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Factors that Influence School Counselors' Intent to Use Online Counseling

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Walden University
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Abstract

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MA, Western University, 2006

BA, Hope College, 2001

Dissertation Submitted in Partial Fulfillment

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Abstract

Owing to advancements in technology, online counseling has become a viable option for counselors to provide counseling services to diverse populations. Despite the expansion of resources, a gap in research exists pertaining to a school counselor's intention to use online counseling. Furthermore, online counseling is an underused tool owing to a variety of unknowns, attitudes, ethical and legal concerns, and lack of training associated with online counseling. The underuse of online counseling becomes problematic because youth, who may be more receptive to support via the Internet, remain underserved if school counselors are not using this tool. The purpose for this quantitative survey study was to examine select predictor variables as explained below and their relationships to the school counselor's intent to use online counseling. This study was framed upon the constructs and extensions of the technology acceptance model, which demonstrates that there are factors that influence an individual's behavior and acceptance of technology. The results of a multiple regression analysis yielded a relationship between the independent variables of age, confidence to use online counseling, educational experience, and school's learning program and the school counselor's intent to use online counseling. Furthermore, key findings suggested a significant relationship between 2 of the 4 variables, the school counselor's confidence to use online counseling, educational experience, and school counselor's intent to use online counseling. These findings are useful for informing training programs for school counselors, thus possibly promoting increased use of the Internet to reach vulnerable youth populations who may be more receptive to counseling via the Internet.

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Chapter 1: Introduction to the Study

Technological advancements have become increasingly enmeshed in the culture of contemporary U.S. society. People have integrated smart phones, tablets, and computers into daily practices and activities, thus rendering a vital effect on individuals, communities, and educational environments as well as mental health professions (Leibert, Archer, Munson, & York, 2006; Menon & Rubin, 2011). The Internet has emerged as a tool and resource that has incited evolutionary changes in education and has prompted increased opportunities for individuals to become empowered with knowledge and resources while also yielding accessible and immediate information all via the mobility of technology (Leibert et al., 2006; Menon & Rubin, 2011). On the same continuum, the Internet has become a platform for education and could serve as a viable tool for counseling interventions within this environment with capabilities to serve diverse populations, ultimately yielding multifaceted implications for counseling, counselors, and clients (de la Varre, Keane, & Irvin, 2011; Dincyurek & Uygarer, 2012; Glasheen, Campbell, & Shochet, 2016; King et al., 2006; Menon & Rubin, 2011).

Based on the incipient role of the Internet in the educational system, I focused my study on the Internet within the scope of school counseling practices. School counselors play a vital role in supporting students' mental health and academic growth; therefore, research pertaining to the topic of Internet use and school counselors may be a useful tool to bring increased insight into the use of technology in practice. The American School Counselor Association (ASCA) Ethical Standards (2010) Section A.10.a mandated that school counselors do the following: "Promote the benefits of and clarify the limitations of

various appropriate technological applications" (p. 3). Similarly, the American Counseling Association (ACA) recognized the emerging role of technology; therefore, the ACA *Code of Ethics* (2014) mandated that counselors be cognizant of the infusion of technology and how it affects clients. Furthermore, stressing this point, the ACA (2014) *Code of Ethics* instructs counselors to gain insight into the influence of this facet on individuals and how the Internet may be used to support clients. Based on these ethical standards and the emerging integration of technology into contemporary culture, I focused on the role of technology in education as it affects school counselors. In addition, researchers have suggested variables that may influence an individual's willingness to use technology (Glasheen, Campbell, & Shochet, 2013; Kurki et al., 2013; Thayer & Ray, 2006,). I examined the relationships between variables that may be predictive of and influential in the school counselors' intention to use the Internet in counseling practices in the educational environment; therefore, I focused on the relationship between counselors' demographics of age, type of educational experience, school's learning program, and the variable of school counselors' confidence and school counselors' intent to use the Internet for counseling purposes.

Social Implications

The social implications of this research are influential in a variety of capacities. I built this study in the context of multicultural theoretical orientation, which embodies a worldview that encompasses, recognizes, and promotes a heightened awareness to the uniqueness, individuality, culture, diversity, and the unique needs of individuals and marginalized populations (Halbur & Halbur, 2011). Through this research, I sought to

bring greater insights into the tools, which may benefit marginalized and diverse populations, thus recognizing the unique needs of individuals and populations (Halbur & Halbur, 2011). The evolution of contemporary culture has brought new insights to counselors regarding the need to attend to the individual's frame of reference and cultural context from which one may view the world through values, beliefs, and other influences that affect perception and action (Mio et al., 2008).

Within this theoretical framework, I based my study on the concept that online counseling may be an effectual tool for school counselors to service vulnerable populations; therefore, it was essential to continue to expand research from this context. I emphasized vulnerable groups, individuals, and diverse populations of youth. Such a worldview, therefore, places the necessity for practitioners to have a heightened awareness of the distinct needs of marginalized populations and individuals (Halbur & Halbur, 2011).

Dineyurek and Uygarer (2012) suggested that as human nature evolves, counselors must also evolve practices, thus possibly reaching broader populations through the use of the Internet. In addition, it is necessary for researchers to examine the relationship among cultural variables related to the school counselor's individual experience and demographic influences, thus influencing the school counselor's intent to use the Internet in practice and influence behavior and Internet use.

It then becomes dually necessary to examine how the Internet and school counseling professionals may be affected or limited using the Internet to best address the needs of vulnerable populations. Researchers further emphasized the potential for the

Internet as a tool to reach broader populations and suggested that the Internet may be effective in reaching youth and populations who may be inhibited to seek in-person counseling (Glasheen et al., 2016; Young, 2005). Expanding on these potential barriers, Young (2005) indicated that the uniqueness of individual circumstances, individual diversity, cultural factors, handicaps, or other factors may be reason that certain individuals, groups, or populations may benefit from the anonymity, accessibility, and convenience of the Internet for counseling and helping resources.

In Chapter 1, I will provide a basic preliminary overview of the study with an identification of the background of the study, a review of research and literature as related to the study, and a rationale for this study. In the next section, I will include an outline of the research including identification of the problem statement, purpose for the study, and the research questions and hypothesis related to the school counselor's intent to use the Internet in counseling practices, and the identification of the conceptual framework of this study. I will then outline the study by identifying the nature of the study, key definitions, assumptions, scope, delimitations, limitations, and significance.

Background

Despite the evolutionary technological advancements in the field of online counseling, limited research pertains specifically to online counseling, school counselors, and the use of Internet counseling in education. After an exhaustive literature review, I found some specific articles related to this field, but many were published before 2010. Based on the integral role of technology and the Internet, my research contributes to the evidence-based knowledge of online counseling. I included some research published

before 2010 in this introduction as a framework for information and example of the direction and growth of research, particularly owing to a lack of research content related to school counseling and the use of the Internet for counseling intervention.

Alleman (2002) presented evidence that the online counseling is a growing component of the counseling profession. Alleman purported that despite the benefits of using the Internet, the mental health profession is not entirely prepared or fully equipped to embody and use this tool; therefore, it is necessary for researchers to examine practitioners' attitudes toward this tool, ethical implications, effectiveness, and preparation. In this article, Alleman advocated for online counseling and the necessity to continue further research. Alleman's research is significant to my dissertation because it introduced the emergence of the Internet in the counseling profession and the need to gain insight into the role of the practitioner and implementation practices.

Dineyurek and Uygarer (2012) conducted a mixed-methods study that sampled psychological counseling and guidance counseling among undergraduate students and school counselors from Turkish and Turkish Cypriot schools. The study measured their view of online counseling in education. The authors suggested that owing to evolving human nature, it is essential for counselors to evolve practices within this scope to better meet needs and reach broader populations. Dineyurek and Uygarer reported that this participant group might view the Internet as a useful tool in education, because it may save time while also reaching nontraditional students. The authors suggested that it is important for counselors and consumers to be aware of the benefits associated with using the Internet and the benefits of using the Internet in education. They also explained that

ethical implications should be considered. Dineyurek and Uygarer's study is important to the research of online counseling because it contributes data, which begins to explore practitioner's views of the Internet as a tool within education and in the United States (U.S.).

In another study, Thayer and Ray (2006) examined individual preferences for online communication comparing age, gender, and relational communication. The researchers reported that age significantly affects preferences for online communication (Thayer & Ray, 2006). One of the research inquiries indicated a connection between younger ages and increased Internet use, thus suggesting that as age decreases, time spent for communication via Internet increases (Thayer & Ray, 2006). Thayer and Ray also suggested that compared with middle-age groups and older-age groups, younger groups may experience increased comfort levels with using the Internet for communication. These researchers provided insight into the potential demographic trends among individuals and groups as related to the use of the Internet (Thayer & Ray, 2006).

In addition, Glasheen and Campbell (2009) explored the potential benefits of using online counseling as a viable tool for providing youth with counseling services. They suggested that youth may experience a unique set of challenges; however, they may not seek help for a variety of reasons (Glasheen & Campbell, 2009; Glasheen et al., 2016). Glasheen and Campbell suggested that online counseling potentially is useful in providing students with more privacy and comfort; therefore, it may be a valuable asset to the educational setting. Glasheen and Campbell's studies are important because they introduce a rational for using online services within education.

Via survey methodology, Menon and Rubin (2011) conducted a study of counseling professionals who reported providing online counseling services. Through this study, Menon and Rubin sought to identify the online counseling format counselors used, their theoretical framework, their perceptions on the benefits of interventions, and which problems are appropriate for this method. The researchers found the following: (a) email was the preferred platform among participants, (b) women were the largest population served, (c) cognitive behavior and solution-focused therapy were the most used orientations, and (d) much of the counseling focused on information and questions (Menon & Rubin, 2011). This study is beneficial to the research of online counseling because it provides additional background of the uses of online counseling, which is in line with my study.

Based on the hypothesis built on the benefits of online counseling, Young (2005) identified a gap in research exploring client attitudes toward online counseling. Young's study is important to this dissertation because it contributes another aspect of online counseling, which may affect a school counselor's perspective on effective practices, particularly why clients may seek online counseling services (Young, 2005). Young emphasized concern regarding the effectiveness of online counseling and for those who are addicted to the Internet. The author reported that clients sought online counseling owing to the benefits of convenience and concealment, yet the clients were also concerned about privacy and security (Young, 2005).

Haberstroh et al. (2008) conducted a qualitative study to examine counseling students' experiences with online counseling. These researchers examined challenges,

processes, advantages, implications, and facilitation strategies (Haberstroh et al., 2008). Ultimately, Haberstroh et al. identified additional gaps in research particularly pertaining to ethical practices. Their study contributes further to the understanding of a client's experience with online counseling and identification of the need for additional research.

McClure, Livingston, Livingston, and Gage (2005) conducted a broad quantitative study and examined counselors' and psychologists' attitudes toward a variety of issues including Internet therapy. The authors then made a comparison between the two groups. The authors found that both groups indicated that online counseling would have negative results, would be unethical, and would be ineffective (McClure et al., 2005). Their study is important because it provides a landscape of earlier research examining a group of licensed professional counselors (LPCs) and psychologists and their attitudes toward this medium (McClure et al., 2005).

Examining online counseling and the client's perspective, Leibert et al. (2006) conducted a mixed-method survey study in which they collected data on client perception of satisfaction with online counseling. The results yielded that most of the clients (the majority of whom were Caucasian females) experienced satisfaction with this medium, felt more comfortable with sharing personal information, and were able to build a rapport with their counselor (Leibert et al., 2006). Their study provided a foundation for client experience with the Internet and addressed which groups may be using this medium.

In a descriptive report, Gary (2010) reported that adolescents experience a wide variety of trauma and crisis that yields an influence in school and into adulthood. Evidence suggests that school counselors need to attend to issues related to crisis and

trauma, whether involving external crisis events such as natural or humanmade disasters, or crisis within the home, such as violence, neglect, or abuse (Gary, 2010). Gary further suggested that the geographical location of communities and schools influence how trauma is attended to in terms of resources and a school counselor's ability to adequately respond to events of crisis. The Internet may be a useful tool to provide access to such resources and better equip counselors with the tools necessary to attend to, and minimize, negative responses to crisis (Gary, 2010). Specific and approved websites may be useful in assisting counselors with appropriate and evidence-based resources and tools to implement for intervention, particularly in communities that may not have immediate access to resources (Gary, 2010). Gary demonstrated a need for online resources in the counseling profession, particularly for those located geographically challenging areas.

DuBois (2004) conducted a study seeking to identify characteristics, demographics, and intention of those who may be seeking online counseling. DuBois's study is important for my study, because the author provided a background and insight into the diversity of those seeking online help and significance of the rationale behind different types of counselors using online counseling. In addition, DuBois's study represented the importance of examining potential variables that may be predictive of online counseling behavior as well as overall usage, including preference to in-person and online as well as rationale for help seeking (DuBois, 2004).

Based on the emergent role that the Internet plays in counseling services in Australia, Chardon, Bagraith, and King (2011) conducted a naturalistic study that used online counseling transcripts to examine the progression and structure of counseling

sessions when working with adolescent populations. The instrument used in this study included the counselling progress and depth-rating instrument (CPDRI), and the data were statistically assessed based on International Business Machines (IBM) Statistical Package for the Social Sciences (SPSS) (Chardon et al., 2011). The results of their study demonstrated that of the sample of counseling transcripts, counselors did not tend to follow a counseling model during session, thus deviating from training and traditional online counseling stages (Chardon et al., 2011).

The Internet and computers play an imminent role within various professional fields, particularly in psychiatric nursing domestically and internationally (Kurki et al., 2013). Kurki et al. (2013) conducted a mixed-method in which they used the technology acceptance model (TAM) to examine Finnish nursing staffs' attitude toward what was considered information and communication technology (ICT). The TAM helped to provide insight into habits and behaviors as related to Internet use (Kurki et al., 2013). Kurki et al. concluded that the Internet plays an integral role in the activities of this nursing population. Furthermore, the psychiatric nurses may successfully use the Internet to treat and work with adolescents (Kurki et al., 2013).

Charness and Boot (2009) recognized that demographics are a contributing variable in technology use and acceptance; therefore, they reviewed data and information related to technology use and an individual's age. Charness and Boot used Pew Research Center (2015) data and highlighted trends among Internet use within age groups. The Pew Research Center reported that in North America, the 18 to 29-year-old demographic reported the highest use of Internet compared with other age groups. There was a steady

decrease in percentage of Internet use with the lowest percentage of reported Internet users aged 65 and older (Pew, 2015). This information was useful to my study in that it demonstrated a possible relationship between Internet and technology use and the variable of age (Charness & Boot, 2009).

Glasheen et al. (2013) conducted a quantitative survey designed to assess the facets that may influence the school counselor's intention and use of online counseling such as, the school counselor's use of and beliefs about the Internet and their influence on the school counselor's use of the Internet. Glasheen et al. suggested that school counselors are charged with using advanced and alternative forms of counseling interventions; therefore, the researchers sought to identify the factors that may influence the use of this medium. The researchers reported that school counselors in Australia may be willing to use the Internet for counseling if they possess confidence in understanding the potential challenges associated with the use of this tool and if these counselors can also align themselves with appropriate laws and ethical mandates (Glasheen et al., 2013). Furthermore, based on their results, Glasheen et al. suggested that counselors need to feel confident in their skills as well as the receptiveness of students. Similarly, Steele, Jacokes, and Stone (2015) found that school counselors who received training in technology were more likely to use the Internet as a tool in practice. The researchers purported that to attend to potential challenges with the use of online counseling, school counselors would benefit from more intensive focused training related to Internet use (Steele et al., 2015).

As evidenced in the literature, the Internet has a continuously emerging role in today's culture, both domestically and on a global scale (Alleman, 2002; Glasheen et al., 2013). With this forward movement and a society that is heavily reliant on the immediacy and convenience of technology, it is essential to understand benefits and limitations related to the health and well-being of individuals (Alleman, 2002; Glasheen et al., 2013). Researchers have suggested that the Internet has useful benefits in the mental health and education professions; however, more information is needed for professionals to adequately use the Internet and remove potential barriers that may inhibit its use (Alleman, 2002; Glasheen et al., 2013).

Presently, there is notable research pertaining to the benefits of the Internet in counseling and education. In addition, some international researchers have examined the practitioners' viewpoint of the use of the Internet in schools, and school counselors' and school counseling students' view of online counseling (Dineyurek & Uygarer, 2012; Glasheen & Campbell, 2009). Despite this research, there is a gap in the literature related to what attitudes and barriers there might be in relation to school counselors in the U.S. using the Internet as a tool for counseling interventions. Therefore, I focused on school counselors in the U.S. who met their individual state's school counseling requirements. My study is essential to creating a deeper level of understanding pertaining to the relationship between variables and the school counselor's intent to use the Internet in practice. Furthermore, my study is also important for reaching broader and vulnerable populations.

Problem Statement

As the Internet has become an integral component in individual, professional, and societal culture, various unknowns are associated with the use of this tool in professional practices, such as mental health and education. With the notion that the Internet provides individuals with more access to information, education, and self-help, the Internet may be effectively used by school counselors to reach broader, more widespread, and marginalized populations of youth through the educational environment (Glasheen et al., 2016; King et al., 2006; Leibert et al., 2006; Menon & Rubin, 2011). Based on Alleman's (2002) suggestion that many counselors have not yet fully used the Internet as a supplemental tool in counseling and may exhibit resistance when using this tool, my study's findings may contribute to social change. King et al. (2006) posited that many youth, who are resistant to in-person counseling, may deter from seeking receiving in-person counseling services. King et al. suggested that the Internet may be a viable alternative to face-to-face counseling services, thus possibly providing an alternative outlet for youth to receive counseling services.

Youth are a vulnerable population owing to adolescent growth and development, age, and other unique needs (Maclean, Hunt, & Sweeting, 2013; Young, 2005). Within this vulnerable population group, some youth may be even more at risk owing to exposure to negative influences such as substance use and a lack of access to resources, such as food, shelter, and health and mental health services (Scaife et al., 2009). Youth may experience inhibitions toward receiving in-person mental health support; therefore, they ultimately may decline to seek counseling support despite the need or presence of

mental health concerns (Dowling & Rickwood, 2013; Glasheen et al., 2016; Maclean et al., 2013; Young, 2005). It is therefore necessary for counselors to be cognizant of the benefits and limitations of using the Internet as an intervention strategy in counseling (Dineyurek & Uygarer, 2012).

According to the Centers for Disease Control (CDC) National Youth Risk Behavior Survey (2016), trends among U.S. high school students in Grades 9 through 12 have indicated that students who had "seriously considered attempting suicide" in the past year between 2009 and 2015. The percentages included 13.8% in 2009, increasing to 17.7% in 2015 (CDC, 2016). In 2015, the survey indicated that 63.2% of high school students reported that they had had at least one drink, 32.8% indicated that they currently drank alcohol, and 17.7% of students reported drinking more than four drinks in a row (CDC, 2016).

The U.S. Department of Health and Human Services (2016) reported that based on data from 2013 to 2014, 11% of adolescents aged 12 through 17 years reported that they had experienced "at least one major depressive episode" (para. 2). Furthermore, according to U.S. Department of Health and Human Services (2016), in 2015, approximately 30% of U.S. youths in Grades 9 through 12 reported feelings of hopelessness or sadness. These data, broken down by gender, included 20% of males and 40% of females experiencing hopelessness or sadness. Throughout the U.S., the national percentage of high school students who reported experiencing feelings of hopelessness or sadness was approximately 30% (U.S. Department of Health and Human Services, 2016).

According to the Substance Abuse and Mental Health Administration Behavioral Health Barometer California (2014), 10.5% of adolescents aged 12 to 17 years in California were reported to have had a major depressive episode (MDE), and overall in the U.S., approximately 9.9% adolescents aged 12 to 17 years were reported to have had an MDE between 2012 and 2013 (SAMHSA, 2015). Despite the reported percentages of MDEs, "In California, about 85,000 adolescents with MDE (31.0% of all adolescents with MDE) per year in 2009-2013 received treatment for their depression within the year prior to being surveyed" (SAMHSA, 2015, p. 7).

In addition, some youth populations are further at risk based on limitations to receiving counseling services, owing to factors of geographical location in areas where counseling services may not be offered (Gary, 2010). Despite the challenges of geography and limitations of resources, youth still experience challenges and mental health concerns including, but not limited to, crisis, trauma, abuse, and other diagnostic concerns (Gary, 2010). Students not receiving mental health support remain untreated and unsupported, thus exacerbating mental health needs, leaving youth vulnerable, untreated, and at risk (Gary, 2010; Scaife et al., 2009; Young, 2005).

Gaps in Literature

The Internet continues to be a valuable tool for working in education and mental health professions (Young, 2005). There is notable literature pertaining to the benefits of the Internet in counseling and education from researchers in the U.S. and globally. Researchers have begun to explore practitioners' viewpoint of the Internet in schools (Glasheen & Campbell, 2009) and school counselors' and school counseling students'

view of online counseling (Dineyurek & Uygarer, 2012). In spite of these contributions, there remains a gap in literature related to what attitudes and barriers there might be in relation to school counselors in the U.S. using the Internet as a tool for counseling interventions. Therefore, I focused on school counselors in North America and the variables that may influence school counselors' use of the Internet for online intervention with youth in schools.

Purpose of the Study

The purpose of this quantitative study was to examine the relationship between the demographics of age, type of educational experience, school's learning program, and the variable of level of confidence and intent to use online counseling purposes among U.S. school counselors. Through this study, I hoped to determine whether these variables predicted the dependent variable, which was school counselors' intent to use the Internet for counseling interventions.

Based on the gap in the literature related to knowledge about school counselors' use of the Internet related to school counseling practice, it is important for researchers to obtain further insight into predictors of such use as a potential platform for counseling intervention. My study is, therefore, useful in laying the groundwork for further examination of the Internet in the school counseling profession and the variables that may influence the school counselor's use of the Internet in practice.

Research Questions and Hypotheses

Through this quantitative research study, I examined the relationships between school counselors' intention to use the Internet for counseling purposes and the predictors

of demographic and confidence related influences. The research question and hypotheses included the following:

RQ: Is there a relationship between the combination of the independent variables of the school counselor's demographics (age, type of education received, and school's learning program) as measured by a demographic survey, the school counselor's confidence to use online counseling as measured by the school guidance counselors' perceptions of online counseling survey, and the dependent variable, the intent to use the Internet for counseling as measured by school guidance counselors' perceptions of online counseling survey?

H_1: $\beta1 \neq \beta2 \neq \beta3 \neq \beta4 \neq 0$ There is a significant relationship between the combination of the independent variables age, type of education received, and school's learning program as measured by the demographic survey, and the school counselor's confidence to use online counseling as measured by the school guidance counselors' perceptions of online counseling survey and the dependent variable, the intent to use the Internet for counseling as measured by school guidance counselors' perceptions of online counseling survey.

H_0: $\beta1 = \beta2 = \beta3 = \beta4 = 0$ There is not a significant relationship between the combination of the independent variables age, type of education received, and school's learning program as measured by the demographic survey, and the school counselor's confidence to use online counseling as measured by the school guidance counselors' perceptions of online counseling survey, and the dependent variable, the intent to use the

Internet for counseling as measured by school guidance counselors' perceptions of online counseling survey.

Conceptual Framework

The conceptual framework that I used for this study has been used by other researchers to identify trends in Internet and computer use. Davis (1985) developed the TAM, and asserted that there are predictive variables influence trends among technology use. Davis (1989) used TAM to provide a deeper understanding regarding how individuals adopt and accept technology. Davis (1989) further suggested that there are factors that are influential in the acceptance of new technology. Researchers have used TAM to examine trends among health professionals to predict behavior when using the Internet in professional practice (Kurki et al., 2013; Teo, 2012).

Since the inception of TAM, researchers have used the TAM to examine Internet behaviors among various groups of people, including professional and consumer groups and individuals (Kurki et al., 2013; Porter & Donthu, 2006; Teo, 2012). Porter and Donthu (2006) used a modified version of the TAM model to gain insight into how rates of Internet use may vary based on demographics of the participant's education, income earned, race, and participant's age. Porter and Donthu (2006) adapted the TAM model to suggest that consumer beliefs about technology and perception of barriers to technology are "differentially relevant to consumers with different demographic profiles" (p. 1000).

From the standpoint that there may be external factors that influence technology use, Kurki et al. (2013) posited that the TAM is useful for increasing insight into trends among nurses' use of the Internet in working with adolescents. The authors suggested

that facets such as “computer skills, adolescent-nurse relationships, training, and IT education” may be influential variables in use of the Internet in practice within this group of nurses (p. 100).

Ultimately, I used this framework to inform my study by suggesting patterned trends and predictive variables that influence behavior and attitudes toward technology use. Furthermore, adaptations and expansions of the TAM have included the examination of demographic variables that may be predictive of the adoption of technology (Porter & Donthu, 2006). In my study, I emphasized the school counselor’s age, type of educational experience, school’s learning program, and school counselor’s confidence to use the Internet as possible predictors of the school counselor’s intent to use the Internet for counseling. I provide a more detailed discussion of the TAM as a conceptual foundation for this study in Chapter 2.

Nature of the Study

I shaped the nature of this study from a quantitative methodology using multiple regression analysis to analyze predictor variables and facilitated through electronic survey as a data collection strategy (Creswell, 2009). A quantitative study was useful in providing a numerical explanation and understanding of the data from the sample population as related to the present inquiry. With this study, I specifically sought to examine the relationship between the independent variables which are the school counselor’s age, school’s learning program, and type of educational experience, as measured by participant self-report on the demographic survey, and the school counselor’s confidence to use online counseling as measured by the School Guidance

Counselors' Perceptions of Online Counseling Survey, and their ability to predict the dependent variable, which is school counselors' intent to use the Internet in counseling practices the School Guidance Counselors' Perceptions of Online Counseling Survey.

The sampled population consisted of credentialed school counselors in the U.S. who were members of the ASCA. The sample was a convenience sample that I drew from the ASCA online membership database, specifically focusing on individuals who were identified as school counselors. I recruited participants through electronic email correspondence.

I collected the primary data for this quantitative study through Survey Monkey (Survey, 2017). I sent a survey link to school counselor's email addresses that I obtained through the database mentioned above. I then analyzed the results with the software, International Business Machines (IBM) SPSS Software Version 21 (SPSS) (IBM, 2012) and provide a numerical insight and summary of the relationship between the school counselor's demographics and the variable confidence to use the Internet and the dependent variable, intent to use the Internet for counseling interventions (Creswell, 2009).

I assessed the data through using a pre-existing scale developed by Glasheen et al. (2013) and used for examining school counselors' intent to use online counseling. I administered the survey online through email. Their original survey included seven sections and 38 questions. After conducting a factor analysis, Glasheen et al. (2013) determined that the questionnaire would be cut down to 17 items. In the present study, I used the 17 items as indicated by the authors and five demographic questions, which

included the participant's age, type of education received, and school's learning program, gender, and grade level of students for a total of 23 questions. I addressed the independent variables in section five of the survey, which examines counselors' confidence to use online counseling, and section seven which collects data regarding participant demographics (Glasheen et al., 2013). The independent variables included, age, type of education received, and school's learning program. I measured the dependent variable, which is the counselors' intention to use online counseling with section four of the survey (Glasheen et al., 2013).

The quantitative approach that I used in this was survey methodology, which was useful in examining the relationship among variables (Creswell, 2009) as they influence the school counselor's intent to use the Internet for counseling interventions in the educational setting. The survey methodology was the most appropriate for this study as researchers are able to collect data from a large sample population thus potentially increases the ability for generalization of data and creates an opportunity to examine the attributes of a select population (Salkind, 2010). Furthermore, the survey methodology allows researchers to collect data that will help to identify trends among select populations (Creswell, 2009). Other quantitative methodologies such as experimental designs are not appropriate for this study as a survey method because researchers would use this design to examine treatments between groups (Creswell, 2009). In addition, my study was a cross-sectional design as I examined participants' data from a select point in time thus examining participant data through a longitudinal survey would not be relevant (Salkind, 2010). Through this research, I compared demographics between participants

and not over a period of time (Salkind, 2010). I used a multiple regression analysis to explore the relationship between school counselor's age, type of educational experience, and school's learning program, and confidence to use online counseling as potential predictors of intent toward school counselor use for counseling intervention. The multiple regression analysis was a particularly appropriate statistical analysis for the study as this quantitative study is advantageous to identifying relationships between multiple variables (Field, 2013).

Definitions

Through this study, I quantitatively examined the independent and dependent variables as related to possible predictors of trends among school counselors and the use of the Internet in practices. There was one dependent variable and five specific predictors, which were the independent variables to identify if there was a relationship between them and the dependent variable. The following included the definitions of the dependent variable and the independent variables as well as other descriptor demographics. These included age, credentialed/licensed school counselor, education, Internet counseling or online counseling, K-12 education, school's learning program, school counselor's level of confidence to use online counseling and school counselor intent to use the Internet for counseling.

***Age*:** The first independent variable included the school counselor's age, which was the counselor's current age in years as of the date they respond to the survey. The independent variable of age was defined as the participant's current age in years, "the amount of time during which a person or animal has lived" (Merriam-Webster, 2015a,

para 1) as of the date they took the survey. This was measured by the self-report of the participant on the demographic sheet that was included in the study. Participants listed their numerical age as of the date of filling out the survey.

***Credentialed/licensed/certificate school counselor*:** To practice as a school counselor, school counselors must receive the appropriate educational requirements, which typically necessitates an advanced degree and state licensure, credential, or certificate (ASCA, 2016b). The term, school counselor in this study refers to an individual who earned the qualifying degree and met the governing state's requirements for credentialing or licensure to work as a school counselor with student populations of K through 12th grade (ASCA, 2016b).

***Educational experience*:** The third independent variable was the type of post high school education and training, which the school counselor received. This category refers to the combination of the school counselor's educational experience. More specifically, I incorporated three options for this variable. The first option was *traditional education*, meaning the individual took courses that were land-based, teacher delivered, in-person, and face-to-face. The second option included participants who learned via distance education via *online education only*, where individuals have taken only online courses in which the curriculum was facilitated through the computer without face-to-face instruction (Brodersen & Melluso, 2017). The third option was *a combination or blended education*, meaning that individuals took both types of courses, including online and traditional in-person classes for training and preparation. An example of this may be that the school earned a counselor's master's degree in the traditional environment, and

doctorate was earned through a distance-learning program including online classes. This was considered a combination or blended education where the school counselor experienced both online and in-person instruction (Brodersen & Melluso, 2017). This was measured by the self-report of the participant on the demographic sheet that was included the study.

***Internet counseling or online counseling*:** It is important to note that counseling intervention and services provided via the Internet may be implemented through a variety of methodologies, thus also assuming different names and terminology. The use of the Internet within the frame of counseling may be facilitated through a variety of methods through the computer or Smartphone, including real-time transactions such as instant messaging, chat rooms, or video conference (Glasheen et al., 2013), which would necessitate immediate response and interaction between client and counselor or e-mail. Dowling and Rickwood (2013) posited that there is a diverse range of terminology for the way in which services are provided through the Internet, as well as the type and modality for what counseling and helping facets look like through Internet platforms. The range may include text messaging, synchronous as well as asynchronous interactions via the mental health professional, educational resources and websites, chat rooms, Instant Messaging, and e-mail (Dowling & Rickwood, 2013). The emphasis in many of these modalities, with the exception of real-time video conferencing, is often written and text based through writing (Glasheen et al., 2013).

In the context of this current study, it should be noted that the terms Internet counseling or online counseling is all inclusive of counseling interventions or mental

health services that are conducted via technological platforms, such as text messages through the computer or Smartphone, real-time messaging, video conferencing, email, texting, or psychoeducational platforms under the direction of a counselor or an online curriculum. Each of these may be conducted remotely and do not need to be in-person or from a select location.

K-12 education: The term K-12 education refers to the setting or educational level in which school counselors may work in the 50 United States. Grade levels kindergarten to Grade 12, is kindergarten through the final year of high, Grade 12 (Corsi-Bunker, n.d). The grade levels were categorized by two main groups of primary education to secondary education (Corsi-Bunker, n.d). Primary education was considered elementary school, which ranges from kindergarten until Grade 5 (Corsi-Bunker, n.d.). Secondary education was middle school and high school. Middle school is Grades 6 to 8 and high school was Grades 9 to 12 (Corsi-Bunker, n.d.). Another variation of this as found in some areas was primary, which is kindergarten to Grade 6, and secondary education was Grades 7 to 9, known as junior high, and high school, Grades10 to 12 (Corsi-Bunker, n.d.).

***School counselor intent to use the Internet for counseling*:** The dependent variable (DV) in this study includes the school counselor's intent to use the Internet for counseling. Simply stated, does the school counselor plan to use the Internet to support counseling interventions and what variables may influence their intent (Glasheen et al., 2013)? The DV was measured via the School Guidance Counselors' Perceptions of Online Counseling Survey (Glasheen et al., 2013).

***School counselor's level of confidence to use online counseling*:** The fourth independent variable is the school counselor's level of confidence to use online counseling as measured by the School Guidance Counsellors' Perceptions of Online Counselling Survey (Glasheen et al., 2013). Simply stated, this was a measure that identified the school counselor's confidence to use online counseling (Glasheen et al., 2013). Level of confidence was measured by eight questions in the School Guidance Counsellors' Perceptions of Online Counselling Survey and was rated on a 5-point Likert scale with a rating of high to low (Glasheen et al., 2013). This section consisted of questions related to the school counselor's understanding of legal issues, control within online counseling, outcome of counseling sessions, confidentiality, ethics, and the application of in-person counseling translated into the online environment (Glasheen et al., 2013).

School learning program: School learning program is an independent variable referring to the school counselor's school's learning program. This variable specifically refers to the school where the school counselor was presently or if not currently employed, most recently employed. In my study's survey, I included three options for the variable of school learning program: traditional school, where students learn via face-to-face learning with in-person instruction; online program, where students receive their education via online without in-person instruction and may be conducted from a distance; and a blended learning program, which was a blend of both in-person instruction and online education (Brodersen & Melluso, 2017).

Assumptions

There were several key assumptions associated with this study. My first assumption was that participants who have identified as school counselors have met the criteria for credentialing in their state of employment. In the demographic section of the survey, I inquired about credentialing, but I did not ask participants to go into depth about their specific training and background, only that they have qualified for their identified state's credentialing, licensing, or certificate to work as a school counselor. I did not verify credentials owing to maintaining the anonymity of participants and personal information was not collected. Another assumption I made in this study is that the participants were truthful in their survey responses and not be inhibited by outside variables. My hope was that owing to the anonymity of the surveys, this promoted honest responses. An additional assumption was that the sample, which I sent the survey to for this study, would adequately represent the population of school counselors for making generalizations. My final assumption was that counselors had access to the computer and Internet for receipt of the email invitation and to fill out the electronic survey.

Scope and Delimitations

As the problem statement indicated, owing to the inclusion of technology and the Internet in current culture and education, it is necessary to examine how this tool influenced the counseling profession to meet the needs of broader and more diverse populations **(**Dincyurek & Uygarer, 2012; Glasheen et al., 2013). The problem is that the Internet could potentially be a useful tool to reach youth populations, who are vulnerable experiencing unique challenges (Gary, 2010; Glasheen et al., 2013; Glasheen et al., 2016;

Young, 2006). Despite these challenges, youth may not seek traditional in-person mental health support owing to feelings of inhibition; therefore, this population may benefit from the use of the Internet as a vehicle for providing mental health services (Dowling & Rickwood, 2013; Glasheen et al., 2013).

Notwithstanding, the potential benefits to using this tool to support this population, school counselors may experience resistance toward using this tool owing to discomfort and a variety of unknowns (Alleman, 2002) and further there may be influencing variables that effect trends among Internet use for professionals and individuals (Glasheen et al., 2013; Porter & Donthu, 2006). It was necessary to examine how the predictor variables may influence the school counselor's intention to use online counseling.

Based on this premise, gaps in research, and prior research that supports the validity of these variables as potential predictors this through this quantitative study, I sought to examine the possible predictive relationships between the independent variables of age, type of school counselor educational experience, school's learning program, and confidence to use online counseling, and the dependent variable the school counselor's intention to use the Internet in counseling practices (Glasheen et al, 2013; Porter & Donthu, 2006). These data have potential to provide information about the relationship between these variables and the school counselor's intent to use the Internet for counseling. The results of this study may then be helpful to work with school counselors, inform training programs, and target groups who may need more information for working with the Internet, and outreach.

My delimitations for this study included a focus on credentialed/licensed/certified kindergarten through Grade 12 school counselors in the U.S. To practice as a school counselor, there are certain educational and training requirements that, while governed by each state, still set a standard among school counselors for training, practice, and employment (ASCA, 2016b). According to the ASCA (2016b), the educational requirements set by most states includes, but are not limited to, education in areas of human development, group work, professional orientation, evaluation of programs, theories, and career development as well as experiential training. Therefore, for this study, I selected individuals who were registered as members of ASCA. This created another standard in consistency among school counselors. The ASCA Ethical Standards for School Counselors (2016c) create a guideline for ethical practice and standards that are appropriate for working in the school setting with students and families. Furthermore, this standard created consistency among practicing school counselors.

The Internet counseling may include a variety of techniques and mediums, such as text, email, video conferencing, instant messaging, etc. For purposes of this study, regarding counseling via the Internet, I focused on the concept of using the Internet as a tool for counseling intervention as opposed to specifying the type of intervention. My focus for this study was on the counselors' intent to use the Internet for intervention purposes, as opposed to the type of intervention, in order to better inform practices and identify variables that influence intention and Internet use in counseling practices.

The population that I included in this study was comprised of school counselors who were registered as members of the ASCA. Within this population, all those over age

18 and all gender identities were eligible to participate in this study. The populations I excluded were those who were not school counselors and who did not hold a license/credential/certificate in their governing state of employment. It should be noted that the school counselor did not need to have a current school counseling credential, rather, the individual just needed to have held the school counseling credential at one point, thus this indicated that they have previously met the educational and training standards in their governing state of employment.

The results of the study were limited in terms of generalizability owing to the specific focus on school counselors located in the U.S. It should be noted that while most states require a standard of educational requirements, each state might also vary in these requirements and have different requirements for issuing the school counseling credential/license/certificate (ASCA, 2016b). In addition, each of the 50 states in the U.S. were represented in this study based on number of school counselors who registered with the ASCA. Furthermore, the sample selection was a convenience sample, which limited generalizability, because the sample was drawn from school counselors who are registered with the ASCA.

Owing to the limited research pertaining to the school counselor and the Internet use, there did not appear to be a common framework from which researchers drew their foundation for research. The literature relating to school counselor use of online counseling that was reviewed for this study did not identify a theoretical orientation or conceptual framework; therefore, I did not consider other theories.

Limitations

I found several limitations to highlight in this study. The first included the various roles that school counselors may assume in their specific educational environments. Individual school counselors may assume a variety of roles in their positions contingent upon the school setting and needs of the educational environment; therefore, this group may be using the Internet for different types of interventions, whether academic support or social emotional support. The differences in school counseling roles may cause an effect on how school counselors perceive the usefulness of the Internet in practice. For purposes of this study, the term, online counseling interventions, I included all interventions that a school counselor may use within the scope of school counseling roles and practices depending on the needs of the population and environment. I used the term was used in the general context.

Another limitation in this study was that the survey was a self-reporting and self-responsive. The phenomenon of social desirability bias might potentially have had an influence on what participants reported, which may affect reporting. Social desirability bias is a phenomenon found in self-reporting where participants may formulate answers based on societal norms and what they expect to be the best answer to present in the best way possible (Fisher, 1993). I controlled this potential for bias by the anonymity of the surveys to encourage participants to not have their name associated with the responses or answers.

Other considerations of limitations included participants' previous training and experience with computer and technology (Glasheen et al., 2013). In addition, another

factor may have also been that I used the Internet for data collection with the online-based survey (Glasheen et al., 2013). A participant's willingness to access the Internet to submit a survey may have suggested a certain comfort level with the use of technology and the Internet, because such may indicate a pre-bias related to technology and the Internet (Glasheen et al., 2013). The phenomenon, associated with self-reporting in survey methodology, is known as common method variance or common method bias which suggested that there may be other explanations for the results and relationship between variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) such as participants not accurately reporting their responses.

Significance

Within the context of contemporary cultural trends, an evolution and growth in the use of technology has emerged, thus yielding a significant effect through Internet use as it expands into the helping profession. While a potentially beneficial resource, the innovations available through the Internet, also have drastic, complex, and diverse consequences on individuals and communities further bringing about a variety of unknowns, hence necessitating more in-depth examinations particularly as it effects specific populations, such as youth in the educational setting (Leibert et al., 2006; Menon & Rubin, 2011; Trepal, Haberstroh, Duffey, & Evans, 2007). The Internet may be a viable resource and tool for reaching vulnerable youth populations, particularly those who may experience inhibition to seek face-to-face counseling support or those who have barriers such as limited access to counseling resources (Gary, 2010; Glasheen et al., 2013; Glasheen et al., 2016; Young, 2006).

Alleman (2002) posited that counselors may experience resistance toward using the Internet in practice owing to the unknowns associated with this tool. A school counselor's resistance to using such a tool to provide services to marginalized student populations who might otherwise seek help, has the potential to leave some students without resources or remain untreated (Alleman, 2002; Glasheen et al., 2013, Young, 2006). In addition, an individual's adoption of technology may be influenced by a variety of factors, including demographic variables (Porter & Donthu, 2006); therefore, to adequately provide counseling services, it is necessary to gain insights into the variables that may influence the school counselor's intent to use the Internet. This information is useful in helping to develop training and target the needs of select groups based on the results of this study.

Similarly, in select fields, the effect of the Internet in the educational setting and the possible progressive attitude of school counseling professionals towards the online medium as a viable supplemental tool for online counseling necessitates further in-depth examination. Despite the potential benefits of the Internet as a tool, Internet counseling has not been effectively used to a degree that it has become an integrated component in counseling as needed (Glasheen et al., 2013). Therefore, through this research, I examined if there was a relationship between school counselors' demographics, including age, education type, school's learning program, and, confidence to use the Internet and the dependent variable the school counselor's intent to use the Internet as a tool for counseling interventions. My goal for this study was to identify if there was a relationship among school counselor's demographics and confidence to use technology, as related to

intention to use online counseling when working with youth populations in school counseling.

Furthermore, emphasizing the multicultural implications, certain populations and adolescents have been reported to identify that the Internet may be sought out as a resource for intervention (King et al., 2006) to the capacity of the Internet to create an environment where the individual feels less exposed to the public, through the perceived anonymity of this medium (King et al., 2006). Research on this topic provided valuable insights into how online counseling interventions may be used in the educational setting for select student populations.

It is evident that the evolution of technology requires further examination of this tool to promote ethical practices and meet the diverse needs of various populations. Owing to the newness of online counseling as evidenced by research, there is limited information on how the Internet has influenced specific populations and also the factors that influence school counselors' intention to use the Internet for counseling interventions. Based on ethical standards, which promote the use of counselors' appropriate, unbiased, and ethically based practices, it is necessary to examine counselors' perceptions regarding the use of the Internet as an alternative platform for providing services to youth and families (ACA, 2014). As previously noted, the results of this study may then be helpful in working with school counselors in training and school counseling programs to inform training, and target counselors who may need more information, experience, or practice in using the Internet, in their work with students.

Summary

The Internet is progressively being used and integrated into health, mental health, and educational professions and services. As the Internet is being used in interventions and practices of education and school counseling, it has become increasingly important to gain insights into ways in which the Internet is being implemented and how professionals use this tool. Literature has demonstrated that there is a growing need to examine and use the Internet in practices of daily and professional life. Based on the limited research pertaining to the use of the Internet in school counseling for counseling intervention, it was necessary to examine the potential unknowns associated with the use of this tool as well as the school counselor's intention to use the Internet in practice, cultural implications and other factors that may influence the counselor's use of the Internet (Alleman, 2002; McClure et al., 2005; Glasheen et al., 2013). Furthermore, it is evident that there is a gap in evidenced based research specifically pertaining to the school counselor and the use of the Internet in intervention practices.

My purpose for this study was to quantitatively examine the relationship between the independent variables, of school counselor's age, type of education received, school learning program, and the school counselor's confidence to use the Internet and the dependent variable, which is the school counselor's intention to use the Internet in practice. I focused my hypotheses on determining if there was a relationship, the strongest predictor, and the relationships between the variables.

For this study, I used the conceptual framework that was founded upon the TAM and the adaptations of the model, which indicated that there are predictive variables that

influence the adoption of new technologies among individuals (Davis, 1989; Teo, 2012; Kurki et al., 2013; Porter & Donthu, 2006). There are several limitations to the present research. The results of this study are limited in generalization to the school counselors within the 50 United States who are registered members of the ASCA.

This study was useful to provide information and a framework pertaining to the variables that can potentially influence the school counselor's intent to use online counseling. Furthermore, it was then useful to inform areas or groups of school counselors who may need more information or training pertaining to the use of the Internet. Ultimately, increased use of the Internet as a tool could be useful to assist school counselors in providing youth with the resources and support that may be more effectual to meet the needs of this vulnerable population (de la Varre et al., 2011; Dincyurek & Uygarer, 2012; Jackson et al., 2006; King et al., 2006; Menon & Rubin, 2011).

In the next chapter, I identify the research and literature search strategies along with the foundational framework from which I have built this study. This includes the TAM, which inform the rationale and focus for this research study. Furthermore, in Chapter 2, I include a review of current literature related to the key variables and concepts of this study, which include online counseling, behaviors, and the use of the Internet in facets of health, education, and mental health.

Chapter 2: Literature Review

Youth are a vulnerable population with distinct needs as they frequently experience a wide range of challenges and problems related to growth and development as well as mental health concerns (King et al., 2006). The ACA (2014) *Code of Ethics* mandates that counselors need to act as advocates for various populations and gain competency in a variety of areas in practice and interventions that would be most appropriate for select populations. In line with these standards and principles, literature has suggested that the Internet may be a useful tool for intervention in counseling practice and therefore should be examined for usefulness in practice and intervention as well as user intent and experience (Glasheen et al., 2013; Hadjistavropoulos et al., 2014).

Considering the potential usefulness in counseling, the Internet may be a practical, cost-effective intervention strategy to reach underserved populations, particularly vulnerable populations, including adolescents and those who may be inhibited by geographical and income constraints (de la Varre et al., 2011; Dincyurek & Uygarer, 2012; Jackson et al., 2006; King et al., 2006; Menon & Rubin, 2011). Although research appears to be limited, researchers have suggested that the Internet is a viable alternative for providing therapeutic services to multiple populations including the youth population, who may experience greater comfort levels via online mediums (Slone, Reese, & McClellan, 2012). Furthermore, Slone et al. (2012) indicated that research is limited pertaining to how the Internet may benefit specific populations such as diverse, underserved, and rural or urban populations.

The purpose of my quantitative study was to examine the relationship between the school counselor's demographics of age, education received, school's learning program, and confidence to use online counseling and the dependent variables of school counselor's intention to use the Internet in school counseling practice. I focused my hypotheses on determining if there was a relationship and the relationships between the variables. I also focused on the strongest predictor of a school counselor's intent to use the Internet in practice.

My study's findings may be useful in providing increased understanding of the relationship among predictors of school counselors' willingness to use online counseling as a counseling intervention for youth. My study's findings provide information regarding which predictor variables are more likely to influence intent to use online counseling. My findings also provide information regarding to whether there is a relationship between variables. The results may inform which school counselors may need more information, training, and outreach for them to be more likely to use the Internet as an intervention tool to support youth and their unique needs.

Furthermore, mental health, health, and other self-help services have options for facilitation through facets of the Internet within the professional scope of practice (Huryk, 2010, Mallen et al., 2011). Mallen et al. (2011) indicated that counseling is readily available online and individuals can seek such services in self-help and counseling on immediate demand. This trend necessitates further examination ranging from the benefits and limitations, in addition to the facilitator experience, expectation, and perception of the integration of technology into select professions. Researcher have

shown that despite potential benefits, the Internet has not been effectively integrated into professional practices of counseling specifically school counseling (Alleman, 2002; Glasheen et al., 2013).

Understanding the potential barriers, attitudes, and demographic factors related to higher education faculty participation in online distance learning may be useful to increasing participation and promote increased positive attitude toward distance learning (Tabata & Johnsrud, 2008). Tabata and Johnsrud (2008) found that some demographics influence educators' participation as facilitators in distance education. The first demographic variable is a participant's age, thus Tabata and Johnsrud suggested that the older the faculty, the increased likelihood of participation. Tabata and Johnsrud indicated that this result did not align with other studies and expectations.

Other demographics that influence participation or lack thereof include the type of educational institution and minority status of the educator (Tabata & Johnsrud, 2008). In terms of educational institution, Tabata and Johnsrud found that those who were less likely to engage in distance education included faculty working with associates and bachelor's degrees, which, like the age demographic, did not align with other study's outcomes. Tabata and Johnsrud suggested that demographics and perception influence willingness to use online mediums, thus prompting future studies into which factors influence select groups, such as counselors and counselor educators.

Exemplifying the need for research, Mallen et al. (2011) delved into an examination of how counselors in training facilitate counseling sessions via the online mediums. Mallen et al. found that there were parallels between face-to-face and online

counseling sessions in terms of techniques and skills used to facilitate, yet examples of limitations included challenges with diagnosis and counselor's behavioral changes as a result of concerns working in the online environment. Mallen et al. also introduced potential challenges as well as benefits and further prompted opportunity for further study, stressing the need for additional professional training in this environment (Mallen et al., 2011). Furthermore, emphasizing the need to examine trends in Internet counseling, Slone et al. (2012) reviewed literature pertaining to telepsychology. Slone et al. concluded that it is important for researchers to continue to examine various facets of Internet counseling including the counselors' comfort level, overall effect, treatment types, and recipient populations, particularly diverse populations.

Considering that the expansion of technology has influenced professions such as education and counseling, it is essential to continue to examine and quantifiably gain insight into the potential benefits, limitations, and individual patterns associated with Internet behaviors and use of technology particularly in the educational setting (de la Varre et al., 2011; Dincyurek & Uygarer, 2012). From the standpoint that the Internet has potential to become an increasingly viable asset to strengthen and improve mental health options, particularly in the educational setting, the Internet as an intervention in counseling results in counselors facing a variety of unknowns and potentially disadvantaged in successfully reaching broader vulnerable populations (Glasheen et al., 2013). Hence, school counselors may be resistant toward taking advantage of the benefits of this potential intervention tool owing to these unknowns and personal practices (Dineyurek & Uygarer, 2012). Hanley and Reynolds (2009) posited that there is

resistance toward online counseling owing to the compromise of the integrity of the therapeutic relationship in that there is a lack of person-to-person interaction.

In Chapter 2, I review and identify research pertaining to the use of technology in practices of education, health, and mental health. My examination focuses on several facets including the use of the Internet for specific treatments in mental health and health professions, practitioner attitude toward the Internet in practice, predictors of technology use, and the role of the Internet in working with select populations. These facets help to build a framework to identify gaps in research and prompting the need to expand research to examine the role of the professional school counselor and the use of the Internet as a medium for counseling intervention. Finally, in Chapter 2, I identify the theoretical orientation that provided the foundation for the study.

Literature Search Strategy

I conducted an Internet search that focused on key terms of school counseling and the various terms of the use of the Internet paired with counseling and intervention. My search criteria for literature focused on databases for ERIC, PsychINFO, PsycARTICLES, and Google Scholar. My emphasis was on literature dated 2009 and later; however, I included some articles from as early as 2002 to gather increased data and earlier studies related to the use of technology in counseling. I first focused on the keywords for the various terms for the Internet, including Online, Internet, Virtual, e-counseling, Internet counseling and incorporated school counseling, counseling, education, and school. I paired each keyword as combinations in a search such as school counseling and Internet, school counseling and online, school counseling and e-

counseling. My additional searches included “demographics and attitudes toward technology,” age and technology use, and technology use and counseling, predictors.

After an exhaustive search, I found limited information specifically pertaining to the school counselor’s attitude toward Internet counseling. There is emerging literature related to teachers in education and online activity; however, very few articles speak to the school counselor’s use of the Internet in educational settings and the school counselor’s intention to use the Internet in practice. The minimal research further highlights that there is a gap in literature pertaining to school counseling and use of Internet interventions and specifically as it applies to school counselors in the U.S. As technology continues to evolve, there is an increasing need to continue to examine and research the role of technology from a variety of contexts. Furthermore, there is limited research pertaining specifically to technology and counseling and a counselor’s intention to use the Internet for intervention.

Conceptual Framework

An inquiry into factors that may predict use of technology lends itself to ask questions such as, “What causes people to accept or reject information technology” (Davis, 1989, p. 320). Delving into this inquiry, Davis (1989) suggested that two predictors may include perceived ease of use and perceived usefulness. Davis (1985) originally developed this model in his dissertation, which examined user acceptance of technology in information systems. The TAM model was traditionally used in the field of business to determine predictive behaviors of technology use (Teo, 2012; Davis, 1985).

Models and theories that researchers use to seek to explain behavior and variables that are predictive of an individual's use of technology are useful in providing insight into behaviors toward technology use and the adoption of technology. Researchers developed the TAM to explore such an inquiry and gain increased insight into motivators for use of technology (Davis, 1985; Svendsen, Johnsen, Almås-Sørensen, & Vittersø, 2013). The TAM predicts user acceptance of a technology based upon estimation of three core constructs; perceived usefulness (PU), perceived ease of use (PeU) and behavioral intention (BI) (Svendsen et al., 2013). Taking this one step further, Schepers and Wetzels (2007) conducted a study, which potentially found that in addition to the three factors that influence technology acceptance, subjective norm (SN) also influences the way in which a potential user views the usefulness of the technology and the behavioral intention.

Based on this premise, there are studies that illustrate how these factors that may influence an educator's use of technology in educational practices may be a result of confidence and experience with technology (Teo, 2012). Teo (2012) conducted a study that examined the relationship between variables and computer use of 475 pre-service teachers in Singapore (N = 475). The demographic breakdown of this sample included a mean age of 23.2 years of age and an SD = 4.30; however, Teo did not report the age ranges. The other population demographics included three educational categories: 23.2% (n = 110) held a bachelor's degree, 21.3% (n = 101) "one year post graduate diploma" in primary education, and 55.6% (n = 264) one year post graduate diploma" in secondary education, (Teo, 2012, p. 305). Furthermore, this sample consisted of 73.9% females (n = 351) and 26.1% males (n = 142) (Teo, 2012). Teo also reported that 87.6% of the

participants owned a computer at home and the sample population reported a mean of 7.24 years of using a computer (*SD* = 4.03) and the daily average mean of using a computer was 3.22 (*SD* = 2.17).

The variables Teo (2012) examined in this study included computer self-efficacy, technological complexity, perceived usefulness, and teachers' acceptance of technology, behavioral intention, facilitating conditions, and attitudes toward computer use. Teo founded this research upon the TAM, which examined the causal relationship of behavior as related to the use of technology and predictors of usage (Teo, 2012). Some of the variables examined by Teo that provided support for significant influence on use of technology included perceived usefulness and perceived ease of use. "The results of this study showed that perceived usefulness, attitude toward computer use and computer self-efficacy have direct effect on behavioural intention to use technology" (Teo, 2012, p. 309).

Perceived usefulness had a total effect of $d = .324$, attitude toward computer use had a total effect of $d = .196$, and perceived ease of use had a total effect of $d = .195$ (Teo, 2012). The results further indicated that the other influential factors included "computer self-efficacy was a significant influence on perceived usefulness ($ß = 0.069$, $p < .05$) and behavioral intention ($ß = 0.096$, $p < .001$). Finally, facilitating conditions has a significant influence on perceived ease of use ($ß$ -0.212, $p < .001$) and attitudes toward towards computer use ($ß$ – 0.086, $p < .001$)" (Teo, 2012, p. 308).

The implications of these results suggested that the variables of perception of usefulness and personal computer skill might be a benefit to educators in that, individuals

with positive perceptions and greater computer skill might be more likely to use technology in practice; however, this may also deter these individuals from seeking additional training and supports (Teo, 2012). Furthermore, a positive perception of technology and its practicality in terms of use may be an indicator of pre-service teachers' intention to use this medium, ultimately suggesting that a positive attitude might influence the way in which a pre-service teacher use the computer (Teo, 2012).

Teo (2012) identified the limitations in this study as including the way in which the data were reported. Participants were educators in training; therefore, they may lack the classroom experience and thus may not be a concise comparison to teachers who are currently in the profession (Teo, 2012). This study might be improved by comparing teachers already in the classroom to teachers who are not yet in service (Teo, 2012). Furthermore, the data in this study was self-reported data, which may prove influential on the results and the overall relationship between the variables and computer use, which may affect the measure between variables (Teo, 2012).

One final limitation as indicated by the researchers is that the TAM model provides for the collection of data on more variables than the researchers examined in their study (Teo, 2012). Therefore, there may be additional variables that influenced participants' use of technology that went unreported (Teo, 2012). It is conceivable that there are variables, such as attitudes, that may influence participants' use of technology in education. Furthering this concept, it is important to examine how these variables may influence the use of technology among counselors working in education. Additional

inquiry may be derived from examining the translation of the TAM model into the school counseling profession.

The TAM has also been modified and used by researchers to gain greater insight into how demographics influence Internet use (Porter & Donthu, 2006). Porter and Donthu (2006) modified the TAM in to examine how an individual's demographics of race, income, age, and education and how they influence the individual's beliefs and perception of technology. "We found that age, education, income and race are associated differently with certain beliefs about the Internet, and that these beliefs mediate consumer attitudes toward and, ultimately use of the Internet" (Porter & Donthu, 2006). Porter and Donthu found that the older age group and the participants who were less educated that others had a "lower perceived ease of use" pertaining to the Internet and that the older age group demographic also had an increased perception of barriers related to Internet use (p. 1004). "Furthermore, these tests showed that both attitude toward the Internet usage and Internet usage vary significantly based on age, education and income, but not for race" (Porter & Donthu, 2006, p. 1004).

The TAM and the modified versions of the TAM, including TAM2 are useful to help researchers to have a framework, which leads to an increased understand how individuals adopt technology (Davis, 1989; Porter & Donthu, 2006, Venkatesh & Davis, 2000). The TAM2 extends TAM and includes the constructs of the components of the social influence processes and cognitive instrumental processes (Venkatesh & Davis, 2000). Venkatesh and Davis (2000) concluded that despite the complexities related to an individual accepting information technology in the workplace, it is remains a crucial

issue for researchers to examine and gain greater insight into trends of technology acceptance.

The TAM theories are useful to help provide insight into the variables that influence technology use and acceptance (Venkatesh & Davis, 2000). Technology acceptance is a complex process and may be attributed to a variety of facets (Venkatesh & Davis, 2000). The TAM as a framework helps to provide a foundation that demonstrated that there is a variety that might have a relationship with how an individual intends to adopt or use technology. The framework of my study is founded upon two orientations. The first premise is built on the foundation that counselors have an ethical mandate to remove potential barriers that may impede individuals from receiving mental health services as indicated by the ACA (2014) *Code of Ethics*. These include the potential benefits of online technology with diverse populations and marginalized populations and modes of intervention that may increase access to counseling services. It therefore warrants an examination of variables that influence a counselor's patterns and attitude use toward online counseling.

Literature Review and Key Variables

There is a growing trend of researchers providing literature that examines the role and influence of the Internet in education and the counseling profession. Dowling and Rickwood (2013) conducted a literature review of articles related to the use of online counseling and found that researchers have demonstrated that the Internet may potentially be useful to support counseling services via Internet chat; however, more research is needed, especially pertaining to the vast array of options for intervention. Further

supporting this notion, Chardon et al. (2011) suggested that there is a lack of evidence that supports and examines counseling services via Internet methodology as there remain a variety of unknowns within the context of using this medium.

While there are practical and useful options for using the Internet, there are also challenges that may impede the use of the Internet or cause professionals to hesitate to use this resource. de la Varre et al. (2011) suggested that there are several potential disadvantages of online education. Many of these are in due part to the lack of in-person interactions that embody facial cues, body language, and direct contact (de la Varre et al., 2011). Owing to these factors and a variety of unknowns, individuals facilitating through online mediums may experience hesitation to use this tool; thus, resulting in a lack of effectual use of this potential asset (Alleman, 2002; Glasheen et al., 2013).

Understanding Online Counseling

Specific to the adolescent population, Chardon et al. (2011) conducted research that examined adolescent counseling interactions. Chardon et al. specifically examined the counseling methodology used by the counselors working with an Australian based program, Kids Helpline which is a platform for online and telephone counseling services. Chardon et al. hypothesized the following, “that counselors would broadly adhere to the model in which they had been trained and that, typically, counseling sessions would include orientation, problem clarification, goal exploration, action planning and termination components” (Chardon et al., 2011, p. 584).

Chardon et al. (2011) identified their study as an exploratory naturalistic study that used a quantitative methodology to acutely focus on the method and procedure for

how counselors implement counseling via the online environment. The researchers also recognized that counseling via the Internet may necessitate a slightly different type of exchange in information (Chardon et al., 2011). Chardon et al. specifically examined counselors who worked with adolescents. Chardon et al. examined a sample size of N = 85 transcripts from trained counselors who conducted counseling through Internet chat messaging via the counseling services of Kids Helpline (Chardon et al., 2011). These transcripts were pre-existing transcripts used in a previous study. The sample included adolescents who were recipients of the counseling services and demographics included Ages 12 to 18 with 95.29% female.

Despite the positive findings of using the Internet in counseling for youth, Chardon et al. (2011) posited the possibility that online counseling was not as effectual as in-person counseling; therefore, potentially it is not appropriate owing to the challenges and limitations of exchanging information in this environment. The results of the study revealed that counseling through online mediums was surface level, superficial, lacking the depth of communication in face-to-face counseling, thus supporting part of the researchers' hypothesis (Chardon et al., 2011).

The data that did not support the hypothesis were the findings that suggested that fewer counselors stuck to their counseling training model in session (Chardon et al., 2011). Out of 11 steps in the counseling process, the Chardon et al. (2011) reported that the results yielded that "the mean total progress scale score was 6.39 (SD = 1.88)" thus indicating that online counselors were only using a little more than half of the total steps (Chardon et al., 2011). Chardon et al. indicated, "Contrary to our expectations, counselors

did not even superficially adhere to the counseling model in which they had been trained" (p. 591).

Chardon et al. (2011) indicated that their results yielded a significant correlation between "duration of counseling session ($r = .51$, $p < .01$) and the number of lines of text exchanged in the session ($r = .47$, $p < .01$)" (p. 591). Chardon et al. noted that less information is shared and exchanged in counseling via the Internet and counselors had to adapt from the counseling model. This study is useful in introducing potential differences between counseling in-person and via online mediums. There are differences and these differences may possibly cause challenges and resistance among counselors and more acutely school counselors in education.

Challenges, Legal, and Ethical Issues

By using the Internet as a tool for Internet counseling, counselors are faced with a variety of challenges related to legal and ethical issues. The practice of counseling via distances is an evolving practice (ACA, 2014). The nature of counseling via distance requires counselors to be flexible, knowledgeable, cognizant of the challenges related to this practice (ACA, 2014). The ACA (2014) *Code of Ethics* requires that counselors are aware of the potential challenges related to counseling via distance formats and the legal and ethical standards of practice. The format of counseling via the Internet may prove to be different than traditional face-to-face counseling. Communication methods are mostly in the written format, more immediate, and often briefer than traditional counseling (Kraus, Stricker, Speyer, 2010); therefore, it is necessary for counselors to be cognizant

of communication styles, use of language and tone, communicating without verbal cues, strategies to minimize miscommunications (ACA, 2014; Glasheen & Campbell, 2009).

Just as mental health practitioners are required to follow state laws, those who practice virtually are equally required to follow the same laws regardless of the ability to use distance practices (ACA, 2014; Goodstein, 2012). Unless given special permissions through temporary licensing, mental health providers are required to only serve clients or students within their licensing or credentialing state (Goodstein, 2012). Furthermore, counselors need to be aware of requirements to practice distance counseling, including state requirements, credentialing, and special training (ACA, 2014). Furthermore, the ACA (2014) *Code of Ethics* required that counselors ensure security of electronic documents, privacy of client's communications, confidentiality, and client's rights when practicing at a distance. Other considerations include verifying the client's identity and developing an emergency or safety plan for the client (ACA, 2014).

Attitude and E-Mental Health Services

Attitudes may have an influence on the way online counseling is perceived and received both for the client as well as the counselor. Based on the limited research and the premise that online counseling may be effective for a variety of people, Casey et al. (2013) conducted a mixed factorial design study that examined consumer attitudes toward the helpfulness of online counseling. Casey et al. sought to examine the effect of educating consumers with information about e-mental health services on attitudes toward the effectiveness of such services. The researchers conducted this study via online survey that was disseminated through three facets including social networking outlets, e-mail,

and a student participation pool for a total of 238 participants (Casey et al., 2013). Twenty-one of the participants were not included into the final data set owing to incomplete surveys and participants not meeting the age requirement (Casey et al., 2013). The mean age of participants was 29.74 years old (*SD* = 11.94) with a range of Ages 17 to 60 (Casey et al., 2013). The gender breakdown of the group included 169 females and 48 males (Casey et al., 2013).

The researchers of this study hypothesized that education about online counseling services would increase participants' perceived helpfulness of these services and improve participants' attitudes about online counseling as compared to a control group who did not receive any additional information (Casey et al., 2011). The independent variable in this study was the dissemination of educational information on e-mental health services (Casey et al., 2011). The dependent variable was participants' attitudes and perceived usefulness of such services (Casey et al., 2011).

Furthermore, for the independent variable, groups who received information about online counseling were split into sub-groups (Casey et al., 2011). These sub-groups received the educational information in different formats, which were either text or film, and these experimental sub-groups were compared to the control group who did not receive any educational information (Casey et al., 2011). Casey et al. (2011) then compared the differences to demographic variables including gender, ethnicity, education, relationship, and age.

While the demographics were not reported in the study, the results indicated that there were not any significant differences between the demographic groups. The results

indicated that “gender v2 (2, *N* = 217) = 1.577, *p* = 0.455, Cramer’s V= 0.202), education v2 (4, *N* = 217) = 4.527, *p* = 0.339, Cramer’s V= 0.102), relationship status v2 (2, *N*= 216) = 0.398, *p* = 0.819, Cramer’s V= 0.043), or age *F*(2, 214) = 2.197, *p* = 0.114, g2 = 0.020)” (Casey et al., 2011, p. 595).

The researchers of this study concluded that providing information about online counseling services had the potential to positively change participants’ attitudes toward e-mental health services as compared to the control group (Casey et al, 2011). It should be noted that information provided via written text proved more useful than providing information using film (Casey et al, 2011). The main analysis of this study included two mixed factorial ANOVAs (Casey et al., 2011). This was used to examine two components, which included the independent variable, “type of information and type of mental health service” (Casey et al., 2011, p. 595). “A significance level of $p < 0.05$ was applied to all analyses and effect sizes were calculated using eta squared” (p. 595). In relation to the perceived helpfulness and likelihood of use, Casey et al. (2011) found that there was a violation of assumed covariance when running the Mauchley’s test of sphericity with results of $p = .002$ for perceived helpfulness and likelihood of future use $p < 0.001$); therefore, a Greenhouse-Geissser correction was used to account for the correction. For perceived helpfulness,

> The main effect of type of e-mental health service was significant *F*(2.836, 606.836) = 68.887, *p* < 0.001, g2 = 0.241). The main effect of type of information was not significant F(2, 214) = 2.643, *p* = 0.073, g2 = 0.024), nor was the

interaction between information and e-mental health service $F(5.671, 606.836) = 1.492$, $p = 0.182$, g2 = 0.010) (Casey et al., 2011, p. 595).

In addition, "It was found that the online program without therapist assistance was perceived by participants as being significantly less helpful than information Web site $p < 0.001$*),* online counseling service $p < 0.001$), and online program with therapist assistance $p < 0.001$)" (Casey et al., 2011, p. 595).

With regard to likelihood of future use, "The main effect of type of e-mental health service was significant $F(2.714, 580.831) = 48.946$, $p < 0.001$, g2 = 0.184), as was the main effect of type of information $F(2, 214) = 5.280$, $p = 0.006$, g2 = 0.047)" (p. 595). Casey et al. (2011) indicated, "the interaction between information and e-mental health service was not significant $F(5.428, 580.831) = 1.431$, $p = .206$, g2 = 0.011)" (p. 595). However, Casey et al. reported that participants were less likely to use online counseling services ($p < .001$) or programs ($p < .001$) compared to Websites for information, which the likelihood was significantly higher ($p < .001$). In addition, "Compared to the control group, participants reported significantly greater likelihood of using one of the four e-mental health services when educational information was presented to them in a text format prior to making the rating ($p = .004$).

Noting the limitations in the study, Casey et al. (2011) indicated that the current mental health status of participants was not factored as a variable that could influence the results of this study. In addition, Casey et al. reported that the sample population was selected via convenience sample, which poses limits to the generalizability. Casey et al. also suggested that it may be useful in future studies to examine the variables related to

the use of video for the dissemination of information as the type of video, including the demographic variables of the actors, such as gender, age, style, etc. Furthermore, it may be useful to examine specific populations as well as consumers' accessibility to the Internet as this was not factored into the study (Casey et al., 2011).

This study is useful to my study because the researchers provided information as to whether the dissemination of information and education of online counseling might influence the attitudes or perceptions of potential consumers of Internet counseling services (Casey et al., 2011). Upon further review of this study, it should also be noted that current attitudes toward counseling services, either online or in-person, should be measured as this may pose as a potential influence on attitudes toward online counseling services. Furthermore, other hypothesized factors that might influence consumers' attitudes or perceptions might also include previous experience with counseling, current Internet trends, and the likelihood that individuals might use the Internet for self-help contexts.

Casey et al. (2011) suggested that information about online counseling services might influence the way in which the Internet is perceived in terms of helpfulness and usefulness. This prompts for further research examining strategies for the dissemination of information as related to online counseling services for participants as well as counseling professionals. Alleman (2002) posited that the Internet is not fully used as a tool within the counseling environment owing to potential resistance and perceptions of this tool as only being supplemental to face-to-face the counseling process.

Influencing Factors and Technology Use

Technology is expanding into multiple facets that have been integrated into daily lives and professions (Huryk, 2010). On a global scale in the medical profession, technology has expanded to support patients and medical professionals in a variety of ways (Huryk, 2010). Health professionals have begun to integrate technology to improve accessibility and patient care particularly with health records (Huryk, 2010). Based on this growing trend, Huryk (2010) indicated that as new systems are being implemented into the medical profession, hence necessitating the examination of nurses' attitudes toward the integration.

Based on a review of literature, Huryk (2010) concluded that computer experience had a positive effect on a nurse's attitude toward technology along with an understanding of the benefits of the program. Huryk further suggested a nurse's attitude toward technology may play a role in the acceptance of technology into practice. In addition, this information, training, and strategic integration of programs are factors that have potential to affect the success of technology into the medical profession (Huryk, 2010).

Like the medical profession, education has also been affected by the integration of technology. As contemporary and evolving technologies emerge in the educational field it has been necessary to examine how technology is used and how a school counselor's comfort level and attitude toward technology has affected the use of technology in practice. An example of this specifically pertaining to the educational environment, Paraskeva, Boura, and Papagianni (2008) posited that an educator's attitude toward technology could influence the use of such tools in practice. Moreover, other factors such

as self-efficacy, confidence, age, and experience may also play a role in technological use in the classroom (Paraskeva et al., 2008). School counselors working in the same educational environment may be influenced by similar factors, thus further influencing the role of technology. Along similar facets, Glasheen et al. (2013) found that school counselors' use of online counseling was influenced by user acceptance, student truthfulness, and confidence to use online technology.

Demographic Trends in Technology Use

Demographics may be an influential factor on trends in technology use. Charness and Boot (2009) conducted a review of the literature and reviewed information related to information technology and age-related gaps in the acceptance and use of technology. Highlighting the age trends in technology use, Charness and Boot examined a Pew Research Center survey, which surveyed age and Internet use. Trends in Internet use among North Americans have steadily increased between the years of 2000-2015 from 52%-85% (Pew, 2015). Examining this information, researchers at the Pew Research Center reported that there are age group differences in Internet use. In the year 2015, 96% of individuals within the age group of 18 to 29, reportedly used the Internet followed by 93% of 30 to 49 year olds, 81% of 50 to 64 year olds, and 58% of those Age 65 and older (Pew, 2015). The percentage of Internet use steadily increased for all age groups between the years 2000 to 2015 (Pew, 2015).

Charness and Boot (2015) further examined factors that may influence technology use among older populations. Charness and Boot suggested that factors such as cognitive ability and age-related changes such as vision and hearing may be influential in the

adoption of technology use and should be considered in the development of technology. This literature review and information attends to the variable of age as a potential predictor of technology use.

The Pew Research Center (2015) further conducted studies that surveyed adult populations in North America to indicate the demographics of technology adoption, particularly looking at ownership of Smartphones. The survey results indicated that in 2015, 68% of adults in the U.S. owned a Smartphone, and of this percentage, 70% were males and 66% were females (Perrin & Duggan, 2015). Furthermore, the age breakdown for smartphone owners were: 86% of individuals between the ages of 18-29 had a smartphone, 83% for Ages 30 to 49, 58% for Ages 50 to 64, and 30% for Ages 65 and older (Perrin & Duggan, 2015). This information suggests there has been growth in the ownership of technology and that there are differences among age groups in regard to technology use. In another survey of 1006 adult Americans, participants reported Internet use based on community type (Pew, 2014). Eighty eight percent of individuals in urban communities used the Internet compared to 87% suburban, and 83% of adults in rural communities (Pew, 2014).

As technology has become widely available and integrated into education, teachers play a critical role in the successful implementation and use of technology in working effectively with youth (Davis, Preston, & Sahin, 2009; Inan & Lowther, 2009). It is therefore essential to provide relevant and appropriate training for educators in order to support the adequate integration of technology into the classroom (Davis et al., 2009). Inan and Lowther (2009) indicated the process of training and integration is multifaceted;

therefore, it is essential for researchers to gain greater insight into the predictive factors for technology use.

Inan and Lowther (2009) sought to examine whether a teacher's integration of technology into practice might be effected by the influences in his or her environment as well as the teacher's personal characteristics. The researchers drew their participants *N* = 1,382 from 54 Tennessee schools that were concurrently participants in an educational program called Tennessee EdTech Launch One and Two (Inan & Lowther, 2009). The age percentages of this sample included: 16.4% (*n* = 226) were 29 or younger, 25.3% (*n* = 350) were between the Ages 30 to 39, 25.9% (*n* = 358) were between the Ages 40 to 49, 28.9% (*n* = 400) were between the Ages 50 to 59, and finally 3.5 % (*n* = 48) were Age 60 and older (Inan & Lowther, 2009).

In addition, the participants reported that the years of experience in education included that *n* = 344, (24.9%) participants had 5 years or less, *n* = 242 (17.5%) participants reported 6-10 years, *n* = 234 (16.9%) participants indicated 11-15 years, and *n* = 562 (40.7%) participants reported more than 16 years of experience (Inan & Lowther, 2009). Other noteworthy demographics included that teachers rated their computer proficiency (*n* = 246) at very good, (*n* = 521) as good, (*n* = 496) as moderate, (*n* = 114) as poor, and (*n* = 5) reported having no ability (Inan & Lowther, 2009).

The authors use the path model as an analysis to statistically examine relationships among factors that may be predictive, either directly or indirectly, of an individual's amalgamation of technology into practice (Inan & Lowther, 2009). The variables that the authors examined included teacher age, years of teaching, computer

proficiency, computer availability, teachers' beliefs, teachers' readiness, overall support, availability of technical support, and technology integration. Inan and Lowther (2009) used the Teacher Technology Questionnaire (TTQ), to assess four research questions. These questions included the following:

1. Do teachers' demographics characteristics influence their technology integration?
2. Do teachers' beliefs, readiness, and computer proficiency influence their technology integration?
3. Does school characteristics influence teachers' technology integration?
4. Do teachers' computer proficiency, beliefs, and readiness mediate the indirect effects of teachers' characteristics and school-level factors on teachers' technology integration (Inan & Lowther, 2009, p. 142).

Inan and Lowther (2009) reported that the eight demographic variables combined did not have a significant effect on the integration of technology and only accounting for 56.4% of the variance (Inan & Lowther, 2009). Inan and Lowther (2009) concluded that demographic characteristics, which included both age ($ß$ = -.247) and the number of years that a teacher had been teaching ($ß$ = -.119), yielded a negative effect on computer proficiency. There were only three of the independent variables that yielded a "significant positive direct effect on technology integration after controlling for the other variables in the model" (Inan & Lowther, 2009, p. 145). These included teachers' beliefs ($p < .01$) ($ß$ = .289), teachers' readiness ($p < .01$) ($ß$ = .493), and computer availability ($p < .01$) ($ß$ = .126) (Inan & Lowther, 2009). Inan and Lowther (2009) further concluded the following:

> Teachers' demographic characteristics (years of teaching and age) negatively and teachers' computer proficiency positively affect their technology integration. Teachers' beliefs and readiness positively influence their technology integration. School-level factors (availability of computers, technical support, and overall support) positively influence teachers' beliefs and teachers' readiness. Teachers' beliefs and readiness mediated the indirect effects of school- and teacher-level factors on teachers' technology integration (p. 146).

The variables, combined for direct and indirect effect as they affected technology integration had an ordered effect rating from greatest to least of teacher readiness as having the greatest effect (ß = .493), followed by overall support (ß = 389), computer proficiency (ß = .302), teachers' beliefs (ß = .289), computer availability (ß = .208), technical support (ß = .124), years of teaching (ß = -.084), and age (ß = -.024) (Inan & Lowther, 2009).

The researchers of this study demonstrated that the complexities of integrating technology into the classroom are multifaceted and necessitate attention to multiple variables (Inan & Lowther, 2009). While this study is specific to teachers in education, it provides a framework for school counselors working in the same or similar educational environments. School counselors work closely with teachers, and they share the same educational environment. There appears to be limited research specifically pertaining to school counselors and technology integration; therefore, this study is useful in providing a guideline for future studies that may be adapted to gather data pertaining to school counselors. In addition, for future studies, it may be necessary to expand the

demographics that were considered as having a potential influence on technology integration (Inan & Lowther, 2009).

It should also be noted that the path model used in this study and other similar studies may have limitations particularly in that it does not test causality (Inan & Lowther, 2009). Such information reinforces the necessity to examine the variables that may influence educators to facilitate computer technology within the scope of their professional practices. It is important to examine factors that may influence the educator's proficiency and confidence facilitation of technology. The Inan and Lowther (2009) study informed my study, because the results suggested that to understand technology integration, researchers must consider a broad examination of potential factors that could affect an individual's ability and willingness to integrate technology.

Counseling and the Internet

Counseling services offered via online mediums are a growing alternative to traditional in-person methods. Recognizing the gaps in research pertaining to online counseling, Menon and Rubin (2011) conducted a study, which sought to examine the following research questions:

1. What specific tools are online counselors using in the therapeutic process?
2. What theories or frameworks dictate this new form of practice?
3. Are these "interventions" beneficial for clients?
4. What types of issues/problems are best handled in this new medium? (p. 134).

Menon and Rubin (2011) surveyed individual counselors who advertised on the Internet as offering online counseling services. Their authors initial sample of participants

included a total of 78 individuals who were then emailed, of which 14 they identified as being appropriate and willing to complete the survey; therefore, the sample size was *N* = 14. The authors explained the decrease in sample size by 19 emails being returned as incorrect, and of the remaining potential participants, 32 indicated that they had not actually had experience with an online client (Menon & Rubin, 2011). Finally, the remaining 14 were those who completed the survey (Menon & Rubin, 2011). Menon and Rubin indicated that they had an actual response rate of 76% owing to the actual responses from the original 78 invited participants. Of the 14 that did participate, 57% identified as female and the mean age was 49.57 years with a range between 28-66 years old (Menon & Rubin, 2011). It should be noted that the educational levels and educational background for each of these participants varied from counseling to psychology and the degrees ranged from bachelors to the Ph.D., but all were currently practicing in the U.S.

Pertaining to the research questions, Menon and Rubin (2011) found that counselors offering services via the Internet were using email and this was the favored method for the provision of counseling services. In addition, the theoretical orientation that was more typically used was solution focused and cognitive behavioral therapy 79% (*n* = 11) (Menon & Rubin, 2011). Furthermore, the researchers indicated that 92% (*n* = 12) participants reported that the key issues for clients centered on relationship concerns, substance use, and health issues (Menon & Rubin, 2011).

Subsequently, Menon and Rubin (2011) reported that interventions provided via the Internet could be useful for clients, particularly for those who are inhibited by barriers

owing to geographical challenges or physical ability, or for those who did not desire to seek face-to-face services. Using a 10-point Likert scale, participants indicated that the technology was useful for helping clients (M = 7.14) with a score of 10 meaning *helps a great deal*, while a score of one indicated *does not help (*Menon & Rubin, 2011).

Finally, based on the sample and results of the study, Menon and Rubin (2011) concluded that older counselors were offering online counseling services and most of the clients were under the age of 46. The researchers concluded that younger client populations possibly seek out online counseling services. This was found true, more so than did older populations (Menon & Rubin, 2011).

This study was useful in providing a preliminary study of mental health practitioners who are using the online medium in practice and the type of clientele who are using this tool. The limitations of this study include the very small sample size, which limits the ability to generalize the population. In addition, Menon and Rubin (2011) posited that their online questionnaire included questions that may not have been appropriate, thus more relevant questions should be included in future studies. It is important that the survey questions are relevant, easily understood by the participants, and inclusive of the clearly defined variables (Menon & Rubin, 2011).

Menon and Rubin (2011) indicated that some of their survey questions were related to the technical aspect of the online counseling, such as security and use; therefore, participants may not understand these technical facets. Finally, this study could have benefited not only from a larger sample size, but also from a sample that had more cohesion in training. For example, limiting participation to those who held a master's

degree or higher, rather than including those with only a bachelor's degree. Type of training may influence practice and outcome (Menon & Rubin, 2011).

Online Counseling and School Counselors

Recognizing the role of the Internet in adolescents' daily activities, the increasing mental health concerns for the adolescent population, and school counselors' use of the Internet in practice, Glasheen et al. (2013) conducted a study, which sought to examine factors, which may influence school counselors' willingness to use the online medium. With the notion that youth may not adequately use mental health services, youth may benefit from the integration of mental health services provided via the Internet (Glasheen et al., 2013). Glasheen et al. (2013) indicated that "We hypothesized that their general beliefs about technology in general and their confidence in using online counseling would be the major predictors of their intention to use" (p. 225).

Conducted in Australia, the researchers of this study surveyed 210 school counselors, with a 20% response rate. The authors drew their sample from school counselors who resided in an Australian state. Participation was voluntary and individuals were sent the survey by invitation (Glasheen et al., 2013). The breakdown of this sample was disproportionate in that "Seventy two percent were female and 28% male" (Glasheen et al., 2013). The distribution reflected what was reported as representative of the workforce in that community and included the smallest group as 3% who were between the ages of 20-29. Furthermore, distribution included 10% as being 60 years or older, 16% were ages 30 years to 40, followed by 43% who were ages 51-60 years of age (Glasheen et al., 2014).

From the outcome of this study, the researchers have suggested that there are three main areas that may influence a counselor's willingness to use the Internet as an intervention for counseling. In order of leading factors, these included the counselor's belief in students' reception to, and honesty with online counseling, as well as counselor confidence in training and use in terms of ethical and legal concerns (Glasheen et al., 2013). Additional results in this study suggested that 50% of counselors would be willing to use online counseling based on availability of the resources (Glasheen et al., 2013). Meanwhile, it appeared that counselors did not feel very confident in the ability to maintain client and session privacy through the Internet, which was indicated only 13% of counselors reporting confidence in privacy via the Internet (Glasheen et al., 2013).

Glasheen et al. (2013) analyzed three factors and their predictive value via hierarchical multiple regression. These included "student acceptance, confidence to use and perception of online behaviour" to see if they "predicted counselor intention to use online school counseling" (Glasheen et al., 2013, p. 227). Glasheen et al. reported that gender, which accounted for only 3% of the variance, did not cause an influence on this outcome. The three factors "confidence to use, student acceptance, and perception of online behaviour were entered at Step 2, with 46% of the total variance explained by the model after controlling for gender, *R* squared change = .43, *F* change (3, 194) = 52.21, $p < .01$" (p. 227). Finally, Glasheen et al. examined three factors and found statistical significance among "gender, confidence to use, counselor expectation of student acceptance and perception of online behaviour" (p. 227). The value of gender produced the least value ($\beta = -.12$, $p < .05$), while "counsellor expectation of student acceptance

had the highest beta value (β = .32, p <.000)" which was followed by "confidence to use (β = .24, p < .01)" (p. 227).

Glasheen et al. (2013) analyzed 38 question survey data via SPSS. Furthermore, they asked the participants demographic questions in the study; however, school counselors' own educational experience as to whether they had previous online training or experience with the Internet was not indicated (i.e., did they receive their degree online or in the traditional educational environment with in-person education). Previous exposure to the Internet may also yield an effect on a school counselor's willingness to use the Internet as a tool in counseling (Glasheen et al., 2013). This may be evident with the use of an online survey, but it may also create a potential bias as those who were willing to use the online survey may have preconceived view of the Internet and its use (Glasheen et al., 2013).

Another possible limitation with this study was that the sample population was not evenly dispersed between age and gender; therefore, some of the results may be influenced by this imbalance; however, Glasheen et al. (2013) reported that while the sample was not age and gender proportioned, it was representative of the population of counselors in the sample area (Glasheen et al., 2013). To increase generalizability, it would be necessary to duplicate this study across other districts and sample populations.

The Glasheen et al. (2013) study is valuable because it began the exploration of the role that school counselors play in the successful use of the Internet to serve youth populations. The results of this study may be useful to inform training programs and ultimately attend to various concerns with using this tool as well as identify gaps for

training purposes to help school counselors to effectively use this tool. For the purposes of gaining increased insight into the use of the Internet as a counseling intervention, with preapproved permission, I used the survey scale created by Glasheen et al. (2013) for my study. I added demographic questions to the survey to identify age, gender, educational experience, as related to online vs. brick and mortar training for graduate studies, and the school counselor's school of employment's learning program, and grade levels of students with whom the school counselor works.

On a similar continuum, Vinluan (2011) conducted a study that examined school guidance counselors in the Philippines and their use of technology in practice. Information and communication technologies (ICT) have been used in a variety of settings within the educational environment (Vinluan, 2011). Particularly in counseling, the Internet has potential to provide counseling via mobile mediums as well as providing outlets for research; however, despite the potential benefits, the limitations should be noted (Vinluan, 2011). Vinluan (2011) posited that in the Philippines a limitation to use of the Internet is lack of accessibility, because many may not have the economic resources to support computers and the Internet. Vinluan (2011) conducted a quantitative study to: "(a) determine the level of awareness of guidance counselors of specific ICT tools, (b) identify what the various ICT tools were that were being used within guidance services, namely appraisal, counseling, information, placement and follow-up, and research and evaluation, and (c) determine the attitudes of guidance counselors to ICT as a dimension of their work" (p. 24). Vinluan developed a survey questionnaire for the use of the study (Vinluan, 2011).

Vinluan (2011) drew participants, who were school guidance counselors, from 144 public and private schools, of which 84 were public and 60 private. The total responders included $N = 240$ individuals who completed the survey, and the demographic breakdown of this sample included 51.3% ($n = 123$) from public schools as opposed to private schools. Sixty percent of participants reported that they had a computer at home while only 33.8% reported that they had a computer at work for individual use. The remainder of the sample reported they shared a community workplace computer with colleagues (Vinluan, 2011). In addition, only 7.5% of the participants were male and the mean age was 35.6 years old. Finally, the experience mean was 8.6 years in the profession of guidance counseling (Vinluan, 2011). The gender breakdown included 7.5% ($n = 18$) male (Vinluan, 2011). The age range was not reported in this study, only the participants' mean age.

Vinluan (2011) sorted the data via Microsoft Excel and used a frequency analysis examine the data (Vinluan, 2011). Vinluan (2011) indicated that the data in this study yielded results that suggested that in spite of counselors' awareness toward ICT, having a positive attitude, and recognizing the benefits of ICT, counselors' actions toward using the ICT did not align with actual practice. Counselors were not using ICT to the same degree as their reported attitude toward ICTs perceived usefulness. This was also evident from participants' mean computer use of only 1.24 hours per day, which was also a weekly mean of 6.2 hours (Vinluan, 2011).

Vinluan (2011) measured "Attitudes to the Use of ICT in Guidance Work" via the "Attitude and Perception on ICT in Guidance and Counseling Scale" (Vinluan, 2011, p.

31). The results were based on a rating system with a rank of 1 indicating that the participant disagreed, whereas 5 indicated that they strongly agreed and a middle rating of 3 indicted that the participant was not certain about the statement (Vinluan, 2011). Item #10, "There is little need for information and communication technologies in guidance and counseling in schools" received an *M* = 2.7 and *SD* = 1.4 (Vinluan, 2011, p. 31). These results indicated that many counselors reported they rated themselves a rating of less than uncertain as to the need of ICT in schools with the rating of *M* = 3 indicated uncertainty (Vinluan, 2011). Another lower score included *M* = 2.8, *SD* = 1.0 pertaining to participants close to unsure as to tests via the Internet and computer did not have reliability or validity (Vinluan, 2011). Results of notable interest that yielded scores of 4-5, which indicated agreement included participant confidence in using computers at work was *M* = 4.3, *SD* = .8, ICT was effective to enhance productivity *M* = 4.5, *SD* = .6, more training is needed in ICT *M* = 4.3, *SD* = .8, and finally, school and guidance counselors need to be proficient and obtain skills to use ICT, *M* = 4.2, *SD* = .8 (Vinluan, 2011).

Finally, other scores that Vinluan (2011) reported had a range between 3-4, thus indicating that while participants were slightly undecided, they leaned toward the more agreement in areas of access to information being faster through paper versus the Internet (*M* = 3.7, *SD* = 1.2), emailing students would promote more openness as opposed to face-to-face (*M* = 3.1, *SD* = 1.2), and ICT used in guidance programs is expensive (*M* = 3.8, *SD* = 1.0). In addition, participants gave the statement related to concerns of confidentiality being a problem between computers and counseling a score of (*M* = 3.8,

SD = 1.0), thus indicating that they were leaning between undecided and concerned (Vinluan, 2011).

Vinluan (2011) concluded that ICT and computers are not being effectively used to their fullest capacity and similarly computers are not being used for practice related information sharing. Participants reported that more training is needed pertaining to technology use, and indicated that the computer was useful to enhance productivity in work activities (Vinluan, 2011). Furthermore, Vinluan indicated that the additional results yielded that participants believed that counseling should ideally be done through in-person interactions (Vinluan, 2011). This view is particularly important to note as Vinluan (2011) reported that there this view is also influenced by the Filipino cultural context and perception of counseling and personal issues.

Vinluan (2011) noted the limitations of this study included that some counselors working in the counseling role were teachers, rather than trained counselors, which may influence perception regarding the role of the computer in counseling. In addition, the counselor's workload with students may also influence the counselor's perception of the role of the computer. The results of the Vinluan study ultimately indicated that counselors in different countries and cultural backgrounds might be influenced by differing variables based on the cultural context of the population (Vinluan, 2011). In addition, while it is evident that counselors may perceive the benefits of using the Internet and computers for counseling, participants' experiences may play a specific role regarding counselors' actual actions in practice (Vinluan, 2011). Furthermore, available resources and finances have an effect on the role and use of computers and the Internet for counseling (Vinluan,

2011). While Vinluan (2011) focused the study on counselors in the Philippines, this study was useful to inform the present study as it provided a framework for gaining insight into the influence of culture on the school counselor's adoption of and use of technology in practice.

Mental Health Professionals, Barriers, and Technology Use

For counselors to effectively use the Internet in practice, it is necessary for counselors to have access to such technology, as well as the appropriate skills, and willingness to expand use of such interventions; henceforth, it is necessary to examine barriers that may impede counselors using this tool (Becker & Jensen-Doss, 2013). Based on the need for this information, Becker and Jensen-Doss (2013) conducted a study and sought to examine such barriers to dissemination with technology-based practices in counseling. Becker and Jensen-Doss's study was founded on the orientation of the theory of planned behavior (TPB), thus indicating that the practitioner's ability to use technology and his/her willingness to use technology may influence technology use should be examined in examining technology use (Becker & Jensen-Doss, 2013).

Based on this model, Becker and Jensen-Doss (2013) posited that a counselor's attitude may play an integral role in the use of technology; therefore, they sought to identify predictors of use of technology-based counseling. The authors hypothesized four main concepts for exploration. Becker and Jensen-Doss stated, "we hypothesized that practical and attitudinal barriers would be related, with therapists with more technology access and greater computer fluency holding more positive attitudes" (p. 615). This first concept was aligned with TPB (Becker & Jensen-Doss, 2013). For the second concept,

Becker and Jensen-Doss hypothesized “more positive attitudes would be associated with more openness to EBPs in general and with having a CBT theoretical orientation” (Becker & Jensen-Doss, 2013, p. 615). This relates to the notion that CBT, as an evidence-based practice has been researched and used in computer interventions (Becker & Jensen-Doss, 2013). Thirdly, the authors hypothesized that increased experience among therapists would be predictive of a negative attitude toward computer based practices (Becker & Jensen-Doss, 2013). Finally, the forth hypothesis was “therapists working with youth would have more positive attitudes than those working with adults” (Becker & Jensen-Doss, 2013, p. 616). It should be noted that this study focused on the inclusion of computer based therapies in an assistive format verses as a means to replace therapy (Becker & Jensen-Doss, 2013). The researchers did not examine the use of computer-based therapies in isolation of the traditional therapy (Becker & Jensen-Doss, 2013).

The participants in the Becker and Jensen-Doss (2013) study included a random sampling of n = 1,800 therapists from national organizations associated with mental health. Participants were sent a survey via regular mail through a postal service (Becker & Jensen-Doss, 2013). There was an overall response rate of 68.1% for a total of 1,228 responders, but only 60% (N = 1,067) completed the surveys (Becker & Jensen-Doss, 2013). Becker and Jensen-Doss broke down their sample by gender with 28.5% being male (n = 304) and 69.8% being female (n = 745). The ethnic breakdown of the sample population included 85.4% Caucasian (n = 911), 2.1% African American (n = 22), 2.2% Hispanic (n = 24) .8% Asian (n = 9), and 1.6% other (n = 17). Becker and Jensen-Doss

did not include an age range breakdown, but reported that the average age was 58.2 years old (*SD* = 10.7, range = 28–85). Beck and Jenson-Doss contacted the participants by mail and data were collected via paper survey (Becker & Jensen-Doss, 2013).

As hypothesized, the results indicated that the two scales of Efficacy and Comfort suggested that positive attitudes had a relationship of "greater ease of access to technology at work" (p. 620). The data results indicated that ease of tech access included *ß* = .19, R^2 = .035 as related to Computer-Assisted Therapy Attitude Scale (CATAS) Efficacy scores, and for the CATAS Comfort score ease of tech yielded *ß* = .18, R^2 = .033 (Becker & Jensen-Doss, 2013). The "overall ease of access to technology ratings were high (*M* = 4.4, *SD* = 1.18)" (Becker & Jensen-Doss, 2013, p. 618). Furthermore, the results of the study suggested that working with youth does not have predictive value with regard to comfort in use of technology; however, working with youth had a positive predictive value on the therapist efficacy scale (Becker & Jensen-Doss, 2013). The data yielded, "fewer years of experience (R^2 = .009, a small effect), and working with youth as a major part of clinical practice (R^2 = .011, a small effect), predicted higher Efficacy, but not Comfort scores" (Becker & Jensen-Doss, 2013, p. 620). Working with youth results yielded *ß* = .10 on CATAS Efficacy Scale and *ß* = .06 on CATAS Comfort Scale (Becker & Jensen-Doss, 2013). It was also found that the data did not support the hypothesis that a CBT theoretical orientation would have an increased openness toward EBT's with a result that yielded, as "CBT orientation did not relate to Efficacy or Comfort scores (*ps* > .01), although identifying with psychodynamic orientation was related to both lower

Efficacy (R^2 = .017, a small effect) and Comfort scores (R^2 = .010, a small effect)" (Becker & Jensen-Doss, 2013, p. 620).

In terms of access to technology, 90.7% (n = 960) of the participants indicated that they had access to a computer at work; however, despite the access to a computer, it is important to note that access to high speed Internet was limited for most. "Overall ease of access to technology ratings were high (M = 4.4, SD = 1.18)" (Becker & Jensen-Doss, 2013, p. 618). Nearly a quarter of this sample lacked access to this type of Internet connection (Becker & Jensen-Doss, 2013). Becker and Jensen-Doss (2013) also found that computer fluency was a strong predictor of counselors' willingness to use the computer as part of therapy, specifically as related to comfort scores (Becker & Jensen-Doss, 2013).

In terms of resistance, Becker and Jensen-Doss (2013) found that factors that might lead to resistance toward the use of technology in practice include decreased fluency in computer skills, and limited access to computers and technology in the workplace. An additional factor included a lack of receptiveness toward therapies that used computer assistance (Becker & Jensen-Doss, 2013). Overall, while this is a preliminary study, Becker and Jensen-Doss found that the Computer Assisted Therapy Attitude Scale (CATAS Scale), which was developed by the authors was initially reliable to measure "therapist attitude toward computer-assisted therapies, with preliminary support for its validity" (p. 622).

The strengths and limitations of this study should be noted. The first strength is that Becker and Jensen-Doss (2013) took into consideration the potential limitations

about computer access; therefore, the researchers sent the contact information via regular mail and sent potential participants a survey to complete. Furthermore, the study yielded a larger response rate, which is useful in generalizations (Becker & Jensen-Doss, 2013). However, a limitation includes the use of self-reporting of computer fluency, which is challenging to measure; therefore, to have a true measure, it may be necessary to conduct computer skill tests, which does not fit into this study (Becker & Jensen-Doss, 2013). In addition, Becker and Jensen-Doss suggested that a potential limitation of the study was that those who opted out of completing the survey may have already had preconceived notions in either direction regarding computer involved practices. Furthermore, this sample came from counselors who were involved as members in select mental health organizations; therefore, potential participants did not include independent mental health professionals who do not have an affiliation with an organizational membership in (Becker & Jensen-Doss, 2013).

As noted by Becker and Jensen-Doss (2013), there are other demographics that warrant further examination, but were not explored in this study. This may include the therapist's education and training background, which may influence attitude, or the influence of the organization with which the therapist is associated (Becker & Jensen-Doss, 2013). Overall, the study yielded promising results with to the newly emerging inclusion of technology into mental health practice. In their study's results, Becker and Jensen-Doss suggested that overall, "the majority of therapists reported access to computers…self-reported computer fluency levels were high, and that therapists held generally neutral or positive attitudes toward computer-assisted therapies" (p. 622).

Furthermore, the results suggested that therapists who may experience resistance or hesitance toward computer-assisted therapies reported that they had lower computer fluency and limited access to computers at work (Becker & Jensen-Doss, 2013). The distinction between computer assisted therapy and computer based therapy should be identified and this should be clearly specified within this study. Becker and Jensen-Doss (2013) indicated that the information related to potential barriers that limit an individual's use of therapy in the workplace may be particularly helpful in informing future studies as well as strategies for training.

Computer-assisted interventions may be useful in a variety of facets, particularly in areas of substance abuse, which has the advantages of easy access and effective cost (Buti et al., 2013). From this frame of reference, it is also important to examine a counselor's acceptance of using such technology as part of treatment. On this notion, Buti et al. (2013) conducted a study that examined counselors who were involved in a clinical trial conducted by the Clinical Trials Network. The Clinical Trials Network was conducted across 10 community treatment centers and consisted of 12-week trials comparing outpatient counseling, and outpatient counseling with the inclusion of computer assistance treatment, known as Therapeutic Education System. This study was based on the theory of reasoned action, which posits that an individual's behavior is influenced by an individual's intention, which in turn is persuaded by attitude and by what is perceived as normal in a social context (Buti et al., 2013). Buti et al. indicated that their expected findings would demonstrate that if a counselor believed that their fellow workers are supportive of technology adoption that they will be more likely to use

technology. Furthermore, the authors suggested that researched information pertaining to variables that influence willingness to adopt computer-assisted programs will better inform strategies to train and use programs that may enhance treatments and interventions (Buti et al., 2013).

The participant sample of the study included a total of $N = 143$ individuals. This group of individuals included "counselors, research staff, agency directors and administrative staff across the various site trials (Buti et al., 2013, p. 434). The actual sample size was $n = 96$ and this group was given a survey to assess "characteristics, organizational characteristics, and attitudes, perceived social norms and intentions to use TES following study completion" (Buti et al., 2013, p. 434). The participant demographics included 76.1% female and 23.9 % male, 80% White and 20% non-White, and the average age was 49.3 years of age, with the participant age range of 24-73 years old. The education level of participants included 59.4% of participants held a graduate degree, while 40.6% did not, and the experience in years of counseling included that 34.4% had less than 5 years of experience and 65.6% had more than 5 years of experience (Buti et al., 2013). The three variables examined in this quantitative study included "baseline attitudes, perceived social norms, and intention to adopt TES following completion of the trial" (Buti et al., 2013, p. 436).

The results of participant characteristics demonstrated that the "mean attitude, perceived social norm and intention scores suggested weak positive attitude toward the use of web-delivered interventions ($M = 1.83$ on a -9 to +9 scales), neutral perceptions of social norms ($M = -.036$ on a -3 to 3 scale), and weak support for intentions to adopt web-

delivered intentions at the completion of the trial (M = 0.74 on a -3 to +3 scale) (Buti et al., 2013, p. 435). Counselor and organization characteristics did not prove to be a significant influence on motive to use the computer-assisted treatment; whereas, the concept of what is perceived as social norms proved to be influential on behavioral intention when implementing computer-assisted treatment programs (Buti et al., 2013). These characteristics included categories such as counselor age, education, gender, and years of experience.

The results yielded some interesting findings, many of which align with previous research. The study's results were as follows: "Perceived social norms were significantly associated with behavioral intention to implement Web-delivered psychosocial substance abuse treatment into clinical practices" (Buti et al., 2013, p. 436). As the primary influence, perceived social norms (r = 0.33, p < .01) most strongly influenced participants' willingness to use the computer for counseling intervention; therefore, such information may be useful to inform strategies that will potentially reduce resistance to new and evolving interventions for practitioners (Buti et al., 2013).

It should be noted that this study has limitations particularly with participants, because the sites that were selected for this study were those that were already open to implementing new interventions; therefore, this preconceived openness may yield more positive intention across counselors at these sites (Buti et al., 2013). Furthermore, Buti et al. (2013) indicated that this study focused the intentional component on the program as opposed to the counselor's intention, which may have also influenced the results.

Overall despite the limitations, the information from the Buti et al. (2013) study is useful as it provides a rationale behind the influence of intention to use computer-assisted interventions. This information informed this study as it demonstrated the importance of examining factors that influence intention and perception for the use of technology and online interventions in counseling. As Buti et al. suggested that this information could be useful in the development of training programs and ultimately in creating program buy-in among professionals.

Counseling and Internet Intervention

There is a need for school counselors to provide youth with mental health services particularly owing to growing trends in increasing mental health concerns, particularly among youth (Glasheen & Campbell, 2009). School counseling has provided an avenue for youth to receive counseling services and mental health supports (Glasheen & Campbell, 2009). Despite these avenues for helping services, youth may feel resistance toward reaching out for mental health support and services even if they have a personal need for such services (Glasheen & Campbell, 2009). Moreover, there may be increased reluctance among youth to seek counseling based on gender (Glasheen & Campbell, 2009). Based on this gap in the use of services and growing trends in mental health challenges, there may be opportunity for counselors to use technology to provide counseling services, thus closing the gap and creating increased opportunity for youth to seek helping services (Glasheen & Campbell, 2009).

Technology has grown rapidly in the field of counseling, particularly in school counseling. The use of technology in practice has a viable option of assisting school

counselors to provide effectual and more advanced services provided for students (Sabella, Poynton, & Isaacs, 2010). Sabella et al. (2010) conducted a quantitative study that sought to examine school counselors' perceptions of counseling technology competencies. These researchers had the following research questions:

> 1. What technological competencies do school counselors perceive to be most important?
>
> 2. What technological competencies are least familiar to school counselors?
>
> 3. Which categories of technological competencies are rated as more important than others?
>
> 4. What is the relationship among demographic variables (e.g., age, sex, years of experience, and position) and how school counselors perceive the importance of technological competencies? (p. 611).

Sabella et al. (2011) drew their participant sample from a total of 32,292 individuals, of which 27,549 received the invitation to respond. Ultimately 9.3% (N = 2571) completed the study (Sabella et al., 2011). The sample included counselors, school counselor students, and counselor educators (Sabella et al., 2011). The demographic breakdown of this sample included a mean age of 43.7%, 10.6 years average experience, 83% of participants were female, and a majority total of 75% (n = 1939) reported to be school counselors. It should be noted that the age range was not reported. The remainder of the participants reported that their positions were 12% (n = 309) graduate students, and counselor educators, district supervisor and state consultants made up the remainder of the sample (Sabella et al., 2011).

The researchers issued the participants the online survey, which was The School Counselors and Technology Survey, which used a 5-point Likert Scale (Sabella et al., 2011). Of notable interest were the results of the study pertaining to between demographics and the way in which a counselor viewed the significance of being proficient in the use of technology. Sabella et al. (2011) indicated that the demographics, including age, position, and experience in terms of years, did not affect "the perceived importance of technological competencies" (Sabella et al., 2011, p. 615). Sabella et al. suggested that these results were surprising as younger ages are commonly associated with the increased use of technology. In addressing the first three questions dealing with perceived technical competencies, including most important, least familiar, and categories of importance, data indicated that participants rated the subscale of ethical and legal use of technology as most important (M = 4.74, SD = .45). Participants rated items that were categorized in terms of Ethics, Communication and Collaboration, Word Processing, World Wide Web, and Data Management. The second item of most importance was data management (M = 4.04, SD = .97), Word Processing (M = 3.97, SD = .91), and World Wide Web (M = 3.96, SD = .92), Communication and Collaboration (M = 3.94, SD = .64), Operating Systems (M = 3.92, SD = .89), Multimedia (M = 3.38, SD = 1.11), and Website Development (M = 3.27, SD = 1.43) (Sabella et al., 2011). Furthermore, in terms of items that participants identified as being least familiar, the top item included Data Management, use pivot tables as n = 1365 (53.1%) rated the item as unsure (Sabella et al., 2011).

It is important to note the limitations of this study. First as Sabella et al. (2011) noted, one of the limitations included the low response rate of only 9.3% out of a large sample number. Sabella et al. further suggested that owing to the small participant response rate, the results might lack in generalizability. The study should also note the dispersion of participants and the state location of employment. Each state may have different standards that influence the use of technology. This study was relevant to the current research study because it began to examine school counselors and the influence of perception on technology competencies.

Issues Treated Via Internet Intervention

Practitioners have also used the Internet as a medium for mental health and physical health interventions. Andrews et al. (2010) posited that the Internet could be a viable option for providing cognitive behavioral therapeutic (CBT) services to individuals diagnosed with anxiety and depression. Andrews et al. indicated that research suggested that treatments for these disorders may be costly, have limited availability, and are frequently not used. In their review, Andrews et al. conducted a meta-analysis of studies that met the criteria of being "randomized controlled trials of computerized CBT for participants who met diagnostic criteria for either major depressive disorder, social phobia, panic disorder with or without agoraphobia, or generalized anxiety disorder (GAD)" (Andrews et al., 2010). Andrews et al. conducted a meta-analysis. Results suggested that there was a large effect size for participants in the experimental group as compared to participants in the control group, thus indicating that participants in the treatment group experienced positive improvements and satisfaction. Significant to my

study, the authors further indicated that additional inquiry might be considering the success of a combination of in-person treatment following online treatment in cases where the online intervention may not have been effective.

Practitioners have used the Internet as an intervention tool in counseling for diverse issues and multiple disorders. The types of Internet interventions have ranged from clients with eating disorders, drug and alcohol use, smoking sensation, stress, depression, and anxiety (Norman et al., 2008, Slone et al., 2012; Stice, Durant, Rohde, & Shaw, 2014). Exemplifying this, Speth et al., (2015) suggested that the Internet might be a useful to provide intervention services to families with children suffering from pediatric insomnia. The online approach to health and mental health may be useful to increase familial and patient access to cost effective, easily accessible services and treatment options (Speth et al., 2015). Based on this concept, Speth et al. conducted two different studies. The first study included a qualitative questionnaire of four open-ended questions, and the second study examined the functionality of the Internet intervention for pediatric insomnia (Speth et al., 2015). There are two facets to this study, which examined facilitator perceptions of an online intervention for pediatric insomnia and then the actual participant and health provider experience with the usability of this tool (Speth et al., 2015). The first component is based on feedback from health providers on potential barriers and reasons for facilitation of online interventions, and the second component provides experiential data on the actual implementation of an online intervention for pediatric insomnia (Speth et al., 2015).

The first study was a mixed methods study that incorporated a four question survey focused on the use of the Internet as an intervention for families dealing with children suffering from pediatric insomnia (Speth et al., 2015). Through their questions, the researchers sought to identify barriers that may impede use of this type of intervention and possible reasons for practitioner facilitation of the Internet intervention for pediatric insomnia (Speth et al., 2015). Speth et al. (2015) stated that for this study, they only reported on two of the four questions, which included "(a) What do you think would be the biggest barrier to your use of this intervention with patients? and (b) What do you think would facilitate your use of this intervention with your patients?" (p. 18). Speth et al. reported that they excluded the additional two questions owing to usage in an additional study. The participants in the first study included Canadian health professionals who met the criteria of being credentialed as psychologists, social workers, physicians, or nurses, having 6 years of experience working in Canada, working with some youth Ages 1 to 10 years who were in pretty good health, and able to complete the questionnaire that was written in English (Speth et al., 2015). The participant breakdown included "58 physicians, 39 nurses, 52 psychologists, 26 social workers" (Speth et al., 2015, p. 18).

Speth et al., (2015) reported that participants indicated that on a range of 1-5, there were 1.48 identified barriers to the use of the Internet intervention and 1.68 facilitation factors. Pertaining to the set of questions related to the top barriers to intervention, the response rate yielded 172 responses out of 175 participants (Speth et al.,

2015). The results indicated that the top perceived barriers included time, environment, user ability, and the content on the website (Speth et al., 2015).

For the second question pertaining to the facilitation reason for practitioners to facilitate online interventions, the data yielded response rate of 161 out of 175 participants (Speth et al., 2015). The results suggested that the most common factors that influenced facilitation were environment, the time and training of the user, and the level of support (Speth et al., 2015). In addition, another factor that effected facilitation included the level of support and written language on the website (Speth et al., 2015).

Speth et al. (2015) used the data and information from the first study to build a foundation to create the second phase of the study, which implemented a beta version of an online intervention, which was an online intervention program that was used for parents of children with pediatric insomnia. The second study was a mixed method study and the researchers used participants from two groups, including health professionals meeting the criteria in the first study, and parents, who were English speaking parents, meeting the criteria of Canadian citizenship, parents of children ages 1-10 who had insomnia, and the family also needed to have access to the Internet and email (Speth et al., 2015). The researchers recruited participants through various methods, including social media, referrals, and health professionals (Speth et al., 2015). The participant sample included $n = 28$ eligible responses, and $n = 25$ parents, who participated in the first session of the online intervention trial (Speth et al., 2015). The second group of participants consisted of professionals, ($n = 30$) with a breakdown of “13 physicians, 5 nurses, 10 psychologists, and 2 sleep researchers” (Speth et al., 2015, p. 21). The

researchers based the sample size on those who provided feedback in the first session or more (Speth et al., 2015). This group did not provide input in the development of the Internet intervention program tested in the second study, and had to meet the criteria of health professionals in the first study. Each group provided feedback as they went through the sessions of the Internet intervention program (Speth et al., 2015).

In the qualitative section of this study, the researchers examined the functionality portion of the Internet intervention, thus examining any challenges related to the use of the program (Speth et al., 2015). Speth et al. (2015) posited that category feedback from parents based on average for the five-session program included category positive feedback, which included support for the program and helpfulness, website characteristic burdens, including comments about the information and complicated nature of the videos, technical issues, and support/website characteristics. For professionals group of participants, their most common feedback included in order of importance, positive feedback, website characteristics burdens, website characteristics content, and technical issues (Speth et al., 2015). In the quantitative portion of study two, the researchers provided a rating of the important features in the study based on participant experience. The data yielded that both groups of participants, parents and professionals gave the program a rating of "moderately satisfied to very satisfied range, and rated the intervention's readiness for use with parents within the moderately ready to very ready range, (averaged across sessions)" (Speth et al., 2015, p. 23).

The results of this portion of the study, which tested the beta version of the online intervention, yielded positive information pertaining to the participants' use of the

program and experience with the initial launch. Speth et al. (2015) suggested that these results were useful in that the program, even in early stages of development, received positive feedback, thus indicating that there is potential that this program may be useful as an intervention tool. Speth et al. (2015) highlighted several limitations to this study, such as that the participants in the first study, which was conducted to provide data that was used to develop the online intervention, which was tested in study two, consisted only of health professionals. Speth et al. suggested that it is necessary to gather feedback and data from other individuals who may be involved in using the online intervention. The users, such as parents who have children with adolescent insomnia and other mental health professionals are also vital to identifying barriers to use an online intervention program; therefore, this study warrants an examination at the perceptions of other such stakeholders to create a program that is more user friendly (Speth et al., 2015).

The authors noted another limitation associated with the participant sample of the second study. Speth et al. (2015) posited that the participant sample represented those who had access to the Internet and computers, which may suggest that this group came from a higher socio-economic status, which is not representative of the entire population of parents who may benefit from the use of an online intervention program (Speth et al., 2015). Furthermore, of this group, not all participants completed all phases of the study and did not provide feedback; therefore, this fact and the missing feedback may have affected the results (Speth et al., 2015).

The Speth et al. (2015) study is significant as it provided information on the use of the Internet as an intervention tool with clients who have a specified disorder. User

experience, perception, training, and access to the Internet and the program may play an important role in the effectiveness of the program (Speth et al., 2015). Speth et al. suggested that their study demonstrated a need to continue to research on the use of the Internet as an intervention tool and prompted that further examination was needed regarding the actual interactions of the users when using the intervention. The first part of this study is useful in that it suggests that there are factors that may affect a health facilitator's perception of the usefulness of the Internet as an intervention. In the first study, the researchers examined health facilitator's perceptions provide a foundation for understanding the potential factors that may either inhibit or promote use of this the internet as an intervention tool (Speth et al., 2015). This is important in informing future studies to examine the perceptions of the facilitators and their willingness to use and recommend this tool. The second component to this study was for users to provide experiential feedback on the usability of this tool (Speth et al., 2015). Both facets, the perceptions prior to the intervention and the actual experience of the online intervention, are important in informing the way in which interventions are developed, training is implemented, and actual interventions are used (Speth et al., 2015). These results are useful to inform practices and the development of online intervention and training, but should promote further investigation into participants from diverse cultural backgrounds (Speth et al., 2015).

Migrant Populations

Migrant populations are faced with a variety of challenges related to variables such as cultural differences, loneliness and fear, and cross-cultural transition that may

lead to mental health needs and concern (Hechanova, Tuliao, & Hwa, 2011). Such challenges and distress may warrant mental health support; however, several factors may inhibit individuals from accessing such resources, including gender, cultural perception of counseling, and whether or not the individual is aware of available resources (Hechanova et al., 2011). Hechanova et al. (2011) conducted a study upon the criteria of three facets that may predict use of technology for mental health support via online mediums for migrant populations. This includes the framework of the Unified Theory on the Use of Acceptance of Technology (UTAUT) (Hechanova et al., 2011), which suggested that the adoption of technology correlated with four facets, including demographics, mainly gender, perceived usefulness of technology and ease of use, and computer-use norms (Venkatesh et al., 2003). The other components include the migrant worker's adjustment and challenges related to adjustment and the individual's behaviors related to help-seeking, which are related to attitude toward counseling services, culture, and present supports (Hechanova et al., 2011).

From this framework, Hechanova et al. (2011) conducted their study by first reviewing demographic information of 191 overseas Filipino workers (OFW) individuals who registered on a website that was designed to provide free counseling services conducted via the Internet specifically for this population group. In addition to this number, there were 34 registered OFW family members with 26 females in this group (Hechanova et al., 2011). The total of OFW's and their family members who participated in counseling online totaled 39 (Hechanova et al., 2011).

Furthermore, Hechanova et al. (2011) examined a group of 30 OFW's, and family members who were identified as non-online counseling users, and the chat transcripts of 91 online counseling participants and eight emails. The researchers separated the group of 30 into three equal groups of 10 including OFW's, spouses, and children (Hechanova et al., 2011). The participants met specific criteria including individuals who had to leave family members behind in their country of origin to find employment in varying fields and location (Hechanova et al., 2011).

The demographic breakdown of the sample included 65% (n = 124) males and the mean age of this group was 40.69 (SD = 8.69) (Hechanova et al., 2011). The researchers did not report the age group distribution. It should be noted that most of the users, 66.67% of counselees were from the Middle East (Hechanova et al., 2011).

Hechanova et al. (2011) sought to answer the following questions:

1. How does the profile of OFW users in terms of issues raised, occupation and host country influence adoption of online counseling?
2. How do help-seeking factors influence the adoption of online counseling?
3. How do technology-related factors influence the adoption of online counseling? (p. 34).

Hechanova et al. (2011) concluded that there are a set of three contributing variables that contribute to trends in use of technology as part of online counseling. These variables included "experience of need, acceptance and adoption of the Internet, followed by an acceptance and adoption of Internet-mediated communication as a means of receiving psychological treatment" (Hechanova et al., 2011, p. 38). As indicated by Hechanova et

al. these data provided a foundation as to the possibilities of online counseling reaching diverse and underserved populations. There is potential that online counseling is equally as useful as face-to-face counseling particularly based on the ability to establish a therapeutic alliance.

This may be explained for various reasons owing to the living and human rights conditions in this location or possibly owing to access to technology (Hechanova et al., 2011). Hechanova et al. (2011) also demonstrated the need to examine factors that may potentially predict trends toward online counseling use. Access to technology as well as skills to use such resources may also be influential in use of online counseling and the adoption of technology (Hechanova et al., 2011). There are other cultural implications that should be considered in expanding studies pertaining to Internet use. These include access to the Internet, cultural perception of counseling and Internet use, the way in which individuals are educated about online counseling, as well as current cultural standards, and language and translation factors (Hechanova et al., 2011). In the context of school counseling, it is also necessary to consider demographics that may influence technology use and overall need of select populations.

The field of school counseling has continued to advance efforts to fit within the scope of practice that meets the needs of an evolving educational systems and the needs of students and families. Within such advancements, school counselors may be influenced by changes in expectations, evidence-based practice, and increased use of tools, data collection, and technological integration (Holcomb-McCoy, Gonzalez, & Johnston, 2009). From this standpoint, Holcomb-McCoy et al. (2009) examined potential

predictors of data use as related to school counselor characteristics. Of these potential predictors, this present study was built on the concept of self-efficacy associated with Bandura's (1997) social cognitive theory, which is a person's belief about abilities to achieve an outcome (Holcomb-McCoy et al., 2009). "Perceived self-efficacy facilitates goal setting, effort investment, persistence in face of barriers, and recovery from setbacks" (Holcomb-McCoy et al., 2009, para 8).

For this quantitative study, Holcomb-McCoy et al. (2009) used a survey to gather data from the sample population of counselors working with kindergarten to Grade 12. The researchers drew the participant sample, $N = 130$, via convenience sample to examine "the following school counselor dispositions in relation to data usage: general self-efficacy, school counselor self-efficacy, commitment to counseling improvement, and openness to change. In addition, we examined the school counselors' years of experience on school counselors' data usage" (Holcomb-McCoy et al., 2009, p. 3). The participants were from Maryland and Virginia and selected through school districts; however, samples were also drawn from randomly selected ASCA members (Holcomb-McCoy et al., 2009). Holcomb-McCoy sent participants an invitation via e-mail to complete the survey. The initial return rate was only 11%; therefore, the Holcomb-McCoy sent a follow up survey and received an additional 10 survey responses and additionally extended the survey to ASCA members. This additional sample included random selection from ASCA members who were located in Maryland and Virginia totaling 100 additional participants (Holcomb-McCoy et al., 2009).

The demographic breakdown of the sample included 119 (91.5%) females and the median years of practice for the participants was 6 years, mode of 1 year, and mean 8.36 (*SD* = 7.9) (Holcomb-McCoy et al., 2009). The ethnic dispersion of the population was broken down in the following: 61.5% White, 36.2% Black/African American, 8% Asian, 8% Latino, and other included 8% (Holcomb-McCoy et al., 2009). Holcomb-McCoy et al. (2009) did not include the participant age in the demographic report.

Holcomb-McCoy et al. (2009) asked the following questions,

> Which combination of dispositions and other counselor characteristics best predict data use among K-12 school counselors – general self-efficacy, counselor self-efficacy, commitment to counseling improvement (e.g., amount of professional development on data usage, hours worked beyond the contractual workweek, willingness to complete graduate courses without salary incentive), openness to change, or years of school counseling experience?" (p. 5).

Using an ANOVA analysis, Holcomb-McCoy et al. (2009) determined that "school level $F(3, 126) = .418$, $p = .740$, and ethnicity, $F(1, 128) = 1.262$, $p = .263$)" did not distinctively differ with how school counselors used data (p. 8). Holcomb-McCoy et al. (2009) examined the frequency of data usage. Holcomb-McCoy et al. indicated that the highest means of data usage included "reporting data to supervisors ($M = 3.83$, $SD = 1.13$) and using data to decide which groups to conduct ($M = 3.56$, $SD = 1.0$) (p. 7). On the other end of the spectrum, the data revealed that when the school counselor was using data, it was used for "reporting data to parents ($M = 2.84$, $SD = .98$) and using data to

determine if students have equitable opportunities (M = 2.84, SD = 1.20)" (Holcomb-McCoy et al., 2009, p. 7).

Furthermore, the results of this study yielded that self-efficacy and general self-efficacy were associated with a school counselor's data usage and these factors were the most predictive of the usage of data (Holcomb-McCoy et al., 2009). This indicated that a school counselor's beliefs about his or her own self-efficacy and personal ability is a predictor of using data as the multiple regression analysis data resulted in $R[2] = .246$, $F(2, 127) = 20.67$, $p < .001$ (Holcomb-McCoy et al., 2009). In addition, Holcomb-McCoy et al. (2009) also indicated that a counselor's commitment to professional growth and development do not significantly predict the use of data in practice. While this variable may not be a predictor of data usage, it should be noted that this information may be used when considering training and professional development workshops (Holcomb-McCoy et al., 2009).

Examining the relationship between factors of disposition and data usage suggests the possibility that variables related to disposition may contribute to patterns of behavior. Holcomb-McCoy et al. (2009) postulated that owing to the intricacies of the school counseling profession, research pertaining to school counselors and data usage should be strategic and use valid and reliable instruments. It should be noted that Holcomb-McCoy et al.'s study used an instrument measurement that was developed by the researchers and required further examination for reliability and validity (Holcomb-McCoy et al., 2009). In their study, Holcomb-McCoy et al. used a modified scale that was developed for teachers by Bandura, the Teacher Self-Efficacy Scale (Holcomb-McCoy et al., 2009).

The data may ultimately be useful in building training that would increase counselors who are willing to use data founded practices in education (Holcomb-McCoy, et al., 2009). Other facets of research include using a statistical analysis that examines multiple independent variables, random sampling, and counselor character and using data (Holcomb-McCoy et al., 2009). In addition to strategies for accurate data analyses, Holcomb-McCoy et al. (2009) indicated that their study was limited owing to the use of a convenience sample and the participants in the study had prior training and professional development, which focused on the use of data in counseling programs; therefore, this may have influenced the results. When looking at data related to behavioral and disposition standards, it is necessary to consider individual's prior training and exposure. Ultimately Holcomb-McCoy et al.'s study is useful from the framework of suggesting that disposition may be influential on behavior and trends for practice.

Summary

Technology and the Internet have become useful resources for individuals and professions supporting increased access to information including mental health and health resources. The themes in literature and research related to the role of technology in professional practice suggest that there is an emerging need to continue to examine the role of the Internet in the helping professions particularly in education and counseling. Based on a review of literature, the Internet may be useful in convenience, cost, decreasing barriers of demographics, and may also be useful to support interventions in a variety of settings as well as reaching broader populations who may be challenged owing to proximity and mobility (Dowling & Rickwood, 2013; King et al., 2006). In the

research dating from 2009 to current that I examined, I found researchers examined a variety of themes related to online counseling. Some examples of these include online counseling methodology, a comparison between online and in-person counseling, consumer attitude toward online counseling, factors that influence technology use, and demographic trends among technology use. While limited, there is some research pertaining to Internet use and school counselors, specifically examining the school counselor's attitude toward online counseling and well as barriers and uses of the Internet into practices.

It is apparent that technology plays a multifaceted role influencing individuals and professionals in a variety of capacities. Within the field of counseling and education, it is evident that technology has continued to be integrated in practices as means to continue to support an individual's personal and professional growth. Technology has become a quintessential tool in society. While there is evidence in studies that support this the positive role of the Internet into practice, research there is a need to continue to examine specifics of the role of the Internet in professional practice, particularly an examination of the professionals' receptiveness toward the use of this tool and willingness to adapt practices as well as what factors influence such willingness (Alleman, 2002). There are many different aspects of research that include looking at user trends, professional use trends, the role in medical fields, the uses of the Internet, and the benefits and limitations of this tool. The Internet may be useful in reaching broader populations, particularly youth who may be vulnerable (Glasheen et al., 2013; Hadjistavropoulos et al., 2014).

My current study was intended to be useful to fill in gaps in research as current studies are only beginning to attend to the factors that may influence the school counselor and intent to use the Internet in counseling and educational practices. Based on the premise that the Internet has the capacity to be used as a tool to reach broader populations (Glasheen et al., 2013; Hadjistavropoulos et al., 2014) and that there are potentially influential factors that may influence motivation to use the Internet (Davis, 1985; Svendsen et al., 2013), understanding trends related to Internet use among the demographics of school may be useful to provide insight into predictors of school counselors use of the Internet in counseling intervention. Furthermore, this information may be beneficial to inform training programs and predictors of the use of the Internet with students in a variety of capacities.

As evident in the literature review, there is a gap in research pertaining to the factors that influence a school counselor's use of the Internet for counseling interventions. This study was a quantitative examination of school counselor data, which aimed to identify potential predictive factors that may be useful to predict trends among school counselor's receptiveness toward using the Internet as a counseling intervention in education. Through this study, I examined the demographic variables of age and type of training education through a multiple regression analysis of predictive variables age, education, and school's learning program.

In Chapter 3, I include a discussion of the research methodology that will be used in data collection and research. I begin the chapter with a recap of the purpose of the study then lead into the research design. I then identify the variables and the research

question that I examined in this study. Following this, I discuss the research methodology, population sampling, procedures for recruitment, and data collection methods. In addition, in this chapter, I will discuss the threats to validity, and finally, I will conclude the chapter with attention to ethical components with a clearly strategized plan for ensuring that the study aligns with appropriate ethical procedures.

Chapter 3: Research Method

Technology plays a critical role in the development of an individual's personal and professional growth. It serves as a platform for increased access to resources, information, and knowledge. Beyond the individual level, professionals in the helping professions of health, mental health, and education, have been affected by the Internet (Leibert et al. 2006; Menon & Rubin, 2011). The challenge with the integration of the Internet into professional practices is the variety of unknowns associated with the use of this tool (Alleman, 2002). Such unknowns may cause challenges among individuals who may experience reluctance to use the Internet (Leibert et al., 2006; Menon & Rubin, 2011; Trepal et al., 2007). For these individuals to effectively use the Internet, a more in-depth examination of the influence of the Internet as it affects consumers and professionals and the potential for the Internet to reach more diverse populations is necessary (Leibert et al., 2006; Menon & Rubin, 2011; Trepal et al., 2007).

It is important to examine the role of the Internet as it affects school counseling and counselors in the educational system, particularly the school counselor's willingness to use the Internet as a tool for intervention in practice as this platform may not be fully used (Glasheen et al., 2013; Glasheen et al., 2016). At present, there appears to be a gap in current research specifically pertaining to the role of the Internet and factors that may be predictive of a school counselor's willingness to use this tool. Therefore, to provide evidence-based research and close this gap, the purpose of this quantitative study was to examine the relationship between factors related to demographics and education as well

as the school counselor's confidence to use online counseling and the school counselor's intention to use the Internet.

In Chapter 3, I include a description of the research design and key criteria of this quantitative study. I seek to identify possible predictive variables as related to school counselors' intent to use the Internet in counseling practices. I also provide the rationale for this study as well as the key components of the research design, including the independent and dependent variables. In addition, I present the research questions, hypothesis, and design choice. This is followed by a description of the methodology for the study. I then identify the sample and sampling procedures, as well as the instrumentation. Finally, I conclude the chapter by discussing the threats to validity and ethical procedures that will ensure ethical practice and protection of the sample population.

Research Design and Rationale

In this quantitative research study, I sought to examine the relationships between school counselors' intentions to use the Internet as a counseling intervention tool as well as school counselors' demographics, age, type of education, school's learning program, and confidence to use online technology. My aim for this study focused on school counselors within the 50 United States who are members of the ASCA. The independent variables in this study included participants' age, type of educational/training received, confidence to use online counseling, and school's learning program. I included the following three options for the specific criteria for the independent variable regarding type of education/training participants received; did participants receive their education in

the traditional environment with in-person instruction, online/distance education only, or via both online and onsite courses. Furthermore, I included three options for the criteria for the independent variable, school's learning program, as traditional in-person, an online only curriculum, or blended learning. I identified the independent variable age as school counselors' age in years as of the date of their survey participation. The dependent variable was the school counselor's intention to use the Internet as a tool for counseling intervention.

I used a nonexperimental design to examine the independent variable and dependent variable and collected the data by using an online survey that was sent via email. This approach provided a numerical comparison that identified predictors and trends among this group of school counselors (Creswell, 2013). I used a multiple regression analysis as the statistical tool to explore the relationships between the independent variables (i.e., school counselor's age, type of education received, school's learning program, and confidence to use online counseling) and the dependent variables, which was the school counselor's intent to use the Internet for counseling (Field, 2013). A multiple regression was an appropriate statistical analysis for examining school counselor's intent to use Internet counseling and the relationship between the predictor variables (Field, 2013).

Time and Resource Constraints

To conduct this study, I used minimal resources. I conducted this study through an electronic survey that I sent to individual email addresses listed with the ASCA that are published on the association's website and are accessible. Additional resources I

needed for this study required school counselors to have access to email and access to the Internet. I assumed that if the school counselors have an email listed in the database that they had current access to email and the Internet. Time constraints affiliated with this study included timing that aligns with the academic school year for school counselors. If counselors used their work email in the ASCA database, the response rate might have been affected as the questionnaire was sent out at the end of the school year and some schools were already out of session depending on location.

Consistency Among Research Designs

There appeared to be limited research pertaining to the school counselors' intent to use the Internet in practice, particularly in the U.S. Glasheen et al. (2013) examined school counselors in Australia using a survey research design. This study was also a cross-sectional design as it sampled the school counseling population at a certain point in time and measured characteristics within the group, rather than over a period of time in a longitudinal study (Glasheen et al., 2013). The same survey was used in my study to examine school counselors in the U.S. Survey methodology for data collection and regression analysis was useful in examining predictive relationships among variables (Field, 2013). Teo (2012) examined predictive variables related to the use of technology. Menon and Rubin (2011) followed similar research methods when they surveyed counseling professionals who were advertised as online counselors. In that study, Menon and Rubin (2011) found relationships that suggested their participants who offered online services were older rather than younger. Furthering this consistency between surveys and online Internet use, Vinluan (2011) also used a survey methodology to examine school

counselors' technology trends in the Philippines. Based on these studies and the objectives of this research study, which examined relationships among the variables of age, type of education, school's learning program, and confidence to use online counseling, survey methodology was the appropriate research design and aligns with current research trends of similar nature and inquiry.

Population and Sample

The target population in this study included individuals who have identified themselves as school counselors and who are members of the ASCA who reside in the U.S. and included those who work in multiple settings with students in kindergarten through Grade 12. The ASCA is a national association that is designed to unify the school counseling through providing ethical standards and competencies for professionals as well as a professional national model and framework upon which counseling in education should be built (ASCA, 2016a). Furthermore, ASCA serves to provide a support and resource for advancing the school counseling profession (ASCA, 2016a). Those who maintain membership have access to resources, articles, databases, and other supports to further professional development (ASCA, 2016a).

I drew the sample for this study from the ASCA free public membership database directory. Through this directory, I could search for individuals by name or I could also sort them by state of residence and identified profession (ASCA, 2016a). It should be noted that the database search criteria did not identify the school counselor's type of school environment; therefore, the database included school counselors who work in public, private, and charter school environments or other. Prior to contacting the

population sample, I received permission to use the database for research purposes from ASCA via email and via phone contact (see Appendix A).

Sampling Strategy

The procedure that I used for drawing the population sample was to use the database of registered school counseling members in the ASCA who reside in the U.S. I used the criteria of school counselor designation and counselor location in the U.S. to search through the directory. My purpose for using the convenience sample strategy was to draw from a large accessible sample, thus reaching out to as many available school counselors as possible and therefore increasing the potential for reliability (Creswell, 2013; Field, 2013).

The sample population for this study included all gender identities, ages, and type of education received, and school learning programs. The exclusion criteria for this sample eliminated individuals who did not hold a school counseling credential/license/certificate. Pertaining to this inclusion of credentialed school counselors in the U.S. this created consistency to ensure that the population received the same or similar training.

The power analysis software I used for this study was G*Power 3.1. I used an alpha of .05, a power of .80, and a medium effect size of .15 and four predictors, the G*Power analysis indicated I needed a sample size of $N = 85$. The standard alpha for social sciences is .05, and the power of .80 was also an accepted power level (Field, 2013). A medium effect size of .15 was selected because of the limited research reported;

therefore it is better to err on the side of caution by using a medium effect size (Field, 2013).

Procedures for Recruitment, Participation, and Data Collection

My procedures for recruitment included contacting school counselors who are members of the ASCA. I recruited this participant group from the ASCA online membership database, which is a free search database to ASCA members. ASCA granted me permission to use the ASCA online membership database for research purposes. I sent participants who were listed in the ASCA membership database within the search criteria of school counselor the recruitment email (see Appendix B). The email was sent from my Walden University's student email address sarah.golden@waldenu.edu. In my recruitment email, I sought voluntary participation in the study through completion of the electronic survey link located in the text of the email. The email provided an introduction to the study with informed consent that was included in the bottom of the email. If participants gave consent, they clicked the link for Survey Monkey. Each email contained the following: Introduction, informed consent and Survey Link. If there was no reply from participants after a period of one, two, and three weeks, I sent a follow up email request a total of one to three times to ensure receipt of the email request and collection of as many participants as possible.

Informed consent. As noted above, the recruitment email included a statement that the survey was voluntary. The informed consent contained an explanation of the process and provided participants with the background information, procedures, and the voluntary nature of the study. There were not any incentives provided to participants

other than requesting their contribution to the research project. Within the informed consent, I explained to participants the potential risks and benefits that may occur because of the study, and include a confidentiality statement, and my contact information.

After participants agreed to partake in the survey by clicking the Survey Monkey link, they were then asked a pre-screening question. The pre-screening question asked participants if they have, or have had, a school counseling license/certification/credential to practice school counseling. The participants were asked to identify either yes or no. If they selected a no response, they were directed to a "thank you" page explaining that they did not meet the participant criteria. This served as inclusion criteria. If participants met the inclusion criteria, the participants were prompted to continue through the survey. I obtained the participants' demographic information such as age, education type, school's learning, program, gender, and student population with whom the counselor works through the survey. I will keep all information confidential via a password protected computer.

I collected the data via Survey Monkey (2017). Once the surveys were completed, the participants received a thank you notification for their participation. Based on IP addresses, each participant could submit only one survey entry. This study was not an experimental design; therefore, I did not have any follow up procedures post data collection. The informed consent contained my contact information in case any participants had any questions following the survey and research. I also made the study's results available to participants who requested them.

Instrumentation and Operationalization of Constructs

The instrument that I used in this study was the School Guidance Counsellors' Perceptions of Online Counselling Survey (Glasheen et al., 2013). I received permission to use the instrument and to use/modify as needed for my dissertation from the authors to use this study (see Appendix C). Based on these permissions, for the remainder of this dissertation, I used the U.S. English spelling of the word counselor and counseling. The School Guidance Counselors' Perceptions of Online Counseling Survey was a seven-section survey that covers areas of counselors' personal experience of technological use, counselors' beliefs about online technology in general, counselors' perceptions of student use of technology, counselors' intention to use online counseling, counselors' confidence to use online counseling, counselors' perception of student acceptability of online counseling, and demographics. The original survey contained a total of 38 questions; however, for my study, I followed the results and indications by the authors (Glasheen et al., 2013). Glasheen et al. (2013) reported that in the results of their study, they chose to eliminate select questions owing to the results of their factor analysis. I made modifications to the survey based on the authors' decision to use these questions for reporting their results (Glasheen et al., 2013). The original questionnaire was cut down from 38 questions to 17 items plus five demographic questions and one screening question. The total survey items included 23 items. Glasheen et al. (2013) indicated that based on the factor analysis, there are only a total of 17 items that determined the counselor's intent to use the Internet. Based on these results and the authors' decision to eliminate survey questions, I used the questions that the authors scored in their study

(Glasheen et al., 2013). I added additional questions based on selected independent variables and the demographic questions related to the school counselor's education, the school's learning program, gender, and grade levels of students with whom the counselor works (See Appendix D).

Section one of the survey pertained to the counselor's personal experience with technology use and consists of five-forced choice yes or no questions (Glasheen et al., 2013). I did not use these questions in my study nor were they used by Glasheen et al. (2013) in the results of their study. Sections two, three, four, and six, which related to counselors' beliefs about online technology in general, counselors' perceptions of student use in technology, counselors' intention to use online counseling, and counselors' perceptions of student acceptability of online counseling, respectively, was scored based on the 5-point Likert scale with strongly disagree, disagree unsure, agree, agree, and strongly agree (Glasheen et al., 2013). The scale is anchored as such: 1 = strongly disagree, 2 = disagree, 3 = unsure, 4 = agree, and 5 = strongly agree. Both sections two and three contained two question each (Glasheen et al., 2013). Per the authors' decision in the original study, section four was not used (Glasheen et al., 2013). In section five, counselors' confidence to use online counseling was scored based on the 5-point Likert scale ranging from high to low (Glasheen et al., 2013). This scale was numerically anchored as: 1 = very high, 2 = high, 3 = moderate, 4 = low, 5 = very low (Glasheen et al., 2013). Glasheen et al., (2013) reported that question 19 from section four was better suited for section five; therefore, this present study incorporated the addition of question 19, making the section eight questions, which indicate the counselors' confidence to use

online counseling. Section six, counselors' perception of student acceptability of online counseling consisted of six questions; however, the authors indicated that only five should be scored (Glasheen et al., 2013).

The School Guidance Counselors' Perceptions of Online Counseling Survey was particularly useful, because my intent in this study was to examine a school counselor's perceptions of online counseling. Glasheen et al. (2013) used this survey to examine specific factors that may be effective to predict a school counselor's use of technology in counseling. Similarly, the focus of my study was to identify variables, which might be predictive of a school counselor's receptiveness and intent to use the Internet for counseling interventions.

As reported by Glasheen et al. (2013), the authors measured internal consistency with a Cronbach's alpha. The Cronbach's alpha results for each section included section two was α = .64, section three was α = .70, section five was α = .89, and section six was α = .77 (Glasheen et al., 2013). The Cronbach's alpha scores were the only values the authors provided in terms of reliability and the validity in this study (Glasheen et al., 2013). A Cronbach's alpha score of α = .7 to .8 or above indicates reliability (Field, 2013); therefore, sections three, five, and six were all considered to be internally consistent. Section two yielded a low Cronbach's alpha score with α = .64, which indicated a poor internal consistency and reliability in that scale set (Field, 2013). Section two was not used to answer the research questions in the current study.

Glasheen et al. (2013) reported that the survey questions were developed using a focus group and data that were obtained from their inquiry, which helped with

determining the validity of the scale. Campbell and Glasheen (2012) reported this survey information (Glasheen et al., 2013). Glasheen et al. (2013) conducted their study in Australia and focused their inquiry on guidance counselors in the Queensland Education Department as well as via the Queensland Guidance and Counselling Association. The study yielded a response rate of approximately 20% and a numerical value of 210 surveys completed by counselors (Glasheen et al., 2013).

Operationalization

The independent variables or the predictor variables are those that have the potential to cause an effect or influence the dependent variable (Creswell, 2013). In this study, the independent variables included the participants' age, type of education received as part of training for school counseling, school's learning program, and confidence to use the Internet. The following includes definitions of each variable examined in each study.

Age. The participant's age was defined as an individual's age in terms of years as of the current date of the survey.

Type of educational experience. I included three options for type of educational training that the school counselor received for their post undergraduate and graduate degrees: only in-person traditional education, which would be at a land-based university/college with an educator present; an online only education with programs being solely through distance education and courses taken remotely, and a blended option, which includes an educational experience of both online and onsite courses.

School's learning program. The variable, type of school learning program, was an independent variable for my study. I included three options for the school's learning program: face-to-face traditional education, online program, or blended learning program. Face-to-face traditional education includes education that is in-person teacher-led learning environment. An online learning program is an online program that provides the curriculum or educational program through the computer and does not require students to receive in-person instruction **(**Brodersen & Melluso, 2017). A blended learning program is a combination of the traditional and online program where students receive an education through both online instruction and in-person instruction **(**Brodersen & Melluso, 2017).

Counselor's confidence to use online counseling. The school counselor's confidence to use online counseling was an independent variable measured by Section 5 of the School Guidance Counselors' Perceptions of Online Counseling Survey with modifications as indicated by the authors (Glasheen et al., 2013). Participants used a 5-point Likert scale to rate eight statements pertaining to their confidence to use online counseling ranging from high to low with 1 = very high (Glasheen et al., 2013). This variable measured the school counselor's level of confidence to use online counseling.

Counselor's intention to use online counseling. The counselor's intention to use online counseling was the dependent variable, which I measured by using sections 2, 3, and 6 of the School Guidance Counselors' Perceptions of Online Counseling Survey with modifications as indicated by the authors (Glasheen et al., 2013). Participants used a 5-point Likert scale to rate nine statements pertaining to the intention to use online

counseling as strongly disagree, disagree, unsure, agree, strongly agree with 1 = strongly disagree and 5 = strongly agree. The variable, intention to use online counseling reflected whether or not the school counselor plans to use the Internet in practice as a school counselor working with youth.

Data Analysis Plan

As previously noted, I collected the data in this study via survey. I collected the data using the School Guidance Counselors' Perceptions of Online Counseling Survey by Glasheen et al. (2013). I emailed the survey to participants, who after indicating consent to participate, then responded to the survey online either through clicking the link that was embedded in the email or copying and pasting the survey link into a separate Internet page. I analyzed the data via IBM SPSS Statistics Software. Once the surveys were collected, I reviewed the data in Survey Monkey, exported into Microsoft Excel, and then inputted into SPSS.

In preparation for data analysis, I conducted data cleaning and screening in order to increase the validity and reliability of the data, thus increasing the ability to draw appropriate and accurate conclusions (Salkind, 2010; Tulane, n.d.). This process included my removal of data that was not applicable to this study as well as missing data, data errors, incomplete data, and data bias (Salkind, 2010). In addition, I reviewed the data for any input errors that might have occurred in the exportation of the data (Salkind, 2010). I completed an initial data analysis by hand through a visual review of the data and manual removal of data that was not applicable to the study, such as the removal of any participants who did not hold a school counseling license/credential/certification.

My data and screening process also included the elimination of outliers or incomplete data or the removal of participants who do not meet the inclusion criteria (Salkind, 2010). For example, prior to accessing the survey, I asked participants if they held a school counseling license/credential/certificate. Answers that yielded a "no" response were informed they were not eligible to participate and were automatically excluded from the study. These participants were directed to an exit page thanking them for their interest in the study. I also used a scatterplot to identify outliers (Salkind, 2010).

Other examples of data cleaning included my exclusion of missing questions or ensuring that missing questions were addressed. These included those participants who did not answer, or those that provided incomplete answers to questions, such as those that were only partially answered in the demographic section (Salkind, 2010). Missing data were also possible if participants chose not to answer select questions in the survey (Field, 2013). There are multiple explanations for skipped survey questions. Participants skip questions if they are not clearly explained, if the survey or question was too long, or if the question was of the personal nature (Field, 2013). To address the quandary of missing data owing to skipped questions, I could have used SPSS, and applied a code for missing data or remove the surveys that contained missing data (Field, 2013).

Through my research questions and hypotheses, I sought to identify the relationships among these variables:

RQ: Is there a relationship between the combination of the independent variables of the school counselor's demographics (age, type of education received, and school learning program) as measured by a demographic survey, the school counselor's

confidence to use online counseling as measured by the school guidance counselors' perceptions of online counseling survey, and the dependent variable, the intent to use the internet for counseling as measured by school guidance counselors' perceptions of online counseling survey?

H_1: $\beta 1 \neq \beta 2 \neq \beta 3 \neq \beta 4 \neq 0$ There is a significant relationship between the combination of the independent variables age, type of education received, and school learning program as measured by the demographic survey, the school counselor's confidence to use online counseling as measured by the school guidance counselors' perceptions of online counseling survey, and the dependent variable, the intent to use the internet for counseling as measured by school guidance counselors' perceptions of online counseling survey.

H_0: $\beta 1 = \beta 2 = \beta 3 = \beta 4 = 0$ There is not a significant relationship between the combination of the independent variables age, type of education received, and school learning program as measured by the demographic survey, the school counselor's confidence to use online counseling as measured by the school guidance counselors' perceptions of online counseling survey, and the dependent variable, the intent to use the internet for counseling as measured by school guidance counselors' perceptions of online counseling survey.

For this quantitative study, I used a multiple regression analysis analyze the data, which also provided a correlational analysis, as well as interaction between variables (Field, 2013). I used SPSS (Version 21) to conduct the multiple regression analysis as a linear model to predict the outcome of the dependent variables on the independent

variable and the correlational interaction between the variables (Field, 2013). This type of analysis provided me with information pertaining to the relationship between the identified five variables (Creswell, 2013). There was also a report of the descriptive statistics and then inferential statistics. The confidence interval I used in this study was 95%, which is considered the standard in social sciences (Field, 2013).

Threats to Validity

Threats to internal and external validity are factors that may interfere with the generalizability, explanations, and conclusions pertaining to the results of the study (Creswell, 2013). The threats to internal validity include factors that may influence the conclusions of the study and provide alternative explanations of the results, whereas, the threats to external validity could influence my ability to generalize the results across populations or similar settings (Creswell, 2013). In my study, the threats to internal validity included the population sample and the participant's history and experience with computers and the Internet. Glasheen et al. (2013) posited that a limitation of their study was the fact that the administration of the survey was conducted via online through email. Considering that for my study I used the same survey to collect data, the online component of the survey was also a limitation and threat to the internal validity of my study. Using an online survey required individuals to have access to the Internet and have a level of comfort with navigating through the online environment and email to complete the survey (Glasheen et al., 2013). Therefore, sample selection was a threat to internal validity as this group of participants may have particular characteristics that influenced their receptiveness toward online counseling interventions (Creswell, 2013). One way I

attended to the challenges of sample selection was to use a convenience sample and select participants from across the U.S. until the sample size was met.

Maturation might also contribute as a threat to internal validity owing to the time I sent the survey, particularly if the timing is at the end of the school year, and if school counselors had alternative plans or job changes for the coming school year (Creswell, 2013). This might have influenced school counselors' points of view. My goal was to send the survey during the actual school year; however, this was contingent upon different start and end dates of different schools. I used strategies to address these threats to internal validity, by using a broad sample selected from across the U.S. in the national database in ASCA, and members from all states would have the opportunity to participate in the survey if they chose.

Threats to external validity included the use of convenience sampling (Creswell, 2013). The database from which I drew the sample included school counselors who are members of ASCA. Owing to characteristics that might be associated with school counselors across the U.S., it was difficult for me to generalize this study to the entire population of school counselors who are nonmembers of ASCA. It might also be possible that school counselors who have a membership affiliation in ASCA may have characteristics that could have influenced their receptiveness toward technology. While this information may not be generalizable, it was useful in informing common themes among school counselors who are receptive toward technology use in practice.

Possible threats to construct validity included instrument errors such as the questionnaire not adequately measuring what it was hypothesized to measure (Frankfort-

Nachmias & Nachmias, 2008). Other threats to construct validity include hypothesis guessing, which is the concept that participants may actively try to guess the desired outcome or the hypothesis, thus providing survey answers based on the assumptions (Trochim, 2006).

Another possible threat to construct validity included evaluation apprehension, which is the participants desire to provide answers and respond based on what they perceived to be considered knowledgeable (Trochim, 2006). The survey questionnaire was a published measured study found in Glasheen et al. (2013) study; therefore, decreasing the threats to construct validity. Glasheen et al. (2013) reported the Cronbach's alpha score for sections in the questionnaire.

Ethical Procedures

As previously noted, the database I used to obtain participants for this study was from the ASCA online member database. This is a free membership database that is accessible to ASCA Members. The ASCA granted me permission to access their database for research purposes. I made this request to use and access this database for research purposes via email and I confirmed through email and a phone call on 3/23/2016 and again in 2017.

I followed ethical and legal standards and procedures with implementation of this study, thus ensuring the safety of participants. Prior to conducting research or collecting and analyzing data, I applied to the Institutional Review Board (IRB) for Ethical Standards in Research at Walden University. Participant contact and data collection only commenced once approval was received. The IRB safeguards against unethical data

collection standards by and harm to research participants "ensuring that all Walden University research complies with the university's ethical standards as well as U.S. Federal regulations" (Walden, 2015, para. 1).

I further ensured the ethical conduct in research and treatment of all participants, by aligning my study with the ACA (2014) *Code of Ethics*. Section G Research and Publication necessitated that all research and scope of research practice ensured that my practices were ethical and follow institution, Federal and state standards and laws (ACA, 2014). I treated participants in this study both ethically and respectfully, and I wrote my email request in appropriate language that was also bias free to respect all participants.

All school counselors who I contacted for participation had the choice to volunteer for this study. I did not associate any survey data with identifying information that would impede allowing participants to remain anonymous. Each participant received an informed consent, which was aligned with ACA (2014) *Code of Ethics* and addressed the potential risks and benefits of the study as well as explained the process for data collection. The informed consent included my contact information if participants have any questions or concerns.

To ensure anonymity, I numerically coded participant surveys; no names were used. This study had minimal ethical risks, because I password protected the data and kept the data confidential. The only identifying information I used was associated with age, type of education received, school's learning program, and confidence to use online counseling. I did not use any other identifiers that would reveal which schools participants attended. I informed my volunteers that participation in this study was

optional and that each could withdraw from the study at any time, for any reason, and without any penalty. The Internet Protocol address (IP) was stored through Survey Monkey, but it was not used except to prevent more than one survey submission per computer. I did not track participants via IP address. Based on past research, counselors may experience resistance toward using the Internet as a tool for intervention (Alleman, 2002; McClure et al., 2005). Based on this and by potential participant discomfort, as I indicated in the informed consent, I set up the survey so that none of the questions were required except for the screening question; therefore, participants were allowed to skip or stop any questions that they did not want to answer or if they experienced discomfort.

The raw data that I collected from Survey Monkey exists in the survey Monkey account that I have protected by a password. I also password protected the data I collected and downloaded from Survey Monkey I keep it stored on a single owned computer and then I exported it into SPSS. I will delete surveys and data from the Survey Monkey account in less than one year and I will keep the exported data password protected for no longer than five years. After that time, the data will be destroyed. The data will remain anonymous and will not be used except in data analysis

Summary

My purpose for this research study was to gain insight into variables that may influence school counselors' intentions to use the Internet in counseling practices. The study design and methodology was an electronic survey that I sent out to a convenience sample of participants who were school counselors who received the license/credential/certificate in the U.S. and whose e-mail addresses are obtained from

the ASCA membership database. I analyzed the data through a multiple regression analysis to identify if there was a relationship between the variables between the IV's of age, type of education received, school learning program, and the school counselor's confidence to use online counseling, and the DV, intent to use the Internet for counseling.

In Chapter 4, I provide a summary of the study and include a summary of the data collection process. I will include a timeframe for the data collection; identification of any discrepancies in the actual process of data collection as compared to the plan, and a breakdown of the descriptive statistics. I conclude the chapter by discussing the study results along with the statistical analysis of the data and an in-depth analysis and summary of the data.

Chapter 4: Results

Effective use of the Internet may better equip counselors to reach vulnerable youth populations who may feel more comfortable seeking mental health services via the anonymity of the Internet (King et al., 2006; Young, 2005). Despite the benefits, there remains a gap in research pertaining to school counselor's use of the Internet in counseling practice. This gap is problematic if school counselors are not effectively using the Internet in practice as a potential intervention because youth, such as those who suffer from mental health disorders, may then remain vulnerable and underserved (Ebert et al., 2015). Based on the gap in knowledge related to counseling and the Internet and the potential viability of the Internet as a counseling intervention for vulnerable youth populations, my purpose of this quantitative study was to examine the relationship between variables that may influence the school counselor's intention to use the internet for counseling interventions. The variables I examined in this study included the school counselor's age, confidence to use online counseling, type of education received, school's learning program, and the dependent variable, the school counselor's intent to use online counseling.

Based on the inquiry into the factors that may influence the school counselor's use of the Internet in counseling practice, my research question for this quantitative study was: Is there a relationship between the combination of the independent variables of the school counselor's demographics (age, type of education received, and school's learning program) as measured by a demographic survey, the school counselor's confidence to use online counseling as measured by the school guidance counselors' perceptions of online

counseling survey, and the dependent variable, the intent to use the Internet for counseling as measured by school guidance counselors' perceptions of online counseling survey?

My hypotheses were as follows:

H_1: $\beta 1 \neq \beta 2 \neq \beta 3 \neq \beta 4 \neq 0$ There is a significant relationship between the combination of the independent variables age, type of education received, school learning program as measured by the demographic survey, and the school counselor's confidence to use online counseling as measured by the school guidance counselors' perceptions of online counseling survey and the dependent variable, the intent to use the Internet for counseling as measured by school guidance counselors' perceptions of online counseling survey.

H_0: $\beta 1 = \beta 2 = \beta 3 = \beta 4 = 0$ There is not a significant relationship between the combination of the independent variables age, type of education received, school learning program as measured by the demographic survey, and the school counselor's confidence to use online counseling as measured by the school guidance counselors' perceptions of online counseling survey and the dependent variable, the intent to use the Internet for counseling as measured by school guidance counselors' perceptions of online counseling survey.

In this chapter, I review the data collection process, the results of this study, and discrepancies between actual process in comparison to the stated plan outlined in Chapter 3. I also review the participant response rate and characteristics of the participant sample. Furthermore, I examine the results and report the findings including descriptive statistics,

multiple regression analysis results, and additional statistical information. Finally, based on the results, I provide an analysis of the hypothesis, interpretation of the data, implications, and overall summary of the findings based on the research question.

Data Collection

As indicated in Chapter 3, I received permission from the ASCA to use its online membership database to recruit participants for this study. In addition to receiving written permission via email to use this database, I applied for and received permission from my university's institutional review board (IRB). Once permissions were in place, I began the recruitment and data collection process. The total timeframe for the data collection process including sorting the participants took me approximately 1.5 weeks.

I began the data collection process by first downloading the participant names from the ASCA database, which I sorted by location, which was the participant's state of residence, and school counseling profession. The database was too large to download at one time for the entire U.S. database; therefore, I had to sort in the following way. During the initial stages when I first accessed the website, I scanned the data to make sure I did not know any of the school counselors' names and therefore would not have a conflict of interest. I did not recognize any names, so this was not concerning to me. The online database would only allow me to search in groupings of 25. I then copied and pasted the names and email addresses for participants from all states into a Microsoft Excel spreadsheet. After I downloaded the data, I deleted participant names and locations so when I used the database, I was aware only of the email address of the participant without any other identifying information.

At this point, I placed the participant email addresses in a Microsoft Excel spreadsheet and placed the list across 14 sheets owing to the large number of participants. I sorted participants into groupings of 25 so that I would be able to send the emails in smaller groupings. In drawing the convenience sample, I selected groups of 25 from each of the 14 tabs, in the beginning of the list, the middle, and the end of the list in order to ensure that I was selecting my sample from the entire database from all 50 states. For the next step, I sent the recruitment emails out to participants. The recruitment process took approximately 2.5 days. I sent out 427 emails to groups of 25 individuals to a total of 10,694 school counselors across the U.S. Approximately 627 emails were returned as not valid or were rejected by the participants filter. Because there was automatically multiple attempts to deliver based on the email delivery database, it was not possible for me to get the exact number of returned email addresses as some of the emails were returned more than once

The total number of survey responses was 391 participants. Of this number, nine of them were not qualified to participate because they did not hold a counseling license in the U.S. in the state in which they practice. Of the 382 participants who began the survey, it appeared that only 288 participants continued beyond the first page of the survey, suggesting that 94 stopped the survey after the screening question and 15 responses contained missing data. These were removed leaving 273 completed the survey without skipping any questions.

The response rate for this study was approximately 3.8%. It should be noted that other factors may have affected the response rate of this study. The timing of the survey

was a big factor. I sent the invitations toward the end of the school year in May. Depending on the end date of each school year, and if the participant used their personal or work email address with the ASCA, this may have affected the response rate. Many individuals may already have been out of school for the summer. In addition, I also began my data collection at the end of the week just before a holiday in the U.S.; therefore, some participants may not have been responsive to their work emails. Despite the lower response rate percentage, my minimum sample size of $N = 85$ was met within one week.

There were not any major discrepancies between the plan for recruitment, data collection, and actual implementation. In Chapter 3, I intended to send recruitment emails to all members of the ASCA who were listed in the online membership database; however, this step was not necessary as this was a convenience sample, and I exceeded my sample size. Owing to the low minimum needed for my sample, I was able to meet my sample size in less than two days; however, I opted to keep the survey open for the remaining week in order to ensure enough participants. Other than the minor change in achieving sample size earlier than anticipated, the implementation matched the plan as presented in Chapter 3.

Results

Seeking to gain insight into select predictor variables that may be influential in the school counselor's intent to use online counseling, I collected data via survey methodology and received completed responses from 273 participants. Prior to analyzing the results, I exported the data from Survey Monkey into a Microsoft Excel file. Once in Excel format, I began the data cleaning by visually examining the data and identifying

any missing data. I then deleted surveys that had missing data, which was a total of 109 from the screening question and survey. Once the data cleaning was complete and cases with missing data were removed, I applied reverse scoring to items 12 and 14. Following this, I combined the scores of the variables confidence to use online counseling, which was a total of eight items, and intent to use online counseling, which was a total of nine items.

I used IBM SPSS Statistics Version 21 to complete a multiple regression analysis to examine the relationship between the dependent variables and independent variables. In this study, I included the independent variables of the school counselor's age in years, confidence to use online counseling, type of educational experience, and school's learning program. The dependent variable was the school counselor's intent to use online counseling. The multiple regression analysis is a useful measure to identify if there is a relationship between variables, the descriptive statistics for all variables, and correlation between variables (Field, 2013). When I ran a multiple regression analysis, the SPSS output included the sample descriptive statistics, test of the hypothesis, the correlation via a Pearson correlation test, and ANOVA. In addition to this analysis, I also ran frequencies for two of the variables, educational experience and school's learning program. I also ran a Chi-square test to determine if there was a relationship between the independent categorical variables and a one-way ANOVA to further examine one of the categorical variables (Field, 2013). In the next section, I present the results, including the descriptive statistics, assumptions, and analysis and findings.

Sample Descriptive

The population that I surveyed in this study included school counselors who were registered members of the ASCA online membership database. The sample did not include any school counselors who were not registered members; therefore, this sample may not be generalizable to the entire school counseling population. The total population of school counselors who are members of the ASCA is not known. Based on the emails I sorted from the online membership database, there were approximately 37,450 individuals who signed up with an email address and identified as a school counselor in the U.S. Of those, it is not known how many of the email addresses were valid. Of the 10,694 participants who were invited to participate in the survey, total participants with valid email addresses included approximately 10,054.

The total participant size for this study was $N = 273$ total responders and the sample size needed for this study was $N = 85$. The demographic data collected in this study included the participant's gender, age, and grade level of the students with whom they work. The average age of the participants was 42 years old with an age range between 24 to 68 years old ($M = 41.85$, $SD = 10.712$) and skewness of .403 and kurtosis of -.833.

The next demographic included the grade level of student with whom the school counselor worked. The frequency percentage of participants who reported that the grade levels with whom they work included the following: 26% elementary grade levels, 19.5% middle/junior high school, 33.7% high school students, 7.7% elementary and

middle/junior high school, 7% middle/junior high and high school, and 5.9% in all grade levels from elementary to high school.

The gender distribution of participants included 82.1% (*n* = 224) females, 17.2% (*n* = 47) males, and 0.7% (*n* = 2) reported that they preferred not to answer. It should be noted that while the gender distribution of the sample population was unevenly distributed, these results were expected. This distribution aligns with the distribution of the general population of school counselors according to a 2011 National Survey of School Counselors where researchers reported that 77% of school counselors were female (Bridgeland & Bruce, 2011).

Descriptive Statistics

Prior to analyzing the data, I visually screened for any missing data and removed incomplete surveys. The variables included in the descriptive statistics were the independent variables age, type of educational experience, school's learning program, and confidence to use online counseling. The dependent variable was the school counselor's intent to use online counseling.

Age. The independent variable, participant's age yielded a range of 24 to 68 (*M* = 41.85, *SD* = 10.712). The results for skewness and kurtosis included a skewness of .403 (*SE* = .147) and kurtosis of -.833 (*SE* = .294), which was acceptable for a normal distribution. For both skewness and kurtosis, a score of 0 indicates a normal distribution (Fields, 2013). The acceptable value of both skewness and kurtosis is a range between +2 or –2 for all of the variables in this study (George & Mallery, 2016).

Educational experience. The independent variable, educational experience is a categorical variable consisting of two options: traditional in-person education, coded as a number one or blended/combination with both in-person and online education, coded as a number three. The frequency of each included 57.5% of participants (n = 157) who reported that they received traditional in-person education. In comparison, blended/combination with both in-person and online educational experiences was a frequency of 42.5% (n = 116). It should be noted that the survey questions contained a third option, which was option number two, online only education. For the data analysis, I dropped this option as zero participants selected this option, thus indicating that none of the participants received an online only education.

School's learning program. The independent variable, school's learning program also contained three response options. These included traditional in-person curriculum that I coded as a one; online-only curriculum that I coded as two, and blended learning environment, that I coded as a three. The results yielded that 82.4%, (n = 225) of participants reported that they worked in a school that offered a traditional in-person curriculum, whereas, 17.6%, (n = 48) participants reported that they worked in a school that offered a blended learning environment or online-only environment. Only two participants selected the online-only option; therefore, I categorized the two into the blended/combination option, because this was the most viable and inclusive selection as it incorporated both online and traditional.

Confidence to use online counseling. The independent variable, confidence to use online counseling as measured by School Guidance Counselors' Perceptions of

Online Counseling Survey, had a minimum score of 8, a maximum score of 40, with a range of 32 (M = 20.98, SD = 7.889). The skewness of this variable was a .146 (SE = .147). The kurtosis was -.750 (SE = .294). This fell within the acceptable range of a normal distribution for both as they were less than 2 and greater than -2 (George & Mallery, 2016).

Intent to use online counseling. The dependent variable, intent to use online counseling as measured by School Guidance Counselors' Perceptions of Online Counseling Survey, had a minimum score of 12 and maximum score of 40, with a range of 28 (M = 27.73, SD 4.372). The skewness was .153 (SE = .147) and kurtosis was .343 (SE = .294). This fell within the acceptable range of a normal distribution for both as they were less than 2 and greater than -2 (George & Mallery, 2016).

Chi-square informed consent. Following the descriptive statistics, I conducted the Chi-square test to look for significant associations between the categorical variables (Field, 2013). These variables included the independent variable, educational experience (traditional/in-person = 1 and blended combination in-person/online = 3) and the independent variable, school's learning program (traditional in-person curriculum = 1 and blended learning environment = 3) (Field, 2013). The Chi-square test yielded a χ^2 (1) = 11.633, $p < .05$, thus indicating that there is some association between the two independent variables.

Statistical Analysis and Findings

As previously noted, I sought to determine whether there was a relationship between the dependent variable, intent to use online counseling, and the independent

variables, school counselor's age, confidence to use online counseling, educational experience, and school's learning program. The research question included the following:

RQ: Quantitative: Is there a relationship between the combination of the independent variables of the school counselor's demographics (age, type of education received, and school learning program) as measured by a demographic survey, the school counselor's confidence to use online counseling as measured by the School Guidance Counselors' Perceptions of Online Counseling Survey, and the dependent variable, the intent to use the Internet for counseling as measured by School Guidance Counselors' Perceptions of Online Counseling Survey?

H_1: $\beta1 \neq \beta2 \neq \beta3 \neq \beta4 \neq 0$ There is a significant relationship between the combination of the independent variables age, type of education received, and school learning program as measured by the demographic survey, the school counselor's confidence to use online counseling as measured by the School Guidance Counselors' Perceptions of Online Counseling Survey, and the dependent variable, the intent to use the Internet for counseling as measured by School Guidance Counselors' Perceptions of Online Counseling Survey.

H_0: $\beta1 = \beta2 = \beta3 = \beta4 = 0$ There is not a significant relationship between the combination of the independent variables age, type of education received, and school learning program as measured by the demographic survey, the school counselor's confidence to use online counseling as measured by the School Guidance Counselors' Perceptions of Online Counseling Survey, and the dependent variable, the intent to use

the Internet for counseling as measured by School Guidance Counselors' Perceptions of Online Counseling Survey.

Correlation. The Pearson correlation table that was generated as a part of my multiple regression analysis was a useful measure to analyze the relationship between the variables in this study (Field, 2013). Between the predictor variables and the dependent variables, the strongest correlation was between school counselor's confidence and the school counselor's intent to use the Internet. The results also yielded positive significance (r = .434, p = .000). Next, between the predictor variable, educational experience and intent, the results also yielded that there was a statistically significant relationship (r = .172, p = .002). Between the independent variable, school's learning program and intent, there was a slight correlation; however, it was not statistically significant (r = .033, p = .293). Finally, between age and intent, the results yielded that there was a negative correlation, but it was not statistically significant (r = -.065, p = .142) (see Table 1).

Next, I examined the relationship between the independent variables. My first analysis included educational experience and school's learning program. These results yielded the highest correlation among all of the variables and statistical significance (r = .215, p = .000). Between educational experience and confidence there was a positive correlation and statistical significance (r = .106, p = .040). Educational experience and age yielded the results of minimal correlation and it was not statistically significant (r = .006, p = .464). Confidence and school's learning program yielded that there was a positive relationship and a statistical significance (r = .164, p = .003). Finally, the correlation between age and confidence, there was a positive relationship; however, there

was not statistical significance (r = .048, p = .215) (see Table 1).

Table 1

Correlation

		DV: Intent total	IV: Confidence total	IV: Age	IV: Educational experience	IV: School's learning program
Pearson correlation	Confidence	.434	1.000		.106	.164
	Age	-.065	.048	1.000		.157
	Educational experience	.172	.106	.006	1.00	
	School's LP	.033	.164	.157	.206	1.00
Sig. (1-tailed)	Confidence	.000*			.040*	.003*
	Age	.142	.215			.005*
	Educational experience	.002*	.040	.464		
	School's LP	.293	.003*	.005	.000*	

Note. * p < .05. DV, dependent variable; IV, independent variable; LP, learning program.

Multiple Regression Analysis

The assumptions of multiple regression analysis include an expectation that the data represent a normal distribution among the independent variables (Fields, 2013). Another assumption is that the independent variables do not exhibit multicollinearity with one another (Fields, 2013). Simply stated the assumption is that the independent variables would have low levels of collinearity between them and are not too closely related (Field, 2013). Low levels of collinearity are acceptable, whereas, correlations of levels of .8 or .9 are very high (Fields, 2013). In this case, there is some collinearity between the predictor variables, particularly, educational experience and school's learning program (r = .206, p

< .05). These two variables had a higher correlation and were also significant; however, this is acceptable as they are lower levels of correlation (see Table 1).

The multiple regression analysis yielded a significance (p = .000), thus indicating that there is a positive relationship between the independent variables and the dependent variable, $F(4, 268) = 18.26$, $p < .05$ with an $R^2 = .214$ and adjusted $R^2 = .202$. After conducting the linear multiple regression analysis via SPSS to determine if there was a relationship between the independent variables and the dependent variables, it appeared that there was statistical significance ($p < .05$), thus supporting a rejection of the null hypothesis and accepting the alternative hypothesis. It was evident that there was a significant relationship between the model of independent variables and dependent variable. The results indicated that 20% of the variance of the dependent variable, intent to use online counseling, was explained by the model including the independent variables age, confidence to use online counseling, educational experience, and school's learning program.

Coefficients

Owing to my further inquiry into the role of the independent variables, the results of examining the coefficients yielded that there was statistical significance ($p < .05$) for two of the four independent variables (see Table 2). This included confidence to use online counseling ($ß = .432$, $p = .000$), which was the strongest predictor thus indicating that this variable had the strongest influence. Educational experience was also significant ($ß = .138$, $p = .013$), but had less of an influence than confidence to use online counseling. The results yielded that the remaining two variables were non-significant predictors ($p >$

.05) including age (ß = .-078, p = .156) and school's learning program (ß = -.054, p = .342) (see Table 2).

Table 2

Coefficients

	ß	t	Sig.
IV: Confidence TOTAL	.432	7.837	.000*
IV: Age	-.078	-1.421	.156
IV: Educational experience	.138	2.487	.013*
IV: School's learning program	-.054	-.952	.342

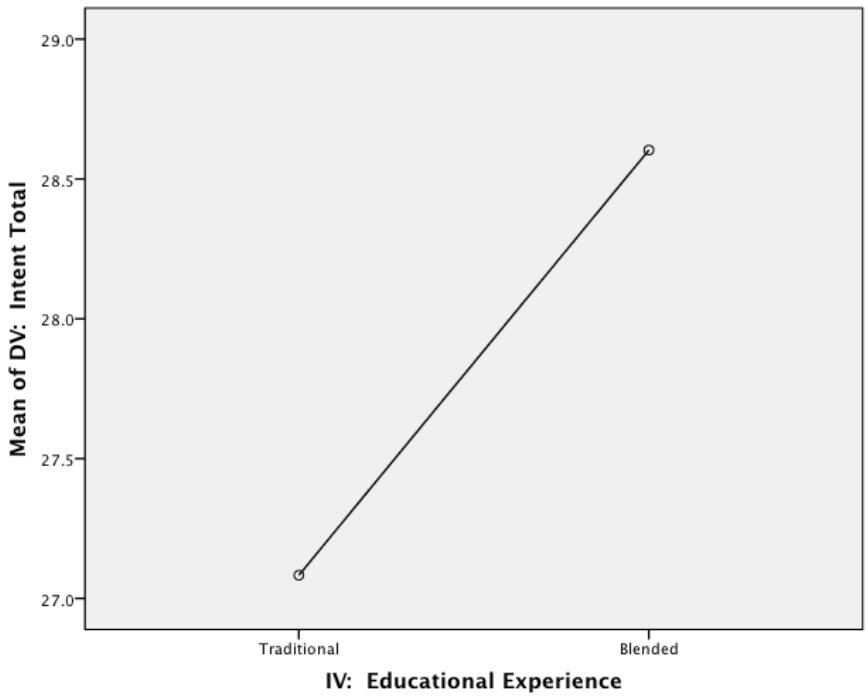
Note. * p < .05. IV, Independent Variable.

The variable educational experience was a categorical variable that contained two answer options, traditional education or blended education with both traditional and online education. Considering this variable was a significant predictor of the dependent variable, intent to use online counseling, this variable warranted further examination. I conducted a one-way ANOVA and descriptive statistics on this variable and the dependent variable to examine the effect of the categorical variable, educational experience on the dependent variable, school counselor's intent to use online counseling, thus examining the differences between the means. The one-way ANOVA was useful to look at the possible differences between the means and their individual influence on the dependent variable (Field, 2013; Salkind, 2010). The traditional education option had a sample size of (n = 157, M = 27.08). The minimum was 12 and the maximum was 40. Blended learning option was a sample size of (n = 116 and M = 28.60) (see Figure 1). The influence of educational experience yielded significance $F(1, 271) = 8.28$, p = .004.

The educational experience group, blended learning option, had more intent to use online counseling.

Figure 1

Mean Plots



Summary

For this study, I used a multiple regression analysis to determine if there was a relationship between the independent variables, age, confidence to use online counseling, type of educational experience, and school's learning program, and the dependent variable, intent to use online counseling. The results of my analysis yielded that the null hypothesis was rejected and the alternative hypothesis was accepted. This confirmed that there is a relationship between the predictor variables and the dependent variables.

In Chapter 5, I provide an interpretation of the findings as well as identify the limitations of the study, including limitations to generalizability. I then follow this with recommendations for additional research as related to this current study. Furthermore, I discuss the implications of this study, including the potential implications on social change, the conceptual framework of this study, and recommendations for school counselors in practice. Finally, I complete Chapter 5 with a conclusive summary of the key findings and outcome of this study.

Chapter 5: Discussion, Conclusion, and Recommendations

As I presented in previous chapters, a gap in literature exists related to school counselors' use of the Internet. There is a need to examine the school counselors' intention to use the Internet in practice when working with students. Based on these gaps, the focus of this study was to examine possible factors that may be predictors of the school counselors' intent to use the Internet in counseling practice when working with students. My purpose for this study, therefore, was to examine the independent variables of school counselor's age, confidence to use online counseling, type of education received, and school's learning program, and the dependent variable, the school counselor's intent to use online counseling. I used a quantitative methodology using an online survey, which I sent to school counselors who were identified as members of the ASCA and located in the U.S. I then analyzed the collected data via multiple regression analysis to examine the relationship between the predictor variables and the dependent variable (Creswell, 2009).

Understanding the relationship between the independent variables and the dependent variables may be useful to identify trends among school counselors and identify variables that influence Internet use for counseling practice. This information also begins to fill the gap in literature related to school counselors and trends in Internet use. Furthermore, this information may be purposeful to inform training programs to better equip counselors to use the Internet in practice to reach youth populations. From a multicultural lens, this research may also be useful in assisting school counselors to reach vulnerable youth populations who may be more receptive to receiving counseling

services via the Internet (King et al., 2006). In this chapter, I summarize and interpret the key findings, discuss the results in relation to the conceptual framework, and identify the potential limitations of the study. Finally, I discuss the implications of this study and recommendations for future research.

Summary of the Results

In this quantitative study, I examined potential independent variables that may be predictive of the school counselor's intent to use online counseling. To address this inquiry, I surveyed participants who were registered members of the ASCA who identified themselves as school counselors. The primary purpose of this study was to determine if there was a relationship between a model of the predictor variables school counselor's age, confidence to use online counseling, type of educational experience, and school's learning program, and the dependent variable, the school counselor's intent to use online counseling. After conducting a multiple regression analysis via SPSS, I found the key findings of this study provided evidence to support that there is a significant relationship between the model and the independent variable.

Interpretation of Key Findings

After analyzing the initial data from this study, the results yielded several noteworthy findings that may be useful for future research. The first finding confirmed that the model was significant thus indicated that the model of independent variables was predictive of the school counselor's intent to use online counseling. Conclusively, after I interpreted the results, it was evident that 20% of the variance of the dependent variable, intent to use online counseling, was explained by the model including the independent

variables age, confidence to use online counseling, educational experience, and school's learning program. This aligns with research related to behavior and variables that influence the adoption of technology. Researchers have found that technology use may be influenced by an individual's demographics, such as age, gender, education, and income, (Porter & Donthu, 2006) as well as other beliefs and perceptions of technology in terms of use, such as ease of use and usefulness (Cheung & Vogel, 2013; Davis, 1989; Sánchez & Hueros, 2010; Schepers & Wetzels, 2007; Teo, 2009). Understanding the effect of select variables on the use of technology better serves to provide insight into how to encourage the use of technology in various practices (Porter & Donthu, 2006; Teo, 2009).

Considering that the results of this study yielded a positive relationship between the predictor variables and the school counselors' intent to use online counseling, I further examined the relationship between these variables independently by analyzing their correlation coefficients. I initially found that only two of the four variables yielded a significant relationship with the dependent variable. This included confidence to use online counseling and type of education received, whereas the nonsignificant variables were the school counselor's age and school's learning program. Delving into a more in-depth analysis of the data, I found that the strongest predictor of the dependent variable is the school counselor's confidence to use online counseling. This suggests that the more confident the school counselors are, the more likely they are to use the Internet for counseling. These results align with Glasheen et al. (2013) study of school counselors located in Australia. They found that school counselors were more likely to use the Internet if they felt confident to use the Internet as a tool (Glasheen et al., 2013). In their

study, the school counselor's confidence in relation to technology use was associated with gaining increased cognition to ethics, legal implications, and student receptiveness (Glasheen et al., 2013).

The two independent variables I found that demonstrated a significant influence on intent to use online counseling included the counselor's confidence to use online counseling, and the school counselor's educational experience. The school counselor's educational experience was a categorical independent variable with two options, traditional education and blended learning education, which was a combination of both online and traditional education options. Upon further investigation, I found that there was a positive relationship between the blended learning education, which was comprised both online and traditional learning experiences, and intent to use online counseling. This suggests that individuals who have experience with online education have increased intent to use online counseling in their practices. Kurki et al. (2013) posited that computer skills may influence the use of the Internet, particularly with nurses who work with adolescents. This suggests that school counselors who have experienced online education may have gained more skills in computer use and may be more likely to use the Internet in practice because of their own experience, increased skill, and personal comfort level with this tool.

Another noteworthy finding that I found was the positive correlation between the independent variables of school counselors' educational experience and confidence to use online counseling. Based on this correlation, it was possible that as educational experience increases, confidence also increases. This relationship was somewhat

expected based on previous research related to confidence and training. There appears to be an overlap between the variables. Schmidt (2016) conducted a study, which examined counselors' methods, confidence, and preparedness in student suicide risk assessment. This researcher found that there was a relationship between counselors' confidence and training and preparedness (Schmidt, 2016). In addition, Teo (2012) suggested that increased computer skill and positive perception and beliefs about the computer may be linked to increased use of technology in practice. Connecting to my study, educational experience may be associated with skill development. Furthermore, I found that individuals who experienced a blended learning educational had increased intent to use online counseling. Experience with online education may be connected to increased skills and exposure to technology. Similarly, one of the components that made up the variable, confidence to use online counseling, in my study was related to school counselor having the skills to implement online counseling.

An additional finding was related to the independent variable school counselors' age. I found that for this participant group, age was not a significant predictor of the school counselors' intent to use online counseling. This data were somewhat contradictory to the previous evidence in other studies as represented in the literature review in Chapter 2. Examples of this included Thayer and Ray (2006) who purported that age had a significant negative relationship to an individual's online communication preferences. In addition, Pew Research (2015) found that there was a decline in Internet use as age increased; therefore, based on this and other research, there may be a negative relationship between age and Internet use (Charness & Boot, 2009). While this was not

the case with my study, the results of my study coincided with Kilic's (2017) study of music teachers and technology use. Kilic (2017) found that age and self-confidence did not have differences that yielded statistical significance, which aligns with the evidence from my study. Based on this evidence, it may be useful for researchers to continue to examine the variable of age and the relationship to Internet use. In this study, it was evident that there were other variables that had a more significant influence on the school counselor's use of online counseling.

In interpreting these results, it is important to note that there are several facets that contribute to school counselors' intent to use online counseling. As demonstrated in my study, the key findings suggested that the school counselors' confidence to use online counseling and school counselors' type of educational experience significantly contributed to the school counselors' intention to use online counseling. While these variables have a positive correlation, they both appear to be linked to training and skill development, thus necessitating additional examination of the role of skill development. Furthermore, the findings related to the school counselor's age also require additional inquiry to gain insight into the influence of age and technology adoption.

Conceptual Framework and Study Results

As I discussed in Chapter 2, I built this study upon the conceptual framework of the TAM. The TAM model provides a framework that is useful to demonstrate increased insight into the individual behavior as related to Internet use and the influential variables and trends that influence an individual's acceptance of new technology (Davis, 1989). Ultimately, from this conceptual framework there are external factors or variables,

including psychological factors, that influence individuals' use of technology; therefore, it is necessary for researchers to examine what these are and their influence on technology use (Davis, 1989, Kurki et al., 2013, Porter & Donthu, 2006; Teo, 2009). The TAM has been effectual to provide an increased understanding of behavioral trends related to technology use, particularly in various professional and consumer groups (Kurki et al., 2013; Porter & Donthu, 2006; Teo, 2009). The original model, developed by Davis (1989), framed the concept of technology adoption on three constructs of perceived usefulness, perceived ease of use, and behavioral intentions, and in later studies, the construct subjective norm was added (Schepers & Wetzels, 2007) and then expanded to other demographic variables (Porter & Donthu, 2006). Porter and Donthu (2006) further expanded upon the TAM and found that the demographic variables, age, education, income, and race have a relationship with attitude toward the way one uses the Internet.

In my study, I examined four main constructs and their relationship to the school counselor's intent to use online counseling. These constructs included the school counselor's school learning program, type of educational experience, confidence to use online counseling, and age, and their relationship to the school counselor's intention to use online counseling. First, the results of this study aligned with the conceptual framework of the TAM, thus ultimately providing evidence that there is a relationship between select predictor variables and intent to use technology, specifically online counseling. The results yielded that there was a significant relationship between these predictor variables and the dependent variable. Conclusively, there are factors that

influence the sample population of school counselor's technology use and adoption toward the use of technology.

It was evident that there was statistical significance between two out of four predictor variables tested in this study. The variables that proved to be significant predictors included confidence, which was the strongest predictor followed by, school counselor's type of educational experience. The remaining two variables, which did not yield significance, included the school counselor's age and the school's learning program, which was the curriculum used in counselors' work environment. After delving into the results of the variables that were significant predictors, it appeared that the results of this study yielded partial alignment with expanded versions of the TAM that included demographics of age as a predictor (Porter & Donthu, 2006). The anomaly of age for this participant group is a curious variable in that it did not align with either the TAM conceptual model, nor did it align with literature as reviewed in the previous chapters (Porter & Donthu, 2006). In my study, age did not influence the school counselor's intention to use online counseling, despite evidence from other studies (Porter & Donthu, 2006).

The TAM and expanded TAM research yielded that an individual's belief related to the usefulness and ease of use of technology and demographic variables influenced attitude and behavior related to technology acceptance (Davis, 1989, Porter & Donthu, 2006). In my current study, the variables of confidence and educational experience aligned with these results. Confidence included the school counselor's level of comfort and certainty and perception of the Internet for counseling, thus asking if a school

counselor has the confidence to use online counseling. Similarly, the TAM variables of perceived ease of use and perceived usefulness are related to how an individual perceives how useful technology is and whether they believe that it is easy to use in practice (Davis, 1989; Porter & Donthu, 2006). These variables are then influential on the individual's attitude toward the use of technology (Davis, 1989; Porter & Donthu, 2006).

Porter and Donthu (2006) found that in addition to the main constructs of the TAM, demographic variables are influential on an individual's perceived ease of use and perceived usefulness. The researchers suggested that factors such as beliefs about access to technology and demographics such as education, income, and age are also influential on beliefs about technology use and actual technology use (Porter & Donthu, 2006). As noted above, in my study, the variable of educational experience was another significant predictor of intent to use online counseling. This predictor variable was related to the school counselor's personal educational experience and training, which included whether the school counselor received a traditional education or blend of online and traditional classroom experience. Educational experience closely linked to the TAM suggested that the school counselor's experience gained in his/her personal education contributed as an influence on intent to use the Internet in practice. My study is effectual to contribute to this base of knowledge related to TAM in that the results also suggests that there is a relationship between an individual's confidence to use technology and educational experience and intent to use technology, both related to belief and environmental experience. This possible extension of the TAM allows for an increased understanding of behaviors, training, and beliefs that may contribute to a deeper understanding of

behavioral trends as related to technology use. Furthermore, this model may be useful to expand to the knowledge of how school counselors use technology and their intention to use the Internet in practice.

Limitations of the Study

There were several limitations that should be noted in this study. One included the time of year that I recruited participants for my study. Despite meeting the sample size, the fact that I collected the data toward the end of the school year may have affected the response rate of potential participants. Another limitation was the wording of the questions from the original study. While it appeared to be clear, there may have been some survey items that may have led to confusion and lack of clarity or to a loose interpretation in terms of school counseling in the U.S. This survey was originally designed and used in Australia (Glasheen et al., 2013); therefore, there may have been some differences between school counseling programs between countries as well as differences in terminology.

Along the same lines, the setup of the survey may have also contributed as a limitation of this study. I set my survey up in Survey Monkey so that it contained an initial screening question, asking school counselors if they held a school counseling license or credential. After answering this question, participants had to then select next at the bottom of the survey. Initially, 391 participants agreed to participate in the study by clicking the survey link. Of this number, nine were not qualified to continue, but 94 did not continue through the survey. This may have occurred because the screening question required participants to click next to continue to the survey instead of automatically

moving to the survey questions. The reason for the high dropout rate in this survey is unknown; however, the extra step of selecting next may not have been clear or participants may have thought this was the end of the survey. The structure of the survey may have contributed to the lack of responses.

Another limitation is related to generalizability. One factor that limited generalizability was this study was Internet based research, which allowed participants to easily drop out or not continue through the survey as noted above (Salkind, 2010). Another limitation pertaining to generalizability of this study was the type of sampling procedure. In my study, I used a convenience sample drawing my sample from a preselected sample of school counselors who were members of the ASCA. This sampling procedure was nonrandom and based upon invitation and participant willingness to participate in the study. A limitation of this type of convenience sample is that the sample is not generalizable to the broader population of school counselors in the U.S. (Salkind, 2010). The participant group in my study may be influenced by certain bias that would also affect my ability to generalize this study to the school counseling population (Farrokhi & Mahmoudi-Hamidabad, 2012). There may be specific characteristics of this population that are associated with membership. To demonstrate this further, the sample included only individuals who listed an email address in the online membership database. It may be possible that this sample group had more experience and comfort level using the Internet as the ASCA offers resources online for members and a certain level of mastery of computer use.

Recommendations

The topic of school counselors and Internet use in counseling practice warrants continued research and examination. After analyzing the data in this study, I found evidence that there is a relationship between the select variables and a school counselor's intent to use online counseling. Future studies may be benefit from researchers addressing the limitations of this my study. One recommendation is to send the survey at a different time during the school year, thus potentially addressing the low response rate. Furthermore, an additional recommendation is to also allow the survey to remain open longer for an increased response rate. Another recommendation is to adapt the survey structure. The survey I used in this study consisted of two parts. The first part was a screening question that required participants to select yes or no. If participants select yes, they then needed to select next to move to the second part of the survey. For future research, I would suggest formatting the survey so that it was only one step, so participants were able to see the entire survey before closing the link or to clearly state the transition requirements.

Furthermore, based on the evidence pertaining to the independent variable, age, and compared to the data from other studies as noted in previous sections, I recommend taking a more in-depth examination of age and school counselors' intention to use the Internet in practice. The results of this study are inconsistent with other studies and data; therefore, this variable warrants further examination and a closer look into the effect of age on technology use. It is not known why this study yielded these inconsistent results.

Finally, it should be noted that during the timespan starting this dissertation process and data collection, researchers have continued to evolve theories related to technology acceptance through furthering discussions based on research and new developments. Based on the evolving nature of technology systems and developing research, I recommend that future researchers incorporate and acknowledge the implications of newly developing theories related to individual's use of technology and other factors that may explain technology acceptance among school counselors. Venkatesh, Thong and Xu (2016) suggested that it may be useful to focus research on an expanded and more synthesized model that combined the framework of multiple theories pertaining to technology acceptance. They indicated that the unified theory of acceptance and use of technology, created by Venkatesh et al. (2003), provides a framework from which to expand research and extend to different populations and settings through the integration of additional influential factors (Venkatesh et al., 2016). Variables such as age, gender, experience, values, social influences, perceived risk, ethics, and effort are some examples of factors that may influence technology use and acceptance (Venkatesh et al., 2016). Based on the expansion and integration of multiple TAMs, I recommend that future research pertaining to the school counselors' intent to use online counseling take into consideration additional characteristics of a more unified TAM.

Implications

This study presented implications that affect social change both acutely and on a broader scope for school counselors and training and for the counseling profession in general. In addition to the conceptual framework of the TAM, this study aligned with a

multicultural framework necessitating a counselor's cognition to the unique needs of individuals and vulnerable populations (ACA, 2014; Mio et al., 2008). This requires that counselors consistently practice with an acute awareness to the ways they can effectively serve marginalized populations (Arredondo et al., 1996). Considering that society is consistently in a state of evolution, counseling practices must also align with such an evolution in order to create ethical and useful strategies to meet the needs of the recipient population (Dineyurek & Uygarer, 2012). With that notion and the role of technology, it is evident that the Internet may be a viable option to support certain groups of individuals (Glasheen and Campbell, 2009; Dineyurek & Uygarer, 2012). Following this premise, the Internet may be a viable option for counselors to use to support and provide mental health services to certain groups of individuals, particularly youth, who are a vulnerable population (Glasheen & Campbell, 2009; King et al., 2006; Leibert et al., 2006; Menon & Rubin, 2011).

Considering this, it is necessary to gain insight into school counselors' use of the Internet in practice and the factors that contribute to their intention to use this medium. In understanding the variables that may be influential in trends in technology use, it is possible that this information may be useful to inform training programs to better equip individuals to effectively use technology in practice. Trends and patterns that are predictive of the school counselors' willingness may be useful to inform training programs and better equip school counselors to effectively use online counseling, thus making it more viable tool that can be used to reach youth. Teo (2009) suggested that administrators and educators may benefit from technology related training and use of

various technologies. Training may contribute to attitude, provide more experience, and promote self-efficacy, which is associated with technology use (Teo, 2009). Similarly, Porter and Donthu (2009) suggested that understanding how demographics are associated with technology acceptance may be useful to inform companies and management on consumer trends and ways in which to increase Internet and technology use.

The results of this study first yielded that there is a relationship between several predictor variables of age, confidence, educational experience, and school's learning program, thus suggesting that these variables are influential on the use of the Internet. Delving further into the results, I found that two out of four of these variables were significant, confidence and educational experience. Noting this outcome, the variables may be useful to inform training programs. Based on my study, it may be beneficial to focus training programs on developing the school counselors' confidence to use the Internet, thus emphasize skill development in using the Internet and technology for counseling practices. In addition, it is important to use training programs to provide counselors with a more in-depth understanding of legal, ethical, and confidentiality issues related toward counseling and Internet use, and counseling outcomes when working with students. In my study, the variable, confidence was comprised of survey questions related to ethics, legalities, controlling the counseling process, confidentiality, and outcome. Based on this, training programs that are focused on these facets may be beneficial to building counselors' confidence and intent to use online counseling. Glasheen et al. (2013) suggested that school counselors need to gain confidence to use online counseling and to also develop the skills needed to use the Internet. Furthermore, it may be useful to

provide school counselors with diversity in education and provide them with a diverse educational experience such as using the Internet in practice and their own educational experience. Better equipping counselors may allow them to feel confident and increase intent toward adopting technology in practice when appropriate, thus providing additional tools to reach diverse populations.

Conclusions

This study was a quantitative survey study that I developed to determine if there is a relationship between the school counselors' predictor variables of age, confidence, type of educational experience, and school learning program, and the dependent variable, intent to use online counseling. The sample population that I used in this study was school counselors who were members of the ASCA and identified as licensed or credentialed school counselors located in the U.S. After I conducted a multiple regression analysis via SPSS, the results yielded that there was a significant relationship between the predictor variables and the dependent variable.

Prior to beginning my study, there was a gap in research pertaining to school counselors located in the U.S. and the use of the Internet in practice. With the growing trends of Internet use, its apparent usefulness, (Leibert et al., 2006; Menon & Rubin, 2011), and research that has demonstrated that youth may benefit from the option of online counseling (Young, 2005), it is essential to gain insight into trends and factors that influence the school counselors' intention to use the Internet. In attending to the role of the Internet and school counselors' trends, it is possible that the Internet may be a viable option to reach and extend counseling to marginalized populations. In my study, I found

that there was a significant relationship between the predictor variables of the school counselor's age, confidence to use online counseling, type of educational experience, and school's learning program, and the dependent variable, school counselor's intent to use online counseling. Furthermore, the results demonstrated that of the four predictors, two predictors, educational experience and confidence were significant predictors; therefore, may be useful to be a focus in training programs. This information may be useful to inform training programs and prepare school counselors to provide counseling support and services to youth.

Despite the growing trends in Internet use, there remains a need for researchers to continue to examine the role of the Internet in the mental health and school counseling professions. Through my study, I examined some variables and factors that influence technology use, which provide a framework for training programs. Ultimately, in gaining insight, skill, and building confidence to use the Internet, school counselors will be better equipped to reach broader marginalized populations who may not otherwise seek mental health support.

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Appendix A: Permission to Use ASCA Database

Gmail by Google

Sarah Golden <sarah.golden@waldenu.edu>

ASCA Membership Directory Dissertation Survey Inquiry

Stephanie Wicks <SWicks@schoolcounselor.org> Mon, May 1, 2017 at 9:42 AM
To: "sarah.golden@waldenu.edu" <sarah.golden@waldenu.edu>

Hi Sarah,

Thanks for reaching out. Members are allowed to use the membership directory, or the ASCA SCENE.

We'd appreciate a copy of your study when it's complete.

Please let me know if you have any questions, or if you need anything else. Good luck!

Take care,

Stephanie

Stephanie Wicks

Membership Administrator

American School Counselor Association

1101 King Street, Ste. 310
Alexandria, VA 22314

(703) 683-2722; fax: (703) 997-7572

www.schoolcounselor.org

From: Sarah Golden [mailto:sarah.golden@waldenu.edu]
Sent: Wednesday, April 26, 2017 5:47 PM
To: Stephanie Wicks <SWicks@schoolcounselor.org>; Jill Cook <JCook@schoolcounselor.org>
Subject: Fwd: ASCA Membership Directory Dissertation Survey Inquiry

Hello Ms. Wicks and Ms. Cook.

Last year, I sent an email requesting permission to access the American School Counseling Association Online Membership Database for my dissertation research study at Walden University. In my request, I specified that I would be surveying school counselors who are located in California. (email below). Since I last sent you the request, I have expanded my study to focus on school counselor's Nationwide.

I received a response from you giving me permission to access the database, or to use snail mail addresses or post to ASCA Scene. You had also indicated that you would like to receive the results of my study, which I am happy to share.

Based on the changes to my study and participants pool, I would like to request to permission to expand my participant pool utilize the Nationwide Online Membership database. I will only be using email addresses, so will only need access to the one that is available to members online. (I am also a Member of ASCA).

Thank you so much for your time and consideration, again.

Sarah Golden

---------- Forwarded message ----------
From: **Sarah Golden** <sarah.golden@waldenu.edu>
Date: Tue, Mar 22, 2016 at 3:17 PM
Subject: ASCA Membership Directory Dissertation Survey Inquiry
To: asca@schoolcounselor.org

Dear ASCA,

My name is Sarah Golden, and I am a Doctoral Candidate in the program of Counselor Education and Supervision at Walden University. I am also a school counselor and a member of ASCA and the CASC chapter.

I am currently working on my dissertation and am focusing my research on school counselors located in California. Prior to reaching out to potential participants, I will be obtaining approval from Walden University's Institutional Review Board to ensure ethical standards in my research.

I am writing to see if I may be granted permission to use the ASCA public membership database to contact school counselors via email to solicit participation in this research, which will be conducted via Internet/email survey. I have included my membership card attached to this email as well.

Thank you for your time and consideration.

Sincerely,

Sarah H. Golden

--

Sarah H. Golden, MA, LPC, NCC

Doctoral Candidate, Doctor of Philosophy in Counselor Education & Supervision

Walden University

(231) 392-4278

--

Sarah H. Golden. MA. LPC. NCC. ACS. DCC

Appendix B: Recruitment Email

Dear School Counselors,

My name is Sarah Golden, and I am a Doctoral student in the Counselor Education and Supervision program at Walden University. I am conducting a quantitative research study that is seeking to examine factors that may influence a school counselor's intention to use the Internet for counseling interventions.

As a school counselor, I would like to invite you to participate in this voluntary survey study. The survey will take approximately 10-15 minutes, and your responses will remain confidential and anonymous.

If you agree to complete this survey, please read the consent form below and click the survey link, which will take you to an external survey.

If you have any questions, concerns, or would like to know more about this survey research, please feel free to contact me at sarah.golden@waldenu.edu.

Thank you for your time and help with this survey.

Sincerely,

Sarah Golden, MA, LPC, NCC, DCC

Appendix C: Permission to Use and Alter Survey Scale

Gmail by Google

Sarah Golden <sarah.golden@waldenu.edu>

Scale/Article Inquiry: Online Counselling

Marilyn Campbell <ma.campbell@qut.edu.au> Wed, Feb 11, 2015 at 12:27 PM
To: Sarah Golden <sarah.golden@waldenu.edu>
Cc: Kevin Glasheen <k.glasheen@qut.edu.au>

Hi Sarah

I am copying the author Kevin Glasheen into this email so that he can contact you about the use of his scale.

Good luck with your dissertation.

Best wishes
Marilyn

Professor Marilyn Campbell
School of Cultural and Professional Learning
Queensland University of Technology
Kelvin Grove 4059
[Quoted text hidden]

Gmail by Google

Sarah Golden <sarah.golden@waldenu.edu>

Scale/Article Inquiry: Online Counselling

Kevin Glasheen <k.glasheen@qut.edu.au> Wed, Feb 11, 2015 at 12:58 PM
To: "sarah.golden@waldenu.edu" <sarah.golden@waldenu.edu>

Hi Sarah,

I am happy for you to use/modify the school counsellor scale (with appropriate acknowledgement) that we used in our study. I would like to hear more about your research and if you have any questions feel free to contact me.

Regards,

Kevin

Dr Kevin Glasheen
Lecturer
School of Cultural and Professional Learning
Queensland University of Technology
Kelvin Grove QLD 4059
Australia
Tel: 61 7 3138 3425

Fax: 61 7 3138 8265
http://eprints.qut.edu.au/view/person/Glasheen,_Kevin.html

From: Marilyn Campbell
Sent: 12 February 2015 06:27
To: Sarah Golden
Cc: Kevin Glasheen
Subject: Re: Scale/Ar cle Inquiry: Online Counselling

[Quoted text hidden]

Appendix D: Survey Questions

Survey Questions
School Guidance Counselors' Perceptions of Online Counseling Survey
(Glasheen, Campbell, & Shochet, 2013) Modified by Sarah Golden

*Number in ( ) reflects the original question number.

Pre-Screening Question:

Do you hold a school counseling license or credential in the United States in the State where you practice? Yes or No

Sections 2 and 3 require participants to respond on a 5-point Likert scale: strongly disagree, disagree, unsure, agree, strongly agree.

Section 2: Counselors' beliefs about online technology in general
1. (7). People are usually honest when online..
2. (11). Privacy can be ensured online.

Section 3: Counselors' perceptions of student use of technology
3. (12). Students are usually truthful when making statements online.
4. (13). Students tend to be deceptive when online.

Section 5 requires participants to respond on a 5-point Likert scale ranging from high to low

Section 5: Counselors' confidence to use online counseling
5. (19). I have the required technical skills to provide online counselling in my school.
6. (20). My understanding of the legal issues related to online counselling.
7. (21). Controlling my availability to control online counseling.
8. (22). Keeping control of the online counselling process.
9. (23). Integrating face-to-face counselling with online counselling.
10. (24). Achieving positive counselling outcomes by using online counselling in the school setting.
11. (25). Ensuring confidentiality when using online counseling.
12. (26). Dealing with the ethical implications of online counselling.

Section 6: Counselors' perceptions of student acceptability of online counseling

Section 6 requires participants to respond on a 5-point Likert scale: strongly disagree, disagree, unsure, agree, strongly agree.

13. (27). Students would like having online counselling available through the school.

14. (28). Students would not take it seriously.
15. (29). Students would like online chat being used for counselling.
16. (30). Students would think the school counsellor was more accessible.
17. (32). Students would use online counselling to check out the counselor.

Demographics

18. **Age** (in years as of day of the survey)

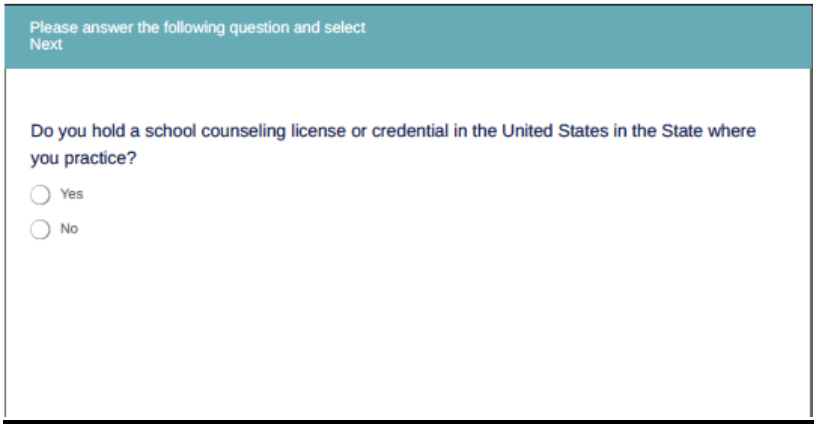
19. **Type of education received** (School counselor's educational experience post high school education and training: Please select the type of educational experience you received post high school: Traditional in-person education, online education only, combination or blended education with both in-person and online)

20**. School's learning program** (School counselor's present or most recent employment, school's learning program): Options: 1. Face-to-face learning and instruction, 2. online learning with a virtual curriculum, or blended learning, blend of both in-person instruction

21. Gender
    Male, Female, Other, Prefer not to answer

22. Grade levels of students with whom the school counselor works
    Elementary, Middle/Junior High, High School, Elementary & Middle/Junior High School, Middle/Junior High and High School, All of the Above.

Survey Monkey Questions



For each statement, please rate your level of confidence to use online counseling for each of the following items as either *Very High, High, Neither High Nor Low, Low, Very Low:*

	Very high	High	Neither High nor Low	Low	Very Low
1. I have the required technical skills to provide online counseling in my school.	○	○	○	○	○
2. My understanding of the legal issues related to online counseling.	○	○	○	○	○
3. Controlling my availability to control online counseling.	○	○	○	○	○
4. Keeping control of the online counseling process.	○	○	○	○	○
5. Integrating face-to-face counseling with online counseling.	○	○	○	○	○
6. Achieving positive counseling outcomes by using online counseling in the school setting.	○	○	○	○	○
7. Ensuring confidentiality when using online counseling.	○	○	○	○	○
8. Dealing with the ethical implications of online counseling.	○	○	○	○	○

For the following statements related to your beliefs about online technology in general, please select whether you *strongly disagree, disagree, unsure, agree, strongly agree:*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
9. People are usually honest when online.	○	○	○	○	○
10. Privacy can be ensured online.	○	○	○	○	○

For the following statements related to your perception of student use of technology, please indicate whether you *strongly disagree, disagree, unsure, agree, strongly agree:*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
11. Students are usually truthful when making statements online.	○	○	○	○	○
12. Students tend to be deceptive when online.	○	○	○	○	○

For the following statements related to your perception of student acceptability of online counseling, please indicate whether you *strongly disagree, disagree, unsure, agree, strongly agree:*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
13. Students would like having online counseling available through the school.	○	○	○	○	○
14. Students would not take it seriously.	○	○	○	○	○
15. Students would like online chat being used for counseling.	○	○	○	○	○
16. Students would think the school counselor was more accessible.	○	○	○	○	○
17. Students would use online counseling to check out the counselor.	○	○	○	○	○

Demographics

18. What is your age in years as of today?

19. Which best describes the type of educational experience/training you have received post high school?

- ◯ Traditional in-person education
- ◯ Online education only
- ◯ Blended/Combination education with both online and in-person education

20. In the school where you are or were most recently employed, please select the option that best describes the school's learning program:

- ◯ Traditional in-person curriculum
- ◯ Online or distance learning curriculum
- ◯ Blended learning environment (Both online and in-person online)

21. What is your gender?

- ◯ Female
- ◯ Male
- ◯ Other
- ◯ Prefer not to answer

22. Please select the grade levels of student with whom you work

- ◯ Elementary
- ◯ Middle/Junior High School
- ◯ High School
- ◯ Elementary & Middle/Junior High School
- ◯ Middle/Junior High School & High School
- ◯ All of the Above

Original Survey

School Guidance Counsellors' Perceptions of Online Counselling
Survey (Glasheen, Campbell, & Shochet, 2013)

Section 1: Counsellors' personal experience of technological use

Yes No

1. I use a computer for work
2. I use a computer for study
3. I use a computer for personal tasks
4. What experience have you had with online technology for any reason (options provided)?
5. What experience have you had with using online technology with students (options provided)?

Section 2: Counsellors' beliefs about online technology in general

Sections 2, 3, and 4 require participants to respond on a 5-point Likert scale: strongly disagree, disagree, unsure, agree, strongly agree.

6. Bad things are likely to happen online.
7. People are usually honest when online.
8. As a rule people present an untruthful persona online.
9. People keep their online world separate from their offline world.
10. It is easy to get to know people online.
11. Privacy can be ensure online.

Section 3: Counsellors' perceptions of student use of technology

12. Students are usually truthful when making statements online.
13. Students tend to be deceptive when online.
14. Online communication is important for students.
15. Students consider the online world as real as the offline world.

Section 4: Counsellors' intention to use online counselling

16. If online counselling facilities were available in my school I would use them.
17. Online counselling would be an effective way to counsel students.
18. I would be confident that a secure chat room would be a suitable place to counsel students.
19. I have the required technical skills to provide online counselling in my school.

Section 5: Counsellors' confidence to use online counselling

Section 5 requires participants to respond on a 5-point Likert scale ranging from high to low

20. My understanding of the legal issues related to online counselling.
21. Controlling my availability to control online counseling.
22. Keeping control of the online counselling process.
23. Integrating face-to-face counselling with online counselling.
24. Achieving positive counselling outcomes by using online counselling in the school setting.
25. Ensuring confidentiality when using online counseling.
26. Dealing with the ethical implications of online counselling.

Section 6: Counsellors' perceptions of student acceptability of online counselling
Section 6 requires participants to respond on a 5-point Likert scale: strongly disagree, disagree, unsure, agree, strongly agree.

27. Students would like having online counselling available through the school.
28. Students would not take it seriously.
29. Students would like online chat being used for counselling.
30. Students would think the school counsellor was more accessible.
31. Students would be worried about confidentiality.
32. Students would use online counselling to check out the counselor.

Section 7: Demographics

33. If training in the use of online counselling was available would you attend?
34. Please select the area of education — primary, secondary.
35. How long have you been providing counselling for young people?
36. What is the highest level of qualifications you have in counseling?
37. Gender
38. Age

Reference:

Glasheen, K., Campbell, M. A., & Shochet, I. (2013). Opportunities and challenges: School guidance counsellors' perceptions of counselling students online. *Australian Journal of Guidance And Counselling*, 23(2), 222-235. doi:10.1017/jgc.2013.15