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To What Extent Does Clinical Supervision And Experience Relate To The Self-Efficacy Of Counselors-In-Training

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**TO WHAT EXTENT DOES CLINICAL SUPERVISION AND EXPERIENCE RELATE
TO THE SELF-EFFICACY OF COUNSELORS-IN-TRAINING?**

by

THOMAS MICHALOS

DISSERTATION

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

2018

MAJOR: COUNSELOR EDUCATION

Approved By:

Advisor

Date

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DEDICATION

This project is dedicated to my family.

My wife Denise and four amazing kids, Soti, Kikee, Nia, and Kosta whose love and support
inspire me each day.

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CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

Efficacy, in the counseling field, does not only imply knowing how to use techniques. It is the counselor's role within the session to facilitate and guide discussion and process with specific focus on client's presenting issues or needs (Goreczny, Hamilton, Lubinski, & Pasquinelli, 2015; Kiralp, 2015). These needs may be simple or complex and the client may be willing or unwilling to share important aspects of their issues with the clinician. Whatever the case may be the counselor must be able to amalgamate their knowledge of theories and techniques to provide a productive experience for their client (Bozkurt, 2014; Dickens, Ebrahim, & Herlihy, 2016; Goodman-Scott & Carlisle, 2014). This skill also depends on the counselor's confidence in working in the clinical environment. Self-efficacy, in the counseling field, depends on the self-judgment of the counselor on how well they can facilitate the necessary skills to handle situations that may arise within the session (Goreczny et al., 2015; Kiralp, 2015). As such, there is no doubt that this important aspect of the educational process cannot be underestimated. However, what remains understudied is how clinical supervision and experience affect counselors-in-training self-efficacy (Brown, Olivárez, & DeKruyf, 2017; Suh et al., 2018).

Research concerning self-efficacy of counselors has been increasing for the past two decades. Researchers often focus on examining the predictors of self-efficacy among counselors (Goreczny et al., 2015; Hu, Duan, Jiang, & Yu, 2015; Kiralp, 2015). Supervision style has been considered as one of the predictors of counselors' self-efficacy. Supervision is defined as the working alliance or relationship between the supervising counselor and the counselors-in-training (Efstation, Patton, & Kardash, 1990; Ladany, Ellis, & Friedlander, 1999). Previous studies have found out the importance of working alliance in developing a bond between the supervisor and the

supervisee that gets stronger over time (Daniel, Borders, & Willse, 2015; Knudsen, Roman, & Abraham, 2013; Ladany et al., 1999). It is reported that counselors-in-training tended to value the rapport in their relationship with their supervisors more so than their client focus. This is due to counselors-in-training lack of having mastered theoretical and clinical skills associated with working with and understanding clients (Efstation et al., 1990).

Other researchers focused on testing models of counselor development with the counselors-in-training level of self-efficacy (Bruneau & Pehrsson, 2014; Melchert, Hays, Wiljanen, & Kolocek, 1996). Melchert et al. (1999) hypothesized that as professional counseling training and experience increased, so would the self-efficacy of the counselors-in-training. Through using a self-efficacy scale given to the participants, Melchert et al. (1999) found out that the amount of training rather than the amount of clinical experience contributed to the difference in levels of self-efficacy. As such, other researchers purported the clinical training must be given to the counselors-in-training to increase their self-efficacy. Along with this clinical training is the clinical supervision that must be present throughout the process.

Theoretical Framework

The theoretical framework that will underpin this study is Bandura's theory of self-efficacy (1986). Self-efficacy is defined as a person's sense of capabilities to perform a particular activity to attain a certain outcome (Bandura, 1986). Self-efficacy refers to the ability of an individual or level of confidence to perform certain activities or tasks (Bandura, 2012). This construct was added to the model in mid-1980 and since then was used in many behavioral theories as it directly relates to whether a person performs the desired behavior. The theory states that a person's success in performing a task or achieving a goal is positively influenced by the person's belief in his/her ability to accomplish that task or goal. This is an effect independent of actual ability; a person who

is nominally able to complete a task but doubts his/her ability will often fail, while a person who ostensibly does not have the ability to complete a task will often succeed (Bandura, 1986).

Self-efficacy theory provides a perspective that might suggest how clinical supervision might affect the self-efficacy of counselors-in-training. It has been found that the more guidance and knowledge that a student has with regards to a certain tasks or subject, the more he or she can perform as expected (Rowbotham & Owen, 2015; van Rooij, Jansen, & van de Grift, 2017). Therefore, it is possible that any guidance on how to perform their clinical activities and tasks will help them succeed in their practicum. The reported positive effects of clinical supervision suggest this effect for such students (Minor, Pimpleton, Stinchfield, Stevens, & Othman, 2013; Neuer Colburn, Grothaus, Hays, & Milliken, 2016). Such efforts could raise those students' levels of self-efficacy.

The Role of Clinical Supervision

Clinical supervision, in the training and education of professional counselors, is an integral part of the development of competent, effective, and confident professionals. Through the supervision process, the counselor-in-training is able to apply their theoretical knowledge in real clinical setting. The goal of the clinical portions of counselor education programs is to close the gap between the theoretical foundations and the practical clinical application (Fong, Borders, Ethington, & Pitts, 1997; Nelson & Neufeldt, 1998). It is when the counselor-in-training steps into the clinical setting for the first time, with their first authentic client that they must put aside their fears and provide effective therapy to the client. The relationship between the clinical supervisor and the counselor-in-training is important on many different levels. In the Discrimination Model, the supervisor can be in the role of the teacher, or in the role of counselor, and other times they can be in the role of the consultant (Bernard & Goodyear, 2014). Through the guidance of the

clinical supervisor, the counselor-in-training is able to improve their skills set and increase their self-confidence as a clinician. Without effective supervision, counselors may develop inappropriate clinical techniques and may not find satisfaction in the clinical setting. This can lead to future counselor burnout and dissatisfaction in career choice.

Additionally, it is important to consider the role of timing of clinical supervision and experience in understanding the association between supervision and self-efficacy. Sagasser et al. (2017) asserted that the timing to which clinical supervision is introduced within the clinical program might affect the self-efficacy of counselors-in-training. Every counselor education program has a theoretical and a clinical component and supervision can occur at different points in the educational process depending on the particular program. For example some programs may have a techniques course as early as the introduction course, whereas others may require all theoretical courses to be completed prior to beginning the clinical portion of the program. This being said, the timing of clinical supervision can vary according to the particular program. Furthermore, counselors-in-training have different levels of self-efficacy when they started in the clinical program and therefore making sure where to introduce supervision is important. Other counselors-in-training learn faster while some do not and thus this complexity must be considered in regards to the timing of clinical supervision.

Limitations of Prior Research and Purpose of the Current Study

This review of the literature suggests that there exists some connection between the clinical counseling supervisory relationship and the level of self-efficacy in the counselors in training. The research reviewed has addressed this connection for a variety of different situations. However, one clear gap in the existing literature is a need to examine the timing of clinical supervision and the

degree to which this timing has an impact on counselor training and development. This is, therefore, the focus of the current investigation.

Based on this review of literature, the purpose of this comparative study is to examine the difference of self-efficacy of counselors-in-training based on the level of clinical supervision (experience), viewing of clinical supervision video, and timing of clinical supervision. The first part is to determine whether there is a difference in the self-efficacy of counselors-in-training according to their level of clinical supervision. The independent variable is the level of clinical supervision while the dependent variable is the level of self-efficacy. The second part is to determine whether there is a difference in the self-efficacy of counselors-in-training according to viewing of clinical supervision video. The independent variable is the exposure to a video of counseling supervision as an intervention designed to raise participants' awareness of the impact of their clinical supervision experience or viewing a comparable length but neutral content video. Participants for this portion will be those students in the clinical portion of the Counselor Education program who have received supervision and the purpose is now to attempt to enhance their understanding of the impact of what they have learned and experienced. Participants will be randomly assigned to one of two groups: (a) experimental group – participants will view a counseling supervision video and (b) control group – participants will view a non-counseling video equal in length to the video shown to the experimental group. The dependent variable is the self-efficacy of counselors-in-training. In the third part, the timing of supervision will be the independent variable, defined as at which stage students are in the clinical portion of the program. The dependent variable is self-efficacy.

Research Question(s) and Hypotheses

The research questions and corresponding hypotheses guiding this study are as follows:

RQ1: To what extent does the self-efficacy of counselors in training differ between those who have had clinical supervision and those who have had no experience at all?

H1₀: There is no significant difference on the self-efficacy of counselors-in-training between the groups.

H1_a: There is a significant difference on the self-efficacy of counselors-in-training between the groups.

RQ2: Does viewing a clinical supervision video, designed to raise awareness of the role of clinical supervision, impact the self-efficacy of counselors-in-training to a greater degree than those in the control group?

H2₀: There is no significant difference in the self-efficacy of counselors-in-training between the experimental and control group while controlling for the viewing of supervision video.

H2_a: There is a significant difference in the self-efficacy of counselors-in-training between the experimental and control group while controlling for the viewing of supervision video.

RQ3: What role does timing of clinical supervision in students' program sequences have in the level of self-efficacy among those in different levels of the clinical portion of the educational program (techniques, practicum, and internship)?

H3₀: There is no significant difference on the self-efficacy of counselors-in-training among the three levels of clinical education.

H3_a: There is a significant difference on the self-efficacy of counselors-in-training among the three levels of clinical education.

Significance

A significant influence in producing self-confident effective counselors is the supervisory experience. Knowledge gained from this study will benefit counselor education programs in providing the most effective timing of when clinical supervision ought to begin. The development of confident, well-educated, and clinically competent counselors is the goal of Counselor Education programs. The insight gained from this study will help ensure that effective programs will continue to produce competent and effective professional counselors.

Definitions

Clinical Supervision. Clinical supervision is defined as the process of counselors-in-training receiving one on one mentoring from a licensed professional that is able to guide the student in the clinical setting (Hawes, 2017).

Counselor(s)-in-training. Counselor(s)-in-training is defined as a graduate student in counseling or more specifically refers to a counseling student in the clinical portion of their education (Storlie, Baltrinic, Mostade, & Darby, 2017).

Clinical Performance. Clinical performance is defined as the counselor-in-training's ability to bridge the gap between the theoretical knowledge and practical application (Fong, Borders, Ethington, & Pitts, 1997; Nelson & Neufeldt, 1998).

Client. Client is defined as the person receiving the counseling. In the business model, this would be the consumer (McLeod, 2003).

Clinical Mental Health Counselor. Clinical mental health counselors operate from a wellness perspective in that they focus on the optimal human functioning in body, mind, and spirit (Magoon, Golann, & Freeman, 1969).

Level of Supervision. The level of supervision refers to the amount and intensity of clinical supervision.

Perceived Self-efficacy. Perceived self-efficacy is defined as what one believes they can do with what skill they possess (Bandura, 1977, 1986).

Practicum. Practicum is one of the clinical portions of the counselor education program. Before practicum is typically a techniques or skills course, and following practicum is an internship experience (Meany-Walen, Davis-Gage, & Lindo, 2016).

School Counselor. A school counselor provides academic, career, college access, and social-emotional competencies to all students (Falco, 2017).

Timing of Supervision. The timing of supervision is where the student receives supervision within the context of the clinical portion of the counselor education program.

CHAPTER 2: LITERATURE REVIEW

The purpose of this quantitative study is to determine to what extent the timing of clinical supervision and experience in counselor education program affects the self-efficacy level among counselors-in-training. The aim of this study is to determine the best timing of clinical supervision in a counselor education program through a randomized pre-test post-test control group design.

To achieve this purpose, several research questions were raised, the first of which is, “what relationship exists between the level of self-efficacy of counselors-in training and the timing of clinical supervision they received as part of their education in a Council for Accreditation of Counseling and Related Programs (CACREP) counselor education program?” The second research question is “what changes in the level of self-efficacy can be explained by the clinical supervision?” The current study hypothesizes that counselors-in-training who have had at least one complete semester of clinical supervision will have a higher level of perceived self-efficacy than students who have had no clinical supervision and that a greater exposure to clinical supervision as evident by the data collected on their demographic can lead to a higher level of self-efficacy of the counselors-in-training.

The population that will be the focus of this study are graduate students enrolled in a CACREP counselor education program at a medium sized university in the Mid-Western United States. These students in the educational program will either already be in the theoretical part of their education or will have completed their theoretical training and in their clinical experience at the techniques, practicum, or internship level. As part of their course, the counselors-in-training are going to treating clients in the school’s clinic that is open to the university staff and students as well as the community at large, their performance of which the researcher will use to measure their self-efficacy and the clinical supervision’s effectiveness.

The researcher will measure the self-efficacy levels of counselors-in-training at various levels of education. One group of the counselors-in-training are only in the theoretical or non-clinical part of their training. The other group of counselors-in-training have had clinical supervision and experience to some degree. The experimental group is the group of students who have had clinical supervision and experience. Both groups will take a pre-test and the experimental group will be randomly assigned to either view a supervision video or not and both groups will take a post-test . The results of this study might provide clinical directors and counselor educators helpful insight as to the effect of the timing of clinical supervision for counselors-in-training. From these results, counselor education programs might be developed further to provide more effective training to clinical supervisors as well.

Identified Gap of the Study

The degree that the point at which a counselor-in-training receives clinical supervision influences their level of self-efficacy is unclear. It is unknown if there are significant differences in the effectiveness of a clinical supervision session undertaken before a counselor's first actual clinical experience and a clinical supervision session undertaken after a counselor's first actual clinical experience. If timing is indeed a factor to a clinical supervision's effectiveness, this might call for a review of Counselor Education curricula. This is because low self-efficacy levels of counselor-in-training can be problematic in so many ways. Their self-efficacy levels can affect how they actually apply theoretical knowledge to clinical performance, how they make sure their performance is congruent and aligned to the role of the counselor, and how they individually integrate into the clinical setting. Ideally, incorporating some form of clinical supervision at all levels of the educational process will make a positive impact both on the student and on the educational program. However, the researcher believes that timing can be important too.

Theoretical Framework

As the independent variable is the self-efficacy of counselors, this study is grounded on the theoretical framework of social cognitive theory. Self-efficacy is a construct deeply rooted in theory, before the 1960s, foundational theorists in the field of psychotherapy formed concepts of how people learn by experimenting with animals. The theorists, through the puzzle boxes, mazes, and simulated environments they formed to study the animals, acquired some insights to form their theories (Davey, 2017; Rachman, 2015; Schwarzer, 2014). One of the more well-known theorists is Ivan Petrovich Pavlov, who is identified and labeled as the father of learning theorists (Davey, 2017; Rachman, 2015; Schwarzer, 2014). Pavlov focused his scientific queries on how animals psychologically respond to the experiments and their conditioning outcomes. In his experiments, he found that a dog can salivate before food was delivered and whenever the dog heard footsteps approaching, the dog would react. He then developed the concept of conditioning (Davey, 2017; Rachman, 2015; Schwarzer, 2014). B.F. Skinner, another well-known theorist, rejected this concept. Specifically, Skinner rejected Pavlov's arguments that learning can take place through constrained responses to a stimulus. Instead, he argued that learning can only take place if the person is allowed the freedom to move and explore in an environment (Rachman, 2015). Learning specifically takes place through repeated behaviors based on responses or consequences to a specific behavior.

The animals in Skinner's experiments, where they are allowed to roam, would often discover food and attempt multiple behaviors until the discovery of the behavior that led to a favorable consequence (Rachman, 2015). Skinner's model of learning behaviors come to be known as operant conditioning. However, it is Albert Bandura's theory that will be used in this study, because he went beyond behavioral learning and operant conditioning, which is something

more applicable to humans (Rachman, 2015). For him, learning involves several cognitive processes. His theory, called the social learning theory, posited that people in particular social conditions or circumstances could learn what to do or how to behave by imitating others (Rachman, 2015). He later expanded his theory to encompass the powerful effect that observing behaviors have on learning, by providing the concept of learning through modeling (Bandura, 1971). Bandura claimed that people are likelier to learn from observing the modeled behavior of others and then repeating it. Internal cognitive processes are engaged in for learning to happen. Later, the theory further expanded to encompass the concept of self-efficacy (Bandura, 1986).

In 1986, Bandura renamed his social learning theory into the social cognitive theory because he realized that learning takes place through cognitive processes. He claimed that the internal cognitive processes engaged in before learning can happen were essential to one's personal development as well, in the form of heightened self-efficacy (Bandura, 1986). Bandura introduced the concept of self-efficacy back in the 70s, defining it as the degree to which an individual believes his or her abilities to perform a certain task or carry out a specific behavior. He noted that self-efficacy is more than just beliefs and thoughts with regard a task, but a summary of all thoughts and experiences associated with the task (Bandura, 1991). In developing the social cognitive theory, Bandura identified four factors that can act as sources of self-efficacy. Similar to what Maslow described of an individual's hierarchy of needs, Bandura explained that these sources exist in a hierarchy.

Bandura (1982) proposed four components that affect self-efficacy levels that a person possess, with regard a task or activity, which are present in counselor development as well. These are performance enactment or outcomes, vicarious learning, verbal persuasion, and emotional arousal. Before understanding counselors' self-efficacy, there is a need first to understand this

construct in totality. Bandura (1977) claimed that there are four sources of information that individuals use to judge their level of efficacy they have with regard a task. They help the individuals determine if they believe they have the capacity to complete or achieve specific tasks they are setting out to do or required to do. Individuals with high levels of self-efficacy perceive difficult tasks as mere challenges that can be mastered if they want rather than threats to avoided across occupational fields (Lirgg, Feltz, & Merrie, 2016; Snyder & Fisk, 2016).

According to Bandura (1982), performance outcomes or enactment are in general, just past experiences of the same task achievement or goal attainment. Bandura added that these are the most important source of self-efficacy. Positive and negative experiences of a given task or goal can influence the current ability of an individual to perform the task again. If one has already performed well on this task in the past, then he or she is more likely to feel competent about performing it again or at a similarly associated task (Bandura, 1977). If an individual performed well in a previous job assignment, he or she is likely to feel confident about their competence if assigned with the similar (not necessarily the same) task in the present. The individual's self-efficacy will become high in this specific area, and with high self-efficacy, he or she may try harder to ensure the task is successfully completed and he or she is likely to achieve much better results.

A negative experience can lead to lower self-efficacy. If an individual experiences failing at doing a particular task, he or she is likely to believe that the same can happen in a similar task and therefore, experience a reduction in self-efficacy. However, this is not automatic (Bandura, 1977). If conviction later overcomes failures in the past, it can serve to increase persistence that is self-motivated, because the task is no longer treated as a threat but a challenge to be achieved (Bandura, 1977).

Another source of self-efficacy is vicarious experiences. According to Bandura (1977), people can develop either high or low self-efficacy vicariously, through how others performed at the task they are now going to engage in. A person can see others in a similar position perform and then compare his or her competence with the person's (Bandura, 1977). Seeing others similar to them succeed at completing the task can increase their level of self-efficacy while seeing others fail, can lead to lower self-efficacy. This is why mentoring programs can lead to higher levels of self-efficacy. Mentoring programs pair two people, one with more experience or better skills at the specific task teaching the one with less or without experience or skills. In these programs, a person who has been paired with someone on a similar career path and was successful in reaching his or her goals can achieve a higher level of self-efficacy.

If both parties have similar skill sets, this relationship between mentoring programs and increased self-efficacy is further strengthened. The person can see first-hand what can be achieved by him or her. The decrease in self-efficacy can happen when an individual perceives others are failing at similar tasks. For instance, even in smoking cessation programs where the designs and intentions are good, self-efficacy of some participants with regard their ability to stop smoking can decrease if they witnessed other participants failing to quit. According to Bandura (1982), self-efficacy is also influenced by encouragement and discouragement received in relation to an individual's performance or capacity to perform. If a person receives encouragement from another who is important to him or her, he or she is likely to put in more effort, and their self-efficacy levels are likelier to improve. On the other hand, the opposite can happen when a person receives words of discouragement. The confidence of others in one's ability to do something can improve self-efficacy levels.

According to Maddux (2016), the credibility of the person providing the verbal persuasion can affect the effectiveness of this source of self-efficacy. If there is a higher level of credibility held by the person, such as one who has a respectable position or better status, the verbal persuasion would have a stronger influence on the individual's self-efficacy. Maddux added that even though verbal persuasion is a weaker source of self-efficacy beliefs compared than performance enactments or performance outcomes, it is still widely used to boost self-efficacy levels because it is easier and more readily available (Maddux, 2016).

Lastly, physiological feedback or emotional arousal can affect self-efficacy. People experience sensations from their bodies or internally, and how they perceived these could affect their self-efficacy levels or beliefs about the ability to complete certain tasks (Bandura, 1977). Some examples of physiological feedback include agitation, anxiety, racing heart, stuttering and excessive sweating - associated when there is a need to do something one does not feel comfortable with, such as speaking in front of a large group, making a presentation, taking an exam, or going to an interview, among others. These sensations can affect how the individual perceives his or her ability to engage in a task and therefore affect their level of self-efficacy. Although it is the least influential of the four sources of self-efficacy, it is still a factor that cannot be overlooked. If one is more at ease with the task at hand, as signaled by these psychological sensations, one is going to feel more capable of their abilities to complete the task successfully.

Applying Bandura's theory of self-efficacy to counseling, Larson and Daniels (1998) described counselor self-efficacy as one's beliefs and judgments about his or her capacity to provide effective counseling to a client in the near future. The concept of self-efficacy and specifically, the social cognitive theory of Bandura have been extended to counselor education through the Social Cognitive Model of Counselor Training (Larson, 1998). According to Larson,

self-efficacy possessed by counselors, along with the facilitative affective, cognitive, and motivational components of counselor education and training act as the link between just knowing or understanding the appropriate action or behavioral response to actual performance of the action or behavior.

The Social Cognitive Model of Counseling Training linked the Social Cognitive Theory by Bandura to the concept of counselor self-efficacy. Larson and Daniels (1998) added that counselor education programs are crucial for counselors' self-efficacy between of the direct relationship between anxiety and self-efficacy levels. The higher the level of anxiety one has, the lower the level of counselor's self-efficacy (Larson & Daniels, 1998). Counselor education, including its supervision component, provided properly and effectively can only serve to decrease anxiety and improve self-efficacy. In turn, counselor self-efficacy can do everything that self-efficacy, in general, has been established able to do, including making the counselor-in-training preserve more and exert more effort in performing their tasks and facing challenges along the way.

Research on counselor self-efficacy that used the social cognitive theory noted that while Bandura did not directly talk about or address the issue of counselor self-efficacy, the theory was already translated for and adopted by training programs for counselors. Bandura argued (1982) that the amount of effort placed on an overcoming a challenge, the choices one made when determining the course of action, and the level of persistence one demonstrated when having encountered failures are all shaped by the person's level of self-efficacy (Bandura, 1977, 1986). These can be applied in the counseling profession. The self-efficacy beliefs held by counselors can affect or influence motivational processes, effective processes, and cognitive processes – shaping their overall effectiveness.

Interventions exist on increasing counselor self-efficacy, as found by researchers who designed interventions using Bandura's (1982) sources of self-efficacy, which are emotional arousal, verbal persuasion, vicarious learning, and performance outcomes or mastery. Included among the interventions are modeling, visual imagery and role-playing. Most of the studies done on these interventions showed them effective in improving counselor self-efficacy. Several studies also evaluated the role of a practicum on counselor self-efficacy and found that in the course of the practicum, self-efficacy can increase.

Review of Related Literature

Supervision

Supervision is usually defined as an intervention that is given by a senior member of an occupation or profession to a junior member of the same field (Bernard, 2014; Goodyear, 2014). The relationship that is formed between the supervisor and supervised is unlike others, as it is evaluative and has the purpose of improving the professional functioning of the junior members. The supervisors oversee the quality of professional services that supervisees also offer to their clients. Bernard (2014) and Goodyear (2014) claimed that the supervisory relationship serves the gatekeeper of those who want to enter the specific profession.

In addition, the American Psychological Association in 2014 influenced by Bernard and Goodyear's definition, described supervision as a form of unique professional practice employing a collaborative relationship that has both facilitative and evaluative components that can take a long period of time with the objectives of improving the professional competence and evidence-based practice of the supervisee (Herbert & Caldwell, 2015). Supervision is also described as the process of monitoring the quality of services provided by the supervisees so that the public can be protected and not just anyone can practice the profession without effective knowledge and skills,

thereby acting as a gatekeeper of the profession. Henceforth, the American Psychological Association claimed that supervision refers to clinical supervision, which encompasses the supervision done by all kinds of health service psychologists across specialties, including but not limited to clinical, counseling, as well as school psychology (Herbert & Caldwell, 2015).

Another definition is provided by the NASW, which perceives professional supervision as the relationship formed between supervisors and supervisees wherein the responsibility and accountability for the formation and enhancement of competence, demeanor, and ethical practice is facilitated (Falender, 2014; Falender & Shafranske, 2014; Falender, Shafranske, & Ofek, 2014). The supervisor takes on the responsibility of guiding and providing direction to the supervisee, who applies social work theory, standardized knowledge, skills, competency, and applicable ethical content in the practice setting (Herbert & Caldwell, 2015). Supervision is described as a collaborative process wherein both the supervisor and supervisee share responsibilities and perform their respective roles to make the relationship work and achieve the goals set.

In the counseling profession, supervision assists the counselors to maintain focus on skills that they have formally learned in the past and the theoretical orientation they acquired in academia (Cashwell & Dooley, 2001). In general, supervision provides structure, feedback, and support necessary for professional growth within one field to be achieved (Cashwell & Dooley, 2001). Specifically, clinical supervision has become a major development of the counselors' professional growth (Bernard, 2014; Goodyear, 2014). Researchers suggested that clinical supervision is linked to the core competencies of the counselors. The more recent of studies focused on the role that clinical supervision plays in developing counselors' multicultural competence, which is deemed necessary to achieve clinical competence (Falender, Shafranske, & Falicov, 2014). According to these studies, there are several obstacles to integrating cultural perspectives

in supervision, one of which is the need to make clear the role of understanding and acknowledging the functions of cultural heritage and sociopolitical contexts in relation to human suffering (Falender et al., 2014).

In relation to supervision, literature has stated that one of the main goals if not the primary goal of supervision is to foster counselors' confidence in their skills and self-efficacy (Bernard, 2014; Cashwell & Dooley, 2001; Goodyear, 2014). Even though the benefits of consistent and effective supervision have already been highlighted in several research studies, literature also suggested that there are a significant number of counselors who are continuing to receive ineffective and unsatisfactory supervision (Cashwell & Dooley, 2001; Falender, 2014). According to Cashwell and Dooley, inadequate supervision should not be undermined because it has been found that counselors who received only minimal or poor supervision can experience in the quality of their counseling services. Effective supervision makes sure counselor growth is continuous (Butterworth & Faugier, 2013; Gonge & Buus, 2016; Moked & Drach-Zahavy, 2016; Pront, Gillham, & Schuwirth, 2016).

Currently, there is a growing body of literature and evidence that clinical supervision is beneficial for counselors, their clients, and even their workplace. Counseling organizations benefit from quality clinician supervision because complaints of clients about ineffective counselors can be significantly reduced. Since supervision supports the standards for counseling, fewer complaints from dissatisfied and disappointed clients can be expected. It was also found that clinical supervision can lead to overall improved client outcomes, Clients can experience better counseling services and therefore, better outcomes. Counselors who underwent supervision benefit because they are more confident, more knowledgeable, more genuinely interested in their clients, more competent and capable of handling the problems of their clients. More open, and more

honest.

Clinical supervision is traditionally perceived by other areas of practice including but not limited to counseling psychology, clinical psychology, and social work as a method to either simplify or expedite the development of the supervisees' counseling competence (Moked & Drach-Zahavy, 2016).

Crucial Elements of Supervision

Several studies have been designed to examine the supervisor relationship and its effect on counselor self-efficacy. A purposeful relationship is described as necessary for feedback to be effectively transmitted from the supervisor to the supervised (Eryilmaz & Mutiu, 2017; Merriman, 2015; Wosket, 2016). Bond and Holland (1998) asserted that the quality of relationship formed between the supervisor and the supervisee could have an utmost impact on the overall effectiveness of clinical supervision, usually measured through counselor effectiveness and client outcomes. Studies have established that the quality of the supervisory relationship is the key to most effective supervision. Researchers have then asserted that the supervisor characteristics can shape the quality of the supervisory relationship. The specific supervisor characteristics that are deemed effective and facilitative of quality relationships often differ between the perspectives of supervisors and supervisees. However, despite these differences, researchers claimed that there is no doubt that supervisory relationship determines the effectiveness of supervision, which is the key to the supervisees' competence (Bell, Hagedron, & Robinson, 2016; Inman et al., 2014; Keil, 2016). From the perspectives of the supervisors, the good characteristics of supervisors that can affect the quality of supervisory relationships are being knowledgeable about the different kinds of interventions, being deeply familiar about what the supervisees need, have the capacity to give constructive feedback to supervisees' performance, and have the capability to form warm and

supportive relationship with the supervisees (Bell, et al., 2016; Inman et al., 2014; Keil, 2016). The ability to promote autonomy is also perceived as a good supervisor characteristic. Those who can confirm the supervisees' professional practice, demonstrate willingness and preparedness to be understanding, address the genuine feelings of their supervisees are also often considered effective supervisor characteristics (Bell et al., 2016; Inman et al., 2014; Keil, 2016). Not all of these characteristics are perceived as valuable by the supervisees.

From the perspectives of the supervisees, the good supervisors are those who have the capacity to develop supportive relationships and impart needed and relevant knowledge and clinical skills to the supervisees. These two characteristics are also perceived as good ones by the supervisors. However, for supervisees, they additionally want supervisors who are committed to the clinical supervision process and good listeners, so that they can feel comfortable in disclosing their concerns and voice out counseling issues they need help with (Bell, et al., 2016; Inman et al., 2014; Keil, 2016).

Notwithstanding research on the conflicting supervisor characteristics considered as positive, there is no contest on the importance of the supervisory relationship in counselor effectiveness. Not only that, it has been said that quality supervision relationship can put into place a safe environment for open and honest interactions between the supervisor and the supervisee to take place, even as the main goal is something as serious and somber as improving the performance of the supervisee professionally and even personally. Bordin (1979), who studied and detailed the concept of a supervisory relationship through the lens of the supervisory working alliance, claimed that this relationship is affected by agreement, clarity of task and bond. The factors of togetherness, attention, and trust can all affect the kind of bond or the strength of bond developed between the supervisor and the supervisee. Kaiser (1997) then added that the relationship formed by the

supervisor and the supervisee could determine how the supervision program goes and whether the goals decided upon can even be achieved. At the core of all supervision programs is accountability, of the supervisor to the supervisee and vice versa; however, this ingredient will be lacking if the supervisory relationship is not of good quality. Kaiser further explained that the relationship between the supervisor and the supervisee revolves around three elements: power and authority of the parties shared meaning between the parties, and trust each other. First, there is an assumption that the power and authority possessed by the supervisor are not at a similar level possessed by the supervisee, in that the former has higher power and authority within the relationship than the latter. That said, higher power and authority is associated with more responsibilities, expected abilities, and estimated skills. Supervisors are taken as being more knowledgeable and more competent, which explain their higher power and authority, but they should also be the ones who are more active in developing shared meaning and facilitating trust within the supervisory relationship. The supervisory relationship has been related or compared to a continuous and ongoing but changing process (Holloway, 1995). How the supervisor and the supervisee relate to each other at one point may not necessarily be the same in the duration of the supervision (Holloway, 1995). Regardless of the changes, the final objective or goal is to improve supervisees' knowledge and skills and empower them. The power and authority structure can also change over time (Holloway, 1995; Goodyear, 2015; Ladany, 2014).

If feedback is effectively transmitted, the supervision process is said to be effective as well. A strong supervisory relationship is one that can facilitate trust between the parties as well as respect, which enables the needs of the counselors-in-training or the supervisees to be better met or their concerns to be better heard or understood (Borders, Welfare, Sackett, & Cashwell, 2017; Burkard, Knox, Clarke, Phelps, & Inman, 2014; Certo, 2015). If needs are met, and concerns are

addressed, then the growth and development of the counselors-in-training can be facilitated, improving their chances of becoming successful and effective counselors in the near future. Several studies have also explored supervisory relationships and client outcomes and showed that there is a statistically significant relationship (Borders et al., 2017; Burkard et al., 2014; Certo, 2015).

Positive client outcomes of counselors can be more assured if they have entered into a positive supervisor working alliance. A strong supervisory alliance develops when the supervisor and supervised agreed on the goals and the tasks as well as have a strong emotional bond (Crockett & Hays, 2015; Ismail, Nasir, Hassan, & Masek, 2015).

A strong supervisory alliance can lead to higher counselor self-efficacy and at the same time, higher supervised satisfaction (Crockett & Hays, 2015). Supervisee satisfaction is crucial because it essentially leads to higher willingness to accept supervisor feedback, which makes the supervisory relationship more effective in contributing to the development of the supervisee into a successful counselor (Crockett & Hays, 2015).

In contrast, supervisees who are not satisfied with the supervisory working alliance and with perceiving their supervisors to be weak in turn could experience high levels of burnout, stress, and diminished skills. They also feel isolated, and in turn, experience decreased the level of self-efficiency (Bernard, 2014; Goodyear, 2014). In a similar vein, because beginning counselors or counselors still in training are more apprehensive to discuss their skills and are less confident about what they can do, are also unlikely to experience an increase in their self-efficacy and performance if they do not perceive the supervisory working alliance as being effective.

Some researchers also suggested that the component of goal-setting cannot be undermined in supervision. Even supervise-initiated goals are crucial to being respected and pursued in an

established collaborative relationship. Lehrman-Waterman and Ladany (2001) revealed that goal setting could increase the supervisees' level of satisfaction with regard the supervisory relationship and solidify the supervisor working appliance. Bernard (2014) and Goodyear (2014) asked that supervisors form a contract with supervisees that establish the goals to be pursued and detail how every objective can be achieved, monitored and evaluated.

Studies have shown that goal setting is an effective way of assisting beginning counselors to be more focused on what is important, which development issues are affecting learning experiences. Setting specific goals helps supervisees positively view feedback, or take the negative feedback they receive as constructive instead of embarrassing because they understand that these are relevant and fair to the achievement of their goals, facilitating their growth as a counselor.

Goal setting is a crucial component of a supervision relationship between it allows the attention to be directed at the supervisees and enhances the persistence of the supervisees by clearly delineating or detailing the exact behaviors expected of them after the counseling sessions (Mehr, Ladany, & Caskie, 2015; Vannucci, Whiteside, Saigal, Nichols, & Hileman, 2017). With a clear direction, the likelihood that the counselor in training or counselor will feel overwhelmed is decreased significantly (Mehr et al., 2015; Vannucci et al., 2017) Instead, the trainee or the counselor who have received supervision can become more self-confident and have higher levels of efficacy with regard their competence to provide consoling (Mehr et al., 2015).

Feedback and evaluation, which are key components of supervision, can enable growth and increase self-efficacy of the supervisee, or the counselor-in-training specifically. Feedback, however, has to have special qualities for it to work. It has to be timely, consistently given, objective, clear and specific, and also reciprocal. Feedback should encompass both formative and summative evaluations (Bernard, 2014; Goodyear, 2014). The feedback that is constructively

given can lead to desired changes much more compared to feedback rudely given, and therefore, going to be preferred by most supervisee. Bernard (2014) and Goodyear (2014) added that supervisees often do not forget the feedback they receive and how it was given. They remember the quality of feedback they have received from the supervisors as they reflect on their past supervision experiences. As a result, failure to provide quality and adequate feedback and evaluation is one of the contentions or complaints that supervisees make with regard the supervisory relationships they experienced (Goodyear, 2015; Ladany, 2015).

Counselor Self-Efficacy

Efficacy, in the counseling field, does not only imply knowing how to use techniques. It is the counselor's role within the session to facilitate and guide discussion and process with specific focus on the client's presenting issues or needs. These needs may be simple or complex, and the client may be willing or unwilling to share important aspects of their issues with the clinician. Whatever the case may be the counselor must be able to amalgamate their knowledge of theories and techniques to provide a productive experience for their client. This skill also depends on the counselor's confidence in working in the clinical environment. Self-efficacy, in the counseling field, depends on the self-judgment of the counselor on how well they can facilitate the necessary skills to effectively handle situations that may arise within the session (Bandura, 1982). There have been studies conducted related to the self-efficacy of counselors in training, or novice counselors. There is no doubt that this important aspect of the educational process cannot be underestimated.

Self-efficacy is important in relation to counselor competence, an established finding by various research in the counseling field. Its importance is also documented by the development of measurements of counselor self-efficacy (Mullen, Lambie & Conley, 2014). Melchert et al. (1996) for one, developed the Counselor Self-Efficacy Scale mainly for the evaluation of counselors and

counselors-in-training's confidence level with regard their knowledge, skills, and counseling competencies. Melchert et al. revealed that students in their second year of training have higher levels of confidence compared to students only in their first year of training. Melchert et al. also found that counselors who have acquired more years of clinical experience as having higher levels of self-efficacy.

Self-efficacy beliefs of counselors are linked to counseling training, first clinical experiences, and supervision (Hill et al., 2008). Skills training affected their overall confidence with regard their helping skills, the core of offering counseling services. Hill et al. (2008) also found that as students are exposed to the more difficult of skills needed in their profession, their confidence levels can start to falter. However, gaining experience with the particular skill can increase their confidence levels. Fox, Miller, and Barbee (2003) found that engaging in service learning can positively increase counselor self-efficacy levels. Fox et al. found that coursework credits and the years spent in preparation programs can predict self-efficacy levels positively. The same goes for previous counseling-related work (Fox et al., 2003).

Tang et al. (2004) found that internship can also increase self-efficacy of counselors. They found that students with more coursework as well as internship experience, including other work-related experience were similar students with higher levels of competence with regard their counseling skills. Counseling self-efficacy also increase the more clinical experience a counselor-in-training has. Kozina, Grabovari, Stefano, and Drapeau, (2010) found that self-efficacy of first year counseling students on certain master programs can increase when they garnered their first experience or initial work with clients during the clinical experience. Mullen et al. (2015) conducted a longitudinal investigation to determine the effects of counselor preparation program on counselors-in-training development of counseling self-efficacy. Using the Counselor Self-

Efficacy Scale to gather data from 179 masters-level counselors-in-training at three-time points during their training and coursework (new student orientation, clinical practicum orientation, and final internship supervision meeting), Mullen et al. (2015) found that experiences in the preparation programs were significantly related to the students' development of self-efficacy. Those with positive experiences experienced higher levels of counseling self-efficacy.

Factors Affecting Counseling Self-Efficacy

In one study, researchers compared the self-efficacy of counselors in training based on their educational program (Tang, Addison, LaSure-Bryant, Norman, O'Connell, & Stewart-Sicking, 2004). The researchers also wanted to see if any differences in the level of self-efficacy were due to the difference in the requirements of a Council for Accreditation of Counseling and Related Programs (CACREP) versus non-CACREP program (Tang et al., 2004). One hundred sixteen participants from six different universities (three with and three without CACREP) in the Midwestern United States (Tang et al., 2004). The results indicate that differences that were found in some of the counseling tasks were not due the CACREP accreditation label (Tang et al., 2004).

Instead, the higher number of training hours, required courses, and field experiences related to CACREP accreditation could account for the variance among the participants' self-efficacy (Tang et al., 2004). According to the researchers, these findings provide empirical evidence for Bandura's theory of self-efficacy (Tang et al., 2004). A limitation of this study is that only students from the Midwest were used in the sample. Also, when considering these programs, those with non-CACREP status may have the same number of required field hours and courses and thus simply not having the CACREP label does not mean that the requirements are less.

Components of Training for Counselors

The practice of counseling training is complex and deliberate process composed of reflective educational as well as experiential activities; all carried out for the goal of knowledge and skills development (Bernard, 2014; Goodyear, 2014). The main goal of counselor preparation programs is to produce students who have the competence, skills, knowledge, and more importantly, the experience of a good counselor (Bernard, 2014; Goodyear, 2014). Students training to be counselors, or counselors-in-training as they are often called, acquire self-awareness and increase their abilities to engage in reflection through these preparation programs or training sessions (Granello & Young, 2011).

Higher education institutions across the United States often pursue accreditation to show that they have a level of commitment to meeting high academic standards and in the quality education of their students (Edwards, 2017; Lawson, Trepal, Lee; & Kress, 2017; Lauka, McCarthy, & Carter, 2014; Taylor, 2015). Colleges and universities have various accreditation options for their counseling programs, one of which is the CACREP accreditation. While fewer, some may also choose not to have their programs accredited. Regardless, there is an agreement among counselor educators that CACREP standards and the educational curriculum are both critical components to counselors-in-training' development and growth (Edwards, 2017; Lawson et al., 2017; Lauka et al., 2014; Taylor, 2015).

Since 1981, CACREP has become the most sought after and the most commonly accepted standard for counselor program accreditation (Tang et al., 2004). As a result, increasing number of educational institutions and their leading counseling programs chose to become CACREP-accredited. In exchange for accreditation is a set of standards that must be adhered to by the institution or the program. These standards are designed to ensure accredited counseling programs

all have standard or similar educational practices so that when counselors-in-training graduate and enter the profession in actual, they can operate with similar knowledge, similar levels of skills, and a shared professional identity. Another value of the accreditation is that it makes sure the counseling programs met the criterion established by the counseling profession (Edwards, 2017; Lawson et al., 2017; Lauka et al., 2014; Taylor, 2015).

The overarching goal is to have a homogenized set of knowledge and skills for all the counselors in training so that they can go into the profession with appropriate and consistent professional identity (Edwards, 2017; Lawson et al., 2017; Lauka et al., 2014; Taylor, 2015). For an educational institution or program to gain accreditation means that its quality is assured not just for the prospective and present students but also for possible employers. With accredited counseling programs, the school will be required to focus on strengthening the theoretical orientation of each student, to be applied in their actual clinical experiences effectively (Edwards, 2017).

To understand the literature on the education that counselor in training receives, the three components of counselor education programs are discussed in this section, which are knowledge, skills, and competence. First, the goal of higher education programs for counselors is to facilitate trainees' acquisition of knowledge by letting the students attend classes and study in instructional environments that can be described as nurturing and conducive to growth of students' understanding of what their profession entails (Edwards, 2017; Lawson et al., 2017; Lauka et al., 2014; Taylor, 2015). Knowledge gained through institutions of higher institutions is to be carried over until they left the institution for actual practice. In counseling education programs, specially accredited by CACREP, knowledge acquired by trainees is distinguished based on this accreditation body's standards (Edwards, 2017).

CACREP calls for counselors-in-training to be self-efficient or knowledgeable with regard seven areas: engaging in professional and ethical practice, recognizing social and cultural diversity, respecting human growth and development, boosting career development, nurturing and guiding relationships, facilitating group work, conducting assessment and evaluation, and carrying out research and program evaluation (Edwards, 2017). Knowledge is a critical component of training for counselors because it serves as the foundation for professional experience. As stipulated in the CACREP standards, foundational knowledge of the counseling profession is the bases for counselors' clinical experiences to be built on (Edwards, 2017). CACREP makes sure that all trainees would graduate with the acceptable range of knowledge on the theories of change, on the different counseling techniques, on the various kinds of addictions and diagnosis, on the different ways of accurate assessment and evaluation, and other responsibilities a counselor must master before they enter the field. CACREP standards do not specify the knowledge level that a counselor-in-training should attain to start their actual clinical practice, but through common assumption as well as Bloom's Taxonomy theory, students should already be in the developmental categories of application or at the stage where analysis is already easy before they enter their clinical practice and start acquiring clinical experiences (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956).

Without sufficient knowledge, counselors-in-training cannot acquire experiences yet because they still do not understand the counseling process deeply and therefore, cannot form a level of self-efficacy that would enable them to provide quality counseling services to the clients. Skills refer to the second component of an effective and accredited counselor program (Edwards, 2017). In counselor education, CACREP has listed the counseling skills that counselors-in-training should be equipped with by their schools or programs. In the 63-page document of the

CACREP standards, the word *skill* materialized 72 times, which emphasized how important it is that counselors should be skilled in various things. Specifically, CACREP stated that they should be skilled in professional identity development, in professional practice, in addiction counseling, in career counseling, in clinical mental health counseling, and in marriage, couple, and family counseling (Edwards, 2017). They should also be skilled in school counseling, student affairs and college counseling, and doctoral standards counselor education and supervision.

These skills are integrated and taught in theoretical and foundational classes. According to Bernard (2014) and Goodyear (2014), the counseling profession is the culmination of the combination of the science of counseling gained during formal education and the art of practice learned and acquired during clinical experiences. It is during these experiences that students often engage in clinical supervision, or receive instructions and guidance from supervisors who already mastered the integration of the science and art of counseling (Bernard, 2014; Goodyear, 2014). Supervisors assist in the gaining of clinical skill sets of counselors-in-training while they are in their clinical experiences. This is where and when self-efficacy can be affected. Bandura (1982) claimed that self-efficacy is the perceived confidence one attains from the successful practice and performance of skills so it can be deduced that theoretical experiences can certainly lead to changes in one's self-efficacy levels, especially after in contact with a supervisor.

Last is the component of competence. Competence refers to the possession of not just knowledge and skills in an area but also capacity. The necessity of competence to be taught in counselor education and training programs is evident in the CACREP standards. For students to develop self-efficacy in showing competence is necessary, in various areas. According to CACREP, faculty of a counseling program is responsible for assessing their students throughout the program, not just their academic performance and achievements, but also their growth

professionally and personally (Edwards, 2017; Lawson et al., 2017; Lauka et al., 2014; Taylor, 2015). Consistent with the Association's code of ethics and other relevant code of ethics as well as standards of practices, evaluations prepared by the faculty should note whether the student is a good or not a good fit for the program (Edwards, 2017). If the student is not a good fit, the faculty has the responsibility to help the student transition out of the program and if still possible, provide guidance on entering a more appropriate area of study. Much like most professional development education programs, counselor education programs are designed to develop the students' or trainees' competencies incrementally as they progress through the program. Counselors-in-training, in particular, are deemed competent based on the CACREP standards, and several external mechanisms are used to ensure credentials are only awarded to counselors-in-training have at least achieved the minimum acceptable level of competence (Edwards, 2017).

Supervision and Counselor Self-Efficacy

While no study especially looked at the effects of the timing of clinical supervision on counselor-in-training's self-efficacy, some studies were designed to examine specific methods of training and how they contributed to improving counselor self-efficacy. Among them, some looked at whether enrolling in a course prior to the clinical phase of education can lead to higher self-efficacy. For instance, Urbani et al. (2002) examined 61 counselor-in-training who enrolled in a course prior to engaging in clinical experience. The experimental group is comprised of 52 students enrolled in a counseling course that included 12 sessions of three-hour classes with an hour devoted to instruction and two hours to skills-based training. On the other hand, the control group consisted of only nine students were enrolled in the one-hour instructional class but not in the two-hour skills training. After the 12 weeks of sessions, each of the students was asked to complete the COSE, a self-report measure of counselor self-efficacy. Results showed that skills training where

counselors-in-training were tested in actual of what they know from the lecture is crucial to developing counselor self-efficacy. Those in the experimental group experienced increases in their self-efficacy while those in the control group did not.

According to social cognitive theory, the two most effective methods for boosting one's self-efficacy are mastery and modeling or through the first two sources of self-efficacy (Bandura, 1986). With regard counselor education, mastery is having positive and successful experiences of counseling a client while vicarious learning is through the observance of others successfully carry out or perform a counseling skill. Vicarious learning can take many different forms apart from observing others' successful performance. More examples include watching videos, role-playing, and imagery. Larson and Daniels (1999) found that among these interventions for increasing counseling self-efficacy, both video watching and role-playing can be significant in improving self-efficacy of the counselors, but roleplaying is much more effective than videos.

Research specifically examining how supervision relates to counselor self-efficacy is scarce, and research on the timing of supervision on counselor self-efficacy currently does not exist. The limited number of studies done on the former will be presented here while the latter is the gap that this study is currently designed to close. Because the studies are limited, all in existence, even those published as early as the 80s will be presented in this section. For instance, in Beverage's (1989) dissertation, a positive relationship was revealed between the evaluations done by supervisors and the self-efficacy of the counselors. The limitation of this study was that the researchers at the time used a still unpublished and therefore, cannot be considered the valid measurement of counselor self-efficacy.

Ladany et al. (1999) on the other hand looked at the effects of supervisory working alliance and counselor self-efficacy. The results revealed ran in contrast with a study conducted years later

by Humeidan (2002). Ladany et al. (1999) found no significant association between supervisory working alliance and self-efficacy while Humeidan (2002) found the opposite. Daniels (1997) found supervisors' feedback, both positive and negative can have an impact on counselor self-efficacy, but again findings were questioned for the use of unpublished measurements. Larson and Daniels (1998) claimed that this body of literature still needed boosting.

Cashwell and Dooley (2001) claimed that many practicing counselors do not receive frequent and regular clinical supervision. Counseling self-efficacy may be affected as a result. The researchers not only evaluated the impact of supervision on counselor self-efficacy but the impact of regular and consistent clinical supervision. The Counseling Self-Estimate Inventory was the main instrument used to gather data from the participants, who were either professional counselors serving in a community setting or doctoral level students getting their clinical experiences in a university counseling lab setting. Results showed that counselors who received clinical supervision on a regular basis experienced a higher level of counseling self-efficacy (Cashwell & Dooley, 2001).

Daniels & Larson (2001) studied the impact of performance feedback on counselor self-efficacy and counselor anxiety. The purpose of their study was to investigate the impact of performance feedback on counseling self-efficacy and counselor anxiety in counselors in training (Daniels & Larson, 2001). The researchers had two hypotheses for their study. The first hypothesis higher self-efficacy would be seen in those counselors in training that received positive feedback in pretest to posttest, and those who received negative feedback would have a significantly lower level of self-efficacy (Daniel & Larson, 2001).

The second hypothesis was that those counselors in training that received positive feedback would report less anxiety than those who received negative feedback (Daniels & Larson, 2001).

There were forty-five participants from four Midwestern universities enrolled in some form of counseling program (school, clinical, marriage, and family, etc.) (Daniels & Larson, 2001). Daniels & Larson (2001) found that performance feedback, even on mock counseling sessions influenced counseling self-efficacy and anxiety. A strength of this research is in the various types of counseling programs represented through the participants (Daniels & Larson, 2001). This will allow the results to be used in a general fashion. According to Daniels & Larson (2001), a weakness of this study can be found in the research setting. Because this research was done in the confines of an analog study a more naturalistic setting would have increased its external validity (Daniels & Larson, 2001).

In another study, researchers studied the relationship of supervisory styles to satisfaction with supervision and how this relates to the perceived self-efficacy of counselors in training (Fernando & Hulse-Killacky, 2005). The central issue addressed by these researchers was to find the specific variables that impact clinical supervision (Fernando & Hulse-Killacky, 2005). In addition, the researchers sought to present a broader understanding of the differences in supervision styles among supervisors (Fernando & Hulse-Killacky, 2005). Fernando and Hulse-Killacky (2005) had the following three hypotheses for this study:

1. There would be a relationship between the supervisor's supervisory style and the supervisee's satisfaction with supervision.
2. There would be a relationship between the supervisor's supervisory style and the supervisee's perceived self-efficacy.
3. There would be a relationship between a supervisee's satisfaction with supervision and perceived self-efficacy. (p. 295)

The eighty-two participants in this study came from six graduate programs at both public and private universities (Fernando & Hulse-Killacky, 2005). The results of this study suggested that supervisor style can be vulnerable to supervisees' judgment (Fernando & Hulse-Killacky, 2005). In addition, the results emphasized the importance of supervision style and its direct effect on both supervisee satisfaction with supervision and the supervisee's perceived self-efficacy (Fernando & Hulse-Killacky, 2005). Limitations of this study include the element of bias since supervisees were self-reported assessments on their supervisor's style (Fernando & Hulse-Killacky, 2005). In addition, external factors such as gender, supervisor experience, ethnicity, and race could also have been influential in rating supervision satisfaction (Fernando & Hulse-Killacky, 2005).

In a study by Ladany, Ellis, and Friedlander (1999) the supervisory relationship, specifically, the working alliance between the clinical supervisor and the counselor in training was considered when measuring the counselor in training's self-efficacy and satisfaction. The purpose of this study was to test Bordin's extension of the concept of the therapeutic working alliance to the counseling clinical supervisory relationship (Ladany et al., 1999). The researchers' hypothesis for this study was, that as the supervisory working alliance strengthened, so would the perceived self-efficacy of the counselor in training (Ladany et al., 1999). This study involved 107 counselors in training, and a self-report instrument was used to assess the trainees' perceptions of the supervisory working alliance (Ladany et al., 1999). The results supported the importance that the working alliance needs to develop and a working bond gets stronger over time and thus ought to be assessed over time and not immediately after supervision begins (Ladany et al., 1999).

The strength of this study can be seen in its applicability to enhance the skills of clinical supervisors and their practice (Ladany et al., 1999). One limitation of the study is that the results

can only be generalized to those of similar demographics as the participants (Ladany et al., 1999). This study's internal validity is threatened by the inability to manipulate any of the predictor variables, as well as, the inability to randomly assign conditions to the counselors in training (Ladany et al., 1999). Repeating this study with counselor supervisors and counselors in training from a demographically different sample would help strengthen its external validity (Ladany et al., 1999).

In a similar research Efstation, Patton, and Kardash (1990) studied the working alliance in counselor supervision. The main problem addressed in this study was to develop a means by which to measure the working alliance in counselor supervision between the supervisor and the counselor in training (supervisee) (Efstation et al., 1990). There were 204 participants in this study and data was collected on three subscales: Interpersonal Sensitivity, Attractiveness, and Task Oriented (Efstation et al., 1990). Supervisor and Supervisee responses were evaluated, and this study found that even though a significant difference in perceptions between the two groups as to what goes into a supervisory relationship, some overlap was observed (Efstation et al., 1990). The results also suggest as in the previous study that work alliance ought to be measured over time because the bond between supervisor and supervisee is something that develops over time as one might expect (Efstation et al., 1990). The results of this study also indicated some implications in clinical supervisor training, specifically in the supervisor stressing their theoretical orientation that may lead supervisors to emphasize certain dimensions of the counseling process that might be different for another supervisor (Efstation et al., 1990). The results of this study also suggest that the counselors in training tended to value the rapport in their relationship with their supervisors more so than their client focus (Efstation et al., 1990). The researchers concluded this was due to

the counselors in training lack of having mastered theoretical and clinical skills associated with working with and understanding clients (Efstation et al., 1990).

In another study, researchers were looking at the supervisor's style of supervision in relation to novice supervisee's self-evaluation (Steward, Breland, & Neil, 2001). The purpose of this research by Steward et al. (2001) was to address the following:

1. Do novice trainees' perceptions of supervisors' supervisory style (i.e., attractiveness, interpersonal sensitivity, and task orientation) influence trainees' self-evaluations of counseling competency?
 2. Do novice trainees' perceptions of supervisory style influence supervisors' evaluation of trainees' counseling competency?
 3. Do novice trainees' perceptions of supervisors' supervisory style influence accuracy of self-evaluation of counseling competency – in other words, the degree of difference between supervisors' and trainees' perceptions of trainees' counseling competency?
- (p.132)

The researchers hypothesized the following: “supervisees' perceptions of supervisors' attractiveness, interpersonal sensitivity, and task orientation would influence supervisees' self-evaluation” (Steward et al., 2001, p.133); “supervisors' evaluations would correlate with supervisees' self-evaluation” (Steward et al., 2001, p.133); “supervisors' evaluation would be higher than supervisees' self-evaluation” (Steward et al., 2001, p.133); and “supervisees' perceptions of supervisors' attractiveness, interpersonal sensitivity, and task orientation would not influence supervisors' evaluations of supervisees' counseling competence” (Steward et al., 2001, p.133).

There were thirty-six counseling dyads from a large Midwestern United States university (supervisees were all master's level practicum counselors in training and supervisors were advanced doctoral students, doctoral level teaching assistants, or faculty supervisors) that participated in this study (Steward et al., 2001). Supervisees submitted self-evaluations of their counseling competence and their supervisor's supervisory style at the end of their semester (Steward et al., 2001). The results of this study supported the hypotheses listed above (Steward et al., 2001).

Another research study tested models of counselor development with counselor in training level of self-efficacy (Melchert, Hays, Wiljanen, & Kolocek, 1996). The purpose of this study was to develop an instrument to measure the effectiveness of counselor development model based on self-efficacy theory (Melchert et al., 1996). The researchers' hypothesis in this study was that as professional counseling training and experience increased, so would the self-efficacy of the counselor in training (Melchert et al., 1996). The participants of this study included 138 students enrolled in the counseling psychology program at a large Midwestern university in the United States, as well as licensed psychologists employed at the university's counseling center (Melchert et al., 1996). The counselor Self-Efficacy Scale was given to the participants (Melchert et al., 1996). This scale measured knowledge and skills of the counselors and counselors in training (Melchert et al., 1996). The results of this study indicated that the amount of training rather than the amount of clinical experience contributed to the difference in levels of self-efficacy (Melchert et al., 1996). A limitation of this study was the inability to conduct a live behavior observation of the counselors in the clinical setting (Melchert et al., 1996). Having this data may have given greater insight as to explain the difference between formal academic training and clinical experience.

Researchers Leach, Stoltenberg, McNeill, and Eichenfield (1997) studied the theoretical domains of the Integrated Developmental Model (IDM) of supervision. This model contains eight specific developmental domains “Intervention Skills, Assessment Techniques, Interpersonal Assessment, Client Conceptualization, Individual differences, Theoretical Orientation, Treatment Goals and Plans, and Professional Ethics” (Leach et al., 1997). The purpose of this study was to examine counselor competency domains within this model. The researchers expected that there would be differences observed between new or novice counselors and more advanced or experienced counselors (Leach et al., 1997). The researchers studied two of the eight domains listed above (Intervention Skills Competence and Individual differences (Leach et al., 1997). There were 142 masters' level and doctoral-level students from different universities representing four different geographic areas (Leach et al., 1997). The results of this study suggested that there was a difference in self-efficacy between those with less experience and those with greater experience (Leach et al., 1997). This study only focused on counselor's in training experience treating sexually abused clients (Leach et al., 1997). This limitation could be overcome by using experience from a variety of different client types.

In conclusion, from this review of the literature, there exists some connection between the clinical counseling supervisory relationship and the level of self-efficacy in the counselors in training. The research reviewed has addressed this connection for a variety of different situations. However, by conducting a study such as the one proposed, an examination of the timing of when clinical supervision begins and if this timing has an impact on counselor training and development.

Self-Efficacy of Counselors

Literature has already established how important the self-efficacy of counselors is and the factors that can shape it. According to Aliyev and Tunc (2015), counselors' feelings about

themselves and their effectiveness in their profession have utmost value in terms of the clients they serve and their success in their chosen profession. It is very important that counselors perceive themselves as being professionally effective in their craft and practice. In other words, the higher their level of self-efficacy is, the more effective they can be in providing their counseling services and the guidance they give to their clients. Ridgway and Sharpley (1993), who studied the value of self-efficacy at a much earlier period, claimed that it is not only performance enactments or outcomes in the past that can shape self-efficacy. Instead, self-efficacy can also, in turn, affect successful and unsuccessful experiences. The relationship between performance experiences and self-efficacy can be considered cyclical - experiences can affect self-efficacy levels with regard a task and self-efficacy levels can affect the successful performance of a task.

Fernando and Hulse-Killacky (2011) also designed a study to determine whether supervisors' supervisory styles can affect the satisfaction and perceived self-efficacy of counselors-in-training at the master's level. Through multiple regression analyses of data of 82 participants showed that specific supervisory styles could serve as significant predictors of supervisees' satisfaction as well as perceived self-efficacy.

Barnes (2011) also specifically explored supervisory feedback on counseling self-efficacy and counselor anxiety using the Social Cognitive Model of Counselor Training. Subjecting 45 master's level trainees to a 10-minute mock counseling session, who then received positive and negative bogus feedback in relation to their performance and then analyzing the effects on self-efficacy and anxiety levels, results showed that counseling self-efficacy is linked to performance feedback. The same relationship was found between performance feedback and changes in anxiety levels. Positive feedback led to higher self-efficacy levels and lower anxiety levels, while the opposite happened for negative feedback.

Williams (2016) investigated the relationship between counselor self-efficacy and the supervisory working alliance. The researchers also evaluated if the gender of the counselors being supervised can be a factor affecting this relationship. Gathering data from 68 graduate students currently enrolled in a counseling program that has been CACREP accredited and who are now already enrolled in an internship to practice their counseling knowledge and skills, the researchers found that there is a significant relationship between supervisory working alliance and counselor self-efficacy. Data was gathered with the use of already published and valid measures this time, specifically the Counselor Self-Estimate Inventory and the Supervisory Working Alliance Inventory-Trainee. While there is a significant relationship between the working alliance and the self-efficacy of counselors who were supervised, gender was not found to affect this relationship. This means that the effects found would still hold no matter the gender of the supervisor or the supervisee.

Powers (2017) also studied how supervision plays a role in counselor's self-efficacy when they are dealing with suicidal clients. The elements of supervision, which are rapport, client focus, feedback and goal setting are assessed on their relationship with the self-efficacy of counselors working with suicidal clients. A total of 90 supervisees were examined for this study. The supervisees were either counselors-in-training enrolled in a master program or counselors-in-training already graduated from a master's program. Participants were asked to complete several validated instruments: Counselor Suicide Assessment Efficacy Survey by Douglas and Wachter Morris (2005), the Supervisory Working Alliance Inventory by Efstation, Patton, and Kardash (1990) and the Evaluation Process with Supervision Inventory by Lerhman-Waterman and Ladany (2001). Findings revealed that the component of goal setting was important in predicting counselor self-efficacy positively among the counselors tasked to work with clients with high suicide risk.

Tan and Chou (2017) examined the relationship between supervision and counselor self-efficacy in the context of school counseling. They evaluated specifically the effects of structured group supervision on counselors' self-efficacy, counseling competency, and job involvement. Data from 21 counselors who participated in a supervisory session for more than 12 weeks and who already had at least six months worth of experience as school counselors in varying capacities and areas, such as in student care centers, was evaluated. A single-group before and after design was specifically used (Tan & Chou, 2017), which is also the method that the current researcher chooses to use for the current study.

Tan and Chou (2017) administered pre- and posttest questionnaires— Counselling Self-Efficacy Scale (CSES), Counselor's Competence Self-Evaluation Scale (CCSS), and Job Involvement Scale (JIS) — to measure the variables of counselor self-efficacy, counseling competency, and job involvement. Through paired-sample *t*-tests, the researchers were able to measure the impact of supervision on the three variables. Through Pearson correlation, the relationship between the variables was determined. Results indicated a significant increase in self-efficacy and competency levels of counselors as measured by the positive changes in the mean scores for pre- and posttest scores (Tan & Chou, 2017). However, job involvement after supervision did not change. The correlational analysis revealed a significant and positive correlation among all the three variables of self-efficacy, competency, and involvement in the counseling occupation. Findings can be used to improve supervisory practices, seeing that they play such an important role in improving self-efficacy and competency of counselors (Tan & Chou, 2017).

Brown, Olivarez, and Dekruyt (2017) also evaluated the impact of supervision on the self-efficacy levels of school counselors. What is usually examined by other researchers is the impact

of supervision on the professional identity development of school counselors. The researchers specifically evaluated the effects of a 4-hour supervision workshop developed according to the School Counselor Supervision Model (SCSM; Luke & Bernard, 2006), wherein a total of 31 school counselors from three southern U.S. school districts were focused on. Similar to what the current research will use, Brown et al. (2017) utilized a pre-experimental pretest-posttest research design with the help of the Site Supervisor Self-Efficacy Survey-revised (DeKruyf, 2011) to complete the study. Results indicated that there is a significant positive relationship between supervision training and supervisor self-efficacy, adding to the growing body of evidence.

Review of Methodology

The literature reviewed for this chapter included studies for different related topics – clinical supervision, counselor training, counselor-in-training self-efficacy, and the relationship between clinical supervision and counselor self-efficacy. In reviewing the methodologies used, the researcher focused on the studies that specifically focused on the relationship between clinical supervision and counseling self-efficacy as it is the closest to the purpose of the current study. A review of the methodologies used by these studies, albeit limited in number, would show that most would use the same design as the current researcher chose to carry out as well – a quantitative, randomized pre-test post-test control group design. For instance, Daniels & Larson (2001) examined the impact of performance feedback on counselor self-efficacy and counselor anxiety using a randomized pre-test, post-test control group design. Using this design helped them establish their hypothesis as true, that higher self-efficacy could be expected of counselors in training who have received positive feedback in pretest to posttest than those who received negative feedback (Daniel & Larson, 2001). A much more recent study also used this design to determine how counseling self-efficacy is affected by clinical supervision.

Brown et al. (2017) examined the impact of supervision in the self-efficacy levels of school counselors using a pre-experimental pretest-posttest research design. Doing so led them to conclude that a 4-hour supervision workshop developed according to the School Counselor Supervision Model ([SCSM]; Bernard, 2014) could improve supervisor self-efficacy. Tan and Chou (2017) used the same design to evaluate if supervision can have a positive impact on the counselor in training's self-efficacy, competency and job involvement. Doing so allowed them to find that supervision improved self-efficacy and competency as indicated by a significant increase in mean scores for pre- and posttest scores for these two variables (Tan & Chou, 2017). Doing so let them see that no such effect can be said on the variable of job involvement.

For the current study, the researcher, like these previous studies, chose this method because it was deemed the most appropriate in measuring gains in self-efficacy levels.

By using this research design style the researcher will show any impact of the timing of clinical supervision on the self-efficacy levels of counselors-in-training, something that can be hard to achieve through qualitative research designs involving interviews or focus group discussions or mere survey responses. To know whether the gains in self-efficacy was due to supervision, then a control group is also appropriate for comparison of data.

Literature Summary

Clinical supervision of professional counselors or the training and education of junior counselors by more senior counselors is an integral part of the development of competent, effective, and confident professionals. Through the facilitating of a supervisory relationship, the counselor-in-training or supervisee achieves deeper insights about their capability to take the theoretical knowledge imparted to them in the classroom and apply it to their clinical performance.

Studies have long established that clinical supervision for counselors can close the gap between the theoretical foundations and the practical clinical application (Nelson & Neufeldt, 1998).

Studies also showed that it is when the counselor-in-training steps into the clinical setting for the first time, with their first authentic client that they must put aside their fears and provide effective therapy to the client. However, there is no study as to whether clinical supervision should be given or engaged in for it to be the most effective and whether the timing of the clinical supervision has a relationship to the self-efficacy levels of the supervisors. The relationship between the clinical supervisor and the counselor-in-training is important on many different levels.

In the Discrimination Model, the supervisor can be in the role of the teacher, or in the role of counselor, and other times they can be in the role of the consultant (Goodyear, 2014). Through the guidance of the clinical supervisor, the counselor-in-training can improve their skills set and increase their self-confidence as a clinician. Without effective supervision, counselors may develop inappropriate clinical techniques and may not find satisfaction in the clinical setting. This can lead to future counselor burn-out and dissatisfaction in career choice. It is important therefore to establish if the timing is a factor that can influence the effectiveness of clinical supervision in improving counselors' self-efficacy, which is a literature gap that the current research is trying to close.

A significant influence in producing self-confident effective counselors is the supervisory experience. Knowledge gained from this study will benefit counselor education programs in providing the most effective timing of when clinical supervision ought to begin. The development of confident, well-educated, and clinically competent counselors is the goal of Counselor Education programs. The insight gained from this study will help ensure that effective programs will continue to produce competent and effective professional counselors.

CHAPTER 3: METHOD

Participants

The participants in this study were recruited from Wayne State University. The participants were counselors-in-training in the Master of Arts (M.A.) in Counseling program at Wayne State University. Wayne State University is a midsize urban public university in the Mid-western United States located in the mid-town area of Detroit, Michigan. Wayne State University is the third largest university in the state of Michigan and is one of the 100 largest universities in the United States. Wayne State University is made up of 13 schools and colleges offering over 350 programs of study. There are approximately 27,000 undergraduate and graduate students (Wayne State University, 2018). In the graduate school, the Racial/Ethnic breakdown is approximately 53% Caucasian and 24% Minority population (Wayne State University, 2018). In this study, there are approximately 300 potential student participants in the Counselor Education program at Wayne State University. This population consisted of students enrolled in one of three possible tracks of study. These tracks are Clinical Mental Health Counseling, School Counseling, and Combined (Clinical Mental Health and School Counseling).

A priori power analysis was conducted to determine the required minimum sample size for the study (see Appendix A). Four factors were considered in the power analysis: significance level, effect size, power of test, and statistical technique. The significance level, also known as Type I error, refers to the chance of rejecting a null hypothesis given that it is true (Haas, 2012). Most quantitative studies make use of a 95% significance level because it adequately provides enough statistical evidence of a test (Creswell, 2013). The effect size refers to the estimated measurement of the relationship between the variables being considered (Cohen, 1988). Cohen (1998) categorizes effect size into small, medium, and large. Berger, Bayarri, and Pericchi (2013)

purported that a medium effect size is better as it strikes a balance between being too strict (small) and too lenient (large). The power of test refers to the probability of correctly rejecting a null hypothesis (Sullivan, & Feinn, 2012). In most quantitative studies, an 80% power is usually used (Sullivan, & Feinn, 2012). The statistical test to be used for this study is ANOVA with two groups. Therefore, using G*Power 3.1.9.2 (Faul, Erdfelder, Buchner, & Lang, 2009), the computed required minimum sample size with a 95% significance level, medium effect size, 80% power of test, and ANOVA as the statistical test is 128. In order to account for potential withdrawal during the data collection phase, missing data, and the possible number of participants available for recruitment, a total of 140 students will be recruited instead. That is 70 students in each group: experimental and control.

Independent Variables

Level of Clinical Supervision

In the first part of this study the independent variable that was examined was the level of clinical supervision while the dependent variable is the level of self-efficacy. This was done by gathering demographic data about the participant's clinical supervision experience.

Exposure to a Video of Counseling Supervision.

The second part of this study was to determine whether there is a difference in the self-efficacy of counselors-in-training according to viewing of clinical supervision video. The independent variable was the exposure to a video of counseling supervision as an intervention designed to raise participants' awareness of the impact of their clinical supervision experience or viewing a comparable length but neutral content video. This intervention involved the viewing of a supervision video by the experimental group only, while the control group viewed a non-counseling related video to account for the time. The supervision video was a presentation by a

Ph.D. Counselor Educator not from Wayne State University. The aim of this video was to raise the awareness of supervision to the viewer. This video presentation is specifically geared toward Counselors-in-Training. The non-counseling related video is simply an informative video on spam email and was chosen because it was unrelated to the counseling field while at the same time maintaining the exact time elapsed as the video used in the experimental group. The assignment to experimental and control groups was randomly determined by the online survey software program described below. Both the experimental and control groups included students in varying degrees of exposure with clinical supervision and experience. Both groups will take a survey test to measure their level of self-efficacy after the completion of either respective video as described above.

Timing of Supervision

In the third part of this study, the timing of supervision was the independent variable, defined as at which stage students are in the clinical portion of the Counselor Education program. This will be measured by information gathered on the demographic questionnaire.

Measures

Demographics. The demographic questionnaire (see Appendix B) was used to gather descriptive characteristics of the participants. The descriptive characteristics collected were gender, age, level of education within the Counselor Education program, and name of program that the participant is enrolled in (Clinical Mental Health Counseling, School Counseling, or Combined Clinical Mental Health/School Counseling). In addition, whether the participant had received clinical supervision or not was also asked in order to differentiate the two distinct groups in research question 1. This was important because it could not be assumed that a student currently

enrolled in the first clinical course, techniques, had received clinical supervision since this study occurred prior to that element of the course.

Counselor self-efficacy. This construct was measured with Lent, Hill, & Hoffman's (2003) Counselor Activity Self-Efficacy Scales, CASES (see Appendix C). Specifically, this scale was developed to assess a counselor's self-efficacy in performing clinically, handling difficult situations in the clinical setting, and managing the overall counseling process (Lent et al., 2003). This instrument is made up of 41 items, with the following six subscales: Exploration Skills, Insight Skills, Action Skills, Session Management, Client Distress, and Relationship Conflict. The items are rated on a 10-point scale from a (0) *No Confidence* to a (9) *Complete Confidence* (Lent et al., 2003). A higher score in the individual subscales and an overall higher score would indicate higher self-efficacy in the counselor-in-training (Lent et al., 2003). The CASES internal consistency reported by Lent et al. (2003) Exploration Skills (.81), Insight Skills (.85), Action Skills (.78), Session Management (.93), Client Distress (.91), Relationship Conflict (.94) and CASES Total (.96). Lent et al (2003) also found the test-retest reliability over a two week interval was as follows: Exploration Skills (.71), Insight Skills (.75), Action Skills (.59), Session Management (.76), Client Distress (.75), Relationship Conflict (.66) and CASES Total (.75).

Research Design

Procedure

Permission to conduct data collection from the concerned institution was secured first. The first step was to contact via email the Program Director of the Counselor Education program at Wayne State University requesting the use of the student email database. A flyer was emailed to the potential participants followed by an information sheet (see Appendix D). The information sheet stated that by continuing further the participant indicates consent.

Quasi experimental design with non-probability purposive sampling was used for the study. Purposive sampling is a sampling technique that involves mindful selection of participants, such that only those who satisfy the inclusion criteria for the study are included (Goodwin & Goodwin, 2013; Haas, 2012). The inclusion criteria for this study included (a) must be 18 years old, (b) must currently enrolled and have an active student status in the graduate school at Wayne State University, (c) and must be enrolled in the Masters of Counseling program. The researcher asked the program administrators or database managers for a list of students enrolled in the Masters of Counseling program.

This study followed all ethical procedures outline in the Wayne State University Institutional Review Board (IRB). First, the approval of the IRB was secured. This means that no data collection commenced before the IRB approval had been secured. Participation in the study was voluntary as will be indicated on the flyer. An IRB approved flyer was emailed via Qualtrics to the students in the Counselor Education program at Wayne State University. If the potential participants wished to be part of the survey they selected the link that directed them to the IRB approved Information Sheet. This sheet contained the potential risks and benefits of this study. Additionally it stated that continuing on with survey served as consent to participate. If the participant continued on they will be direct to a Demographic Questionnaire.

If the participant selected that they were currently in the non-clinical portion of the Counselor Education program they were given the CASES to measure their level of Self-efficacy. If the participant chose the clinical selection they were randomly assigned to either an experimental or control group. If assigned to either of these groups, participants were given the CASES as a pre-test, then each group viewed a specific video according to which group they were randomly

assigned, and following the viewing of the video the participants were given the CASES as post-test.

All participants for the study were required to receive an information sheet before they could participate in the study. Only those who choose to continue would have selected the link to the survey were included, and those who did not were excluded from the study. On the information sheet, it was indicated that withdrawal is allowed at any time even after the responses has been regarded. In that matter, the requesting participant shall contact the researcher to express his or her withdrawal intention. It was made clear that there were no consequences of withdrawing from the study.

The survey test was administered through the online survey platform Qualtrics. This provided for a quick, convenient, and immediate response from participants in all groups. The whole survey consisted of two parts: the demographic portion and the CASES portion. The whole survey took approximately 20 – 25 minutes to complete. Once all participants completed the test, data was exported from Qualtrics to an SPSS table for data preprocessing and data analysis. The survey remained available for 12 days.

All data was anonymous and confidential. No personal identifying information was collected. Pseudo codes, such as Participant #1, were used to tag all the participants. Hard copies of raw data and other documents pertinent to the study were securely kept in a locked filing cabinet inside the personal office of the researcher. Soft copies of raw data and other documents were saved in a password-protected flash drive. All data and documents related to the study will be destroyed seven years after completion. Hard copies will be shredded while soft copies will be deleted.

Data Analysis

Table 1

Research Questions and Analyses

Research Question 1: To what extent does the self-efficacy of counselors in training differ between those who have had clinical supervision and those who have had no experience at all?		
Research Hypothesis	Variables	Statistical Analysis
H1 There is a significant difference on the self-efficacy of counselors-in-training between the groups.	<u>Predictor variables</u> <ul style="list-style-type: none"> The experience of clinical supervision <u>Criterion variable</u> <ul style="list-style-type: none"> Level of Self-Efficacy 	Independent t-test
Research Question 2: Does viewing a clinical supervision video, designed to raise awareness of the role of clinical supervision, impact the self-efficacy of counselors-in-training to a greater degree than those in the control group?		
Research Hypothesis	Variables	Statistical Analysis
<p>H2: There is a significant difference in the self-efficacy of counselors-in-training between the experimental and control group while controlling for the viewing of supervision video.</p> <p>H2a There is no significant difference in the level of Self-Efficacy between the Experimental group and the Control group prior to viewing the respective videos.</p> <p>H2b The Experimental group will have a higher level of Self-Efficacy than the Control group</p>	<u>Predictor variables</u> <ul style="list-style-type: none"> Viewing clinical supervision video – increased awareness of clinical supervision. <u>Criterion variable</u> <ul style="list-style-type: none"> Level of Self-Efficacy 	<p>Experimental and group difference t-tests (4)</p> <p>(a. Experimental vs. Control Pre-test – H2a</p> <p>b. Experimental vs. Control Post-test – H2b</p> <p>c. Experimental Pre-test vs. Post-test – H2c</p> <p>d. Control Pre-test vs. Post-test – H2d)</p>

<p>after viewing the respective videos.</p> <p>H2c There is a significant difference in the level of self-efficacy in the Experimental group after viewing the supervision video.</p> <p>H2d There will be no significant change in the level of self-efficacy in the control group after viewing the non-supervision related video.</p>		
<p>Research Question 3:</p> <p>What role does timing of clinical supervision in students' program sequences have in the level of self-efficacy among those in different levels of the clinical portion of the educational program (techniques, practicum, and internship)?</p>		
Research Hypothesis	Variables	Statistical Analysis
<p>H3: There is a significant difference on the self-efficacy of counselors-in-training among the three levels of clinical education.</p>	<p><u>Predictor variable</u></p> <ul style="list-style-type: none"> • Timing of clinical supervision <p><u>Criterion variable</u></p> <ul style="list-style-type: none"> • Level of Self-Efficacy 	One-Way ANOVA

Raw data was exported from Qualtrics to an SPSS table. After which, data cleaning and screening procedures were conducted to ensure that all valid and complete data sets were included in the final analysis. Participants with missing responses were excluded. Only those participants who answered every question in the survey were included in the final analysis. After arriving with cleaned final data set, the data was then be exported to SPSS.

Descriptive statistics analysis, independent sample *t*-test, and ANOVA were conducted to address the different research questions. SPSS was used to run the different statistics analyses. Descriptive

analysis was conducted first in order to characterize the demographics of the participants as well as their responses to the survey. Descriptive statistics such as frequency, percentage, mean, and standard deviation were computed. Charts such as pie charts and histogram were generated to accompany the descriptive analysis.

An independent *t*-test was conducted to address research question one. For research question 1 the participants were divided into two groups based on whether the participant has had any clinical supervision or not. To address research question 2 several *t*-tests were conducted. To address the third research questions and hypotheses an ANOVA was conducted. ANOVA is used to test differences among group means (Hirotzu, 2017). The independent variable is the timing of clinical supervision and experience that was categorized into three groups (a) students enrolled in the techniques portion of the clinical part of the Counselor Education program (b) students in the practicum portion of the clinical part of the Counselor Education program, and (c) students in the internship part of the clinical part of the Counselor Education program. The dependent variable was the counselor's-in-training self-efficacy.

There are four assumptions that needed to be satisfied before a parametric such as ANOVA could be used. These four assumptions are independence, multicollinearity, normality, and homogeneity of variance. The independence assumption refers to the assumption wherein each observation must be independent of all other observations in the data set (Hirotzu, 2017). Researchers make use of random sampling techniques in collecting data in order to meet this assumption (Huber & Melly, 2015). The multicollinearity assumption refers to the assumption wherein the dependent variable cannot be correlated to each other (Hirotzu, 2017). Researchers make use of obtaining more data points than what is required to produce more accurate parameter estimates (Huber & Melly, 2015). The normality assumption refers to the assumption that for each

categorical group, each dependent variable must represent a normal distribution of scores (Hirotsu, 2017). Removal of outliers in the data set or data transformation can be used to ensure the normality assumption is met (Huber & Melly, 2015). Lastly, homogeneity of variance assumption refers to the assumption that each dependent variable must exhibit similar levels of variance across each independent variable (Parra-Frutos, 2013). Levene's test can be used to test whether there is a violation of this assumption or not (Sedgwick, 2015).

A significance level of 95% will be used to determine the significance of the difference across group means. A p -value greater than the significance level indicates that there is no significant difference across group means. On the other hand, a p -value less than the significance level indicates that there is significant difference across group means.

CHAPTER 4: DATA ANALYSIS AND RESULTS

Introduction

The purpose of this quantitative, comparative study is to examine the difference of self-efficacy of counselors-in-training based on the level of clinical supervision (experience), viewing of clinical supervision video, and timing of clinical supervision. The first part is to determine whether there is a difference in the self-efficacy of counselors-in-training according to their level of clinical supervision. The second part is to determine whether there is a difference in the self-efficacy of counselors-in-training according to viewing of clinical supervision video. The third part is to determine whether there is a difference in the self-efficacy of counselors-in-training according to their timing of clinical supervision in students' program sequences (techniques, practicum, and internship). Descriptive statistics analysis, independent sample *t*-test, and ANOVA were conducted to address the different research questions. SPSS was used to run the different statistics analyses. Specifically, the following research question and hypotheses were tested in the quantitative analysis:

RQ1: To what extent does the self-efficacy of counselors in training differ between those who have had clinical supervision and those who have had no experience at all?

H1₀: There is no significant difference on the self-efficacy of counselors-in-training between the groups.

H1_a: There is a significant difference on the self-efficacy of counselors-in-training between the groups.

RQ2: Does viewing a clinical supervision video, designed to raise awareness of the role of clinical supervision, impact the self-efficacy of counselors-in-training to a greater degree than those in the control group?

H2₀: There is no significant difference in the self-efficacy of counselors-in-training between the experimental and control group while controlling for the viewing of supervision video.

H2_a: There is a significant difference in the self-efficacy of counselors-in-training between the experimental and control group while controlling for the viewing of supervision video.

RQ3: What role does timing of clinical supervision in students' program sequences have in the level of self-efficacy among those in different levels of the clinical portion of the educational program (techniques, practicum, and internship)?

H3₀: There is no significant difference on the self-efficacy of counselors-in-training among the three levels of clinical education.

H3_a: There is a significant difference on the self-efficacy of counselors-in-training among the three levels of clinical education.

Data Collection Summaries

The final sample consisted of 106 counselors-in-training. Table 2 summarized the demographic information of these counselors-in-training. For gender, majority of the 106 counselors-in-training were females (92; 86.8%). In the case of age, more than half of the 106 counselors-in-training have age of 22 to 29 years old (59; 55.7%). For the race/ethnicity demographic, more than half of the 106 counselors-in-training were White or European American (61; 57.5%). There were significant numbers of counselors-in-training that were Black or African American (34; 32.1%). In the case of highest degree earned, majority of the 106 counselors-in-training have Bachelor's degree (86; 81.1%). For the counseling program currently enrolled, more than half of the 106 counselors-in-training were enrolled in clinical mental health (62; 58.5%). The number of credits received in

current program, almost half of the 106 counselors-in-training have received above 40 credits in their current program (47; 44.3%). For the level of clinical supervision, less than half of the 106 counselors-in-training have received clinical supervision (35; 33%). And for the timing of supervision, more than half of the 106 counselors-in-training were enrolled in non-clinical (intro, theories, career, group, etc.) portion of the counselor education program (59; 55.7%). There were 24 (22.6%) that were currently enrolled in internship class, 10 (9.4%) in techniques class, and another 10 (9.4%) in practicum class. For the exposure to video of counseling supervision, participants were randomly assigned to one of two groups: (a) experimental group – participants will view a counseling supervision video and (b) control group – participants will view a non-counseling video equal in length to the video shown to the experimental group. Among the 106 counselors-in-training, 23 (21.7%) were in the experimental group and 21 (19.8%) were in the control group.

Table 2

Frequencies and Percentages of Demographic Information of Counselors-in-Training

	Frequency	Percent
Gender		
Male	10	9.4
Female	92	86.8
Missing	4	3.8
Age range		
22-29	59	55.7
30-39	23	21.7
40-49	13	12.3

50 and above	8	7.5
Missing	3	2.8
Race/ethnicity		
Asian	3	2.8
Black or African American	34	32.1
Hispanic or Latino	5	4.7
White or European American	61	57.5
Prefer not to answer	2	1.9
Other	6	5.7
Highest degree earned		
Bachelor's	86	81.1
Master's	17	16
Missing	3	2.8
Counseling program currently enrolled in		
Clinical Mental Health	62	58.5
School Counseling	16	15.1
Combined Clinical Mental Health/School	25	23.6
Missing	3	2.8
Number of credits received in current program		
0-12	23	21.7
13-24	14	13.2
25-40	19	17.9
Above 40	47	44.3
Missing	3	2.8
Received Clinical Supervision		
Yes	35	33
No	68	64.2

Missing	3	2.8
Current status in the counselor education (Timing of Supervision)		
I am currently enrolled in the techniques class.	10	9.4
I am currently enrolled in the practicum class.	10	9.4
I am currently enrolled in the internship class.	24	22.6
I am in the non-clinical (intro, theories, career, group, etc.) portion of the counselor education program.	59	55.7
Missing	3	2.8
Exposure to a Video of Counseling Supervision		
Control	21	19.8
Experimental	23	21.7
Missing	62	58.5

Table 3 summarized the descriptive statistics summaries of the level of self-efficacy at the pre-test and post-test of the 106 counselors-in-training. The scores of level of self-efficacy were obtained by getting the average scores of the 41 items in the CASES instrument. Looking at Table 3, it is shown that the mean level of self-efficacy at the post-test ($M = 8.48$; $SD = 1.82$) was greater than the mean level of self-efficacy at the pre-test ($M = 7.57$; $SD = 2.11$). This means that the counselors-in-training have greater higher self-efficacy in the counselor-in-training at the post-test than at the pre-test.

Table 3
Descriptive Statistics Summaries of Level of Self-Efficacy at Pre-test and Post-test

	n	Minimum	Maximum	Mean	Std. Deviation
Level of self-efficacy (Pre-test)	97	1.10	10.61	7.57	2.11
Level of self-efficacy (Post-test)	33	3.00	10.61	8.48	1.82

Results

Test of Required Assumptions of Parametric Statistical Analysis. Prior to conducting the independent sample *t*-test and ANOVA to address the three research questions of the study, the different tests for the required assumptions of both statistical analyses were conducted to ensure that the use of both independent sample *t*-test and ANOVA were appropriate. The required assumptions include normality of data of the study variables and homogeneity of variances. The following sections provide the results of the different tests for the required assumptions.

Normality. The first assumption tested is normality of the data of the study variable of level of self-efficacy at the pre-test and post-test. Normality was tested through an examination of the skewness and kurtosis statistics to check the distribution of the different dependent variable data. To determine whether the data follows a normal distribution, skewness statistics greater than three indicate strong non-normality and kurtosis statistics between 10 and 20 also indicate non-normality (Kline, 2005). As can be seen in Table 4, the skewness (-1.59 and -1.00) and kurtosis (-0.72 and 2.21) statistic values of the level of self-efficacy at the pre-test and post-test were in the acceptable range enumerated by Kline (2005). In addition, histograms in Figures 1 and 2 of the data of level of self-efficacy at the pre-test and post-test showed that the histogram formed a bell shaped curve of normal distribution which indicated that the data of level of self-efficacy at the pre-test and post-test. Thus, all the data of the dependent variables exhibited normal distribution and did not violate the normality assumption.

Table 4
Skewness and Kurtosis Statistics of Level of Self-Efficacy at Pre-test and Post-test

	n	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Level of self-efficacy (Pre-test)	97	-1.00	0.25	0.72	0.49
Level of self-efficacy (Post-test)	33	-1.59	0.41	2.21	0.80

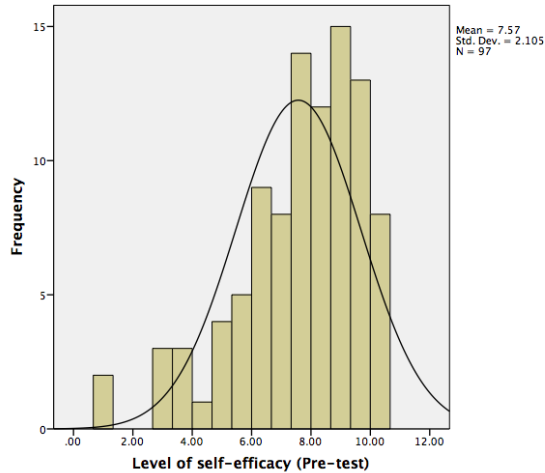


Figure 1. Histogram of Data of Level of Self-Efficacy at Pre-test

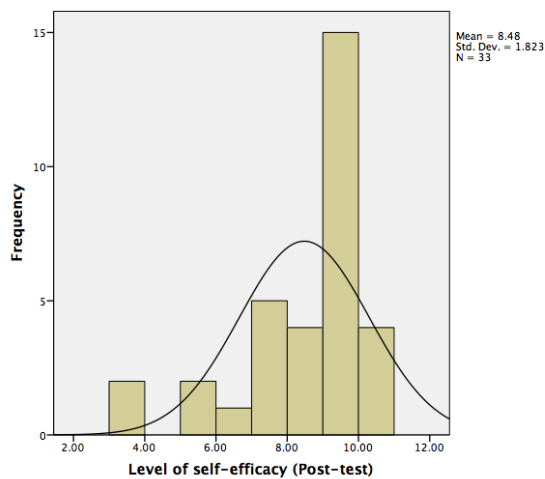


Figure 2. Histogram of Data of Level of Self-Efficacy at Post-test

Homogeneity of Variances. Another assumption tested is homogeneity of variance which means that the variances of each of the dependent variables of level of self-efficacy at the pre-test and post-test were homogenous or equal across the different categories of the independent variables of level of clinical supervision (RQ1), exposure to a video of counseling supervision (RQ2), and timing of clinical supervision (RQ3). Levene's test were conducted to test this assumption. The p -value of the Levene's test should be greater than the level of significance value

of 0.05 to prove that the variances of the dependent variable are equal or homogenous across the different categorical groups of the independent variable. The results of the Levene's tests of homogeneity of variance were discussed one at a time at each of the succeeding results since different Levene's tests were conducted for each analyses per research questions.

Results of Independent Sample *t*-test for Research Question One. An independent *t*-test was conducted to address research question one to determine whether there is a difference in the self-efficacy of counselors-in-training according to their level of clinical supervision. The independent variable is the level of clinical supervision while the dependent variable is the level of self-efficacy at the pre-test. A level of significance of 0.05 was used in the independent sample *t*-test. There is a significant differences in level of self-efficacy at the pre-test between counselors-in-training that had any clinical supervision and those that did not if the *p*-value of the independent sample *t*-test result is less than or equal to the level of significance value of 0.05. Table 6 showed the results of the independent sample *t*-test for research question one.

The results of the Levene's test in Table 6 showed that the variance of the dependent variable of level of self-efficacy at pre-test ($F = 12.04, p = 0.001$) was not homogeneous across the two categories of the independent variable of level of clinical supervision. This was because the *p*-value was greater than the level of significance value of 0.05. Thus, the results in the "Equal variances not assumed" row of the independent sample *t*-test result generated by SPSS was used. Results of the independent sample *t*-test showed that there was significance difference in the level of self-efficacy at pre-test ($t(93.71) = -16.53; p < 0.001$) between counselors-in-training that had any clinical supervision and those that did not. Mean comparison showed that the counselors-in-training that had received any clinical supervision ($M = 8.94; SD = 6.80$) have significantly greater level of self-efficacy at pre-test than those counselors-in-training that did not received any clinical

supervision ($M = 6.80$; $SD = 2.16$) by a mean difference of 2.14. With this result, the null hypothesis of research question one was rejected. Alternatively, the results of the independent sample t -test supported the results of the alternative hypothesis that “There is a significant difference on the self-efficacy of counselors-in-training between the groups”.

Table 5

Descriptive Statistics Summaries of Level of Self-Efficacy at Pre-test by Level of Clinical Supervision

	Received Clinical Supervision	n	Mean	Std. Deviation	Std. Error Mean
Level of self-efficacy (Pre-test)	Yes	35	8.94	1.07	0.18
	No	62	6.80	2.16	0.27

Table 6

Independent Sample t -test of Difference of Level of Self-Efficacy at Pre-test by Level of Clinical Supervision

		Levene's Test for Equality of Variances		t -test for Equality of Means						
		F	p	t	df	p (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Level of self-efficacy (Pre-test)	Equal variances not assumed	12.04	0.001	6.53	93.71	0.00*	2.14	0.33	1.49	2.79

*. The mean difference is significant at the 0.05 level of significance.

Results of Independent Sample t -test for Research Question Two. An independent t -test was conducted to address research question two to determine whether there is a difference in the self-efficacy of counselors-in-training according to viewing of clinical supervision video. The independent variable is the exposure to a video of counseling supervision while the dependent variable is the level of self-efficacy. A level of significance of 0.05 was used in the independent sample t -test. There is a significant difference in level of self-efficacy between the experimental

and control group if the p -value of the independent sample t -test result is less than or equal to the level of significance value of 0.05. Four different t -test of differences were conducted to address research question two.

The first independent t -test was conducted to determine whether the level of self-efficacy at pre-test between the experimental and control group were significantly different. The results of the independent sample t -test were presented in Table 8. The results of the Levene's test showed that the variance of the dependent variable of level of self-efficacy at pre-test ($F = 9.43, p < 0.001$) was not homogeneous across the two categories of the independent variable of experimental and control group. Thus, the result in the "Equal variances not assumed" row of the independent sample t -test result generated by SPSS was used. Results of the independent sample t -test showed that there was no significance difference in the level of self-efficacy at pre-test ($t(32) = 1.01; p = 0.07$) between the experimental and control group. With this result, the hypothesis 2a which states that "There is no significant difference in the level of Self-Efficacy between the Experimental group and the Control group prior to viewing the respective videos" was not rejected.

Table 7

Descriptive Statistics Summaries of Level of Self-Efficacy at Pre-test Between Experimental and Control Group

	Exposure to a Video of Counseling Supervision	n	Mean	Std. Deviation	Std. Error Mean
Level of self-efficacy (Pre-test)	Control	21	8.95	0.89	0.19
	Experimental	23	8.12	1.89	0.39

Table 8

Independent Sample t -test of Difference of Level of Self-Efficacy at Pre-test Between Experimental and Control Group

	Levene's Test for Equality of Variances	t -test for Equality of Means

			F	p	t	d	p (2- tailed)	Mean Differ ence	Std. Error Differ ence	95% Confidence Interval of the Difference Lower Upper	
Level self- efficacy (Pre-test)	of Equal variances not assumed		9.43	0.00	1.9 1	3 2	0.07	0.84	0.44	-0.06	1.73

The second independent *t*-test was conducted to determine whether the level of self-efficacy at post-test between the experimental and control group were significantly different. The results of the independent sample *t*-test were presented in Table 9. The results of the Levene's test showed that the variance of the dependent variable of level of self-efficacy at post-test ($F = 8.04, p = 0.01$) was not homogeneous across the two categories of the independent variable of experimental and control group. Thus, the result in the "Equal variances not assumed" row of the independent sample *t*-test result generated by SPSS was used. Results of the independent sample *t*-test showed that there was no significance difference in the level of self-efficacy at post-test ($t(23.22) = 1.53; p = 0.14$) between the experimental and control group. With this result, the hypothesis 2b which states that "The Experimental group will have a higher level of Self-Efficacy than the Control group after viewing the respective videos" was not supported.

Table 9

Descriptive Statistics Summaries of Level of Self-Efficacy at Post-test Between Experimental and Control Group

		Exposure to a Video of Counseling Supervision	n	Mean	Std. Deviation	Std. Error Mean
Level of self- efficacy (Post-test)	Control		16	8.96	1.08	0.27
	Experimental		17	8.03	2.26	0.55

Table 10

Independent Sample t-test of Difference of Level of Self-Efficacy at Post-test Between Experimental and Control Group

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	p	t	df	p (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Level of self-efficacy (Post-test)	Equal variances assumed	8.04	0.01	1.53	23.2	0.14	0.93	0.61	-0.33	2.20	

The third independent *t*-test was conducted to determine whether the level of self-efficacy of those counselors-in-training in the experimental group or those that viewed a counseling supervision video at the pre-test and post-test were significantly different. The results of the independent sample *t*-test were presented in Table 12. Results of the independent sample *t*-test showed that there was no significance difference in the level of self-efficacy of those counselors-in-training in the experimental group at the pre-test and post-test ($t(16) = 0.26$; $p = 0.80$). With this result, the hypothesis 2c which states that “There is a significant difference in the level of self-efficacy in the Experimental group after viewing the supervision video” was not supported.

Table 11

Descriptive Statistics Summaries of Level of Self-Efficacy at Pre-test and Post-test for Experimental Group

	Mean	<i>n</i>	Std. Deviation	Std. Error Mean
Level of self-efficacy (Pre-test)	8.05	17	1.98	0.48
Level of self-efficacy (Post-test)	8.03	17	2.26	0.55

Table 12

Independent Sample t-test of Difference of Level of Self-Efficacy Between Pre-test and Post-test for Experimental Group

	Paired Differences						<i>t</i>	df	<i>p</i> (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Interval Difference		Confidence of the			
				Lower	Upper	Upper			
Level of self-efficacy (Pre-test) - (Post-test)	0.03	0.42	0.10	-0.19	0.24	0.26	16	0.80	

The fourth independent *t*-test was conducted to determine whether the level of self-efficacy of those counselors-in-training in the control group or those that viewed a non-counseling video at the pre-test and post-test were significantly different. The results of the independent sample *t*-test were presented in Table 13. Results of the independent sample *t*-test showed that there was no significance difference in the level of self-efficacy of those counselors-in-training in the control group at the pre-test and post-test ($t(15) = -1.58$; $p = 0.14$). With this result, the hypothesis 2d which states that “There will be no significant change in the level of self-efficacy in the control group after viewing the non-supervision related video” was supported.

Table 13

Descriptive Statistics Summaries of Level of Self-Efficacy at Pre-test and Post-test for Control Group

	Mean	<i>n</i>	Std. Deviation	Std. Error Mean
Level of self-efficacy (Pre-test)	8.83	16	0.96	0.24
Level of self-efficacy (Post-test)	8.96	16	1.08	0.27

Table 14

Independent Sample t-test of Difference of Level of Self-Efficacy Between Pre-test and Post-test for Control Group

	Paired Differences						t	df	p (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Level of self-efficacy (Pre-test) - (Post-test)	-0.13	0.33	0.08	-0.30	0.05	-1.58	15	0.14	

Results of ANOVA for Research Question Three. An ANOVA was conducted to address research question three to determine whether there is a difference in the self-efficacy of counselors-in-training according to their timing of clinical supervision in students' program sequences (techniques, practicum, and internship). The independent variable is the timing of clinical supervision while the dependent variable is the level of self-efficacy. A level of significance of 0.05 was used in the ANOVA. There is a significant difference in level of self-efficacy among the different timing of clinical supervision in students' program sequences (techniques, practicum, and internship) if the p -value of the ANOVA is less than or equal to the level of significance value of 0.05.

The results of the Levene's test in Table 15 showed that the variances of the dependent variable of level of self-efficacy at pre-test ($F = 6.31, p = 0.001$) and at post-test ($F = 13.4, p < 0.001$) were not homogeneous across the different categories of the independent variable of timing of clinical supervision. Results of the ANOVA in Table 16 showed that there were significance

differences in the level of self-efficacy at pre-test ($F(3, 93) = 11.26; p < 0.001$) and post-test ($F(2, 30) = 14.94; p < 0.001$) by the differences in the timing of clinical supervision of the counselors-in-training.

Post-hoc tests were further conducted using Tukey's test to further determine the difference in the self-efficacy of counselors-in-training according to their timing of clinical supervision in students' program sequences (techniques, practicum, and internship). However, only the Tukey's test was conducted for level of self-efficacy at pre-test since the level of self-efficacy at post-test had at least one group that had fewer than two cases. Instead, mean comparison was conducted for the level of self-efficacy at post-test. For the level of self-efficacy at pre-test, the Tukey's test result in Table 17 showed that the counselors-in-training that are currently in internship class have significantly higher level of self-efficacy at pre-test than those counselors-in-training that are currently in technique class by a mean difference of 2.43. Counselors-in-training that are currently in practicum class have significantly higher level of self-efficacy at pre-test than those counselors-in-training that are currently in non-clinical portion by a mean difference of 1.79. Counselors-in-training that are currently in internship class have significantly higher level of self-efficacy at pre-test than those counselors-in-training that are currently in non-clinical portion by a mean difference of 2.42.

For the level of self-efficacy at post-test, the mean comparison in Table 16 showed that the counselors-in-training that are currently in internship class ($M = 9.41; SD = 0.73$) have the highest level of self-efficacy at post-test. On the other hand, counselors-in-training that are currently in technique class ($M = 6.32; SD = 2.24$) have the lowest level of self-efficacy at post-test. With this result, the null hypothesis of research question three was rejected. Alternatively, the results of the

ANOVA supported the results of the alternative hypothesis that “There is a significant difference on the self-efficacy of counselors-in-training among the three levels of clinical education”.

Table 15

Results of Levene's Test of Homogeneity of Variances of Level of Self-Efficacy at Pre-test and Post-test by Timing of Clinical Supervision

	Levene Statistic	df1	df2	p
Level of self-efficacy (Pre-test)	6.31	3	93	0.001
Level of self-efficacy (Post-test)	13.40	2	30	0.00

Table 16

Descriptive Statistics Summaries of Level of Self-Efficacy at Pre-test and Post-test by Timing of Clinical Supervision

		n	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Level of self-efficacy (Pre-test)	1 Techniques class	10	6.78	2.03	0.64	5.33	8.23
	2 Practicum class	10	8.59	0.95	0.30	7.90	9.27
	3 Internship class	24	9.21	0.80	0.16	8.87	9.55
	4 Non-clinical portion	53	6.79	2.20	0.30	6.18	7.40
	Total	97	7.57	2.11	0.21	7.15	8.00
Level of self-efficacy (Post-test)	1 Techniques class	8	6.32	2.24	0.79	4.45	8.19
	2 Practicum class	7	8.54	1.23	0.47	7.40	9.68

Level of self- efficacy (Post- test)	3 Internship class	1 8	9.41	0.73	0.17	9.05	9.78
	4 Non-clinical portion	0
	Total	3 3	8.48	1.82	0.32	7.83	9.13

Table 17

ANOVA of Difference of Level of Self-Efficacy at Pre-test and Post-test by Timing of Clinical Supervision

		Sum of Squares	df	Mean Square	F	p
Level of self- efficacy (Pre-test)	Between Groups	113.40	3	37.80	11.26	0.00*
	Within Groups	312.14	93	3.36		
	Total	425.54	96			
Level of self- efficacy (Post-test)	Between Groups	53.07	2	26.54	14.94	0.00*
	Within Groups	53.30	30	1.78		
	Total	106.38	32			

*. The mean difference is significant at the 0.05 level of significance.

Table 18

Post-Hoc Test of Difference of Level of Self-Efficacy at Pre-test by Timing of Clinical Supervision

Dependent Variable	(I) Current status in the counselor education (Timing of Supervision)	(J) Current status in the counselor education (Timing of Supervision)	Mean Difference (I-J)	Std. Error	<i>p</i>	95% Confidence Interval Lower Bound Upper Bound	
Level of self-efficacy (Pre-test)	1 Techniques class	2 Practicum class	-1.80	0.82	0.13	-3.95	0.34
		3 Internship class	-2.43*	0.69	0.00	-4.24	0.63
		4 Non-clinical portion	-0.01	0.63	1.00	-1.66	1.64
	2 Practicum class	3 Internship class	-0.63	0.69	0.80	-2.43	1.18
		4 Non-clinical portion	1.79*	0.63	0.00	0.14	3.45
	3 Internship class	4 Non-clinical portion	2.42*	0.45	0.00	1.24	3.60

*. The mean difference is significant at the 0.05 level of significance.

Summary

The purpose of this quantitative, comparative study is to examine the difference of self-efficacy of counselors-in-training based on the level of clinical supervision (experience), viewing of clinical supervision video, and timing of clinical supervision. Descriptive statistics analysis, independent sample *t*-test, and ANOVA were conducted to address the different research questions. For research question one, result of independent sample *t*-test showed that there was significance difference in the level of self-efficacy at pre-test between counselors-in-training that had any clinical supervision and those that did not wherein counselors-in-training that had received any clinical supervision have significantly greater level of self-efficacy at pre-test than those counselors-in-training that did not received any clinical supervision. For research question two, results of different independent sample *t*-test showed that there is no significant difference in the level of self-efficacy between the experimental group and the control group prior to viewing the respective videos. Also, the control group does not have a higher level of self-efficacy than the control group after viewing the respective videos. Results also showed that there is no significant difference in the level of self-efficacy in the experimental group after viewing the supervision video. There was no significant change in the level of self-efficacy in the control group after viewing the non-supervision related video. For research question three, results of ANOVA showed that there were significance differences in the level of self-efficacy at pre-test and post-test by the differences in the timing of clinical supervision of the counselors-in-training. Chapter Five concludes this study. Chapter Five contains findings from the study, findings as they relate to literature, implications for action, and recommendations for future research.

CHAPTER 5: DISCUSSION

Introduction

Research on the role of self-efficacy of counselors-in-training highlights the importance of clinical supervision in mastering clinical and theoretical skills (Daniel, Borders, & Willse, 2015; Knudsen, Roman, & Abraham, 2013). It is critical, then, to understand not only the relationship between self-efficacy and clinical supervision, but to investigate how the timing impact counselors-in-training. Thus, the purpose of this quantitative, comparative study is to examine the difference of self-efficacy of counselors-in-training (dependent variable) based on the level of clinical supervision (experience), viewing of clinical supervision video, and timing of clinical supervision (independent variables). Descriptive statistics analysis, independent sample *t*-test, and ANOVA were conducted using data from 106 counselors-in-training. These students in the educational program had either already been in the theoretical part of their education or will have completed their theoretical training and in their clinical experience at the techniques, practicum, or internship level. The following research questions and corresponding hypotheses guide the study:

RQ1: To what extent does the self-efficacy of counselors in training differ between those who have had clinical supervision and those who have had no experience at all?

H₁₀: There is no significant difference on the self-efficacy of counselors-in-training between the groups.

H_{1a}: There is a significant difference on the self-efficacy of counselors-in-training between the groups.

RQ2: Does viewing a clinical supervision video, designed to raise awareness of the role of clinical supervision, impact the self-efficacy of counselors-in-training to a greater degree than those in the control group?

H2₀: There is no significant difference in the self-efficacy of counselors-in-training between the experimental and control group while controlling for the viewing of supervision video.

H2_a: There is a significant difference in the self-efficacy of counselors-in-training between the experimental and control group while controlling for the viewing of supervision video.

RQ3: What role does timing of clinical supervision in students' program sequences have in the level of self-efficacy among those in different levels of the clinical portion of the educational program (techniques, practicum, and internship)?

H3₀: There is no significant difference on the self-efficacy of counselors-in-training among the three levels of clinical education.

H3_a: There is a significant difference on the self-efficacy of counselors-in-training among the three levels of clinical education.

Findings from the different statistical analyses showed significant differences of the level of self-efficacy based on (a) the experience of clinical supervision and (b) the timing of clinical supervision. However, there were no significant differences on the level of self-efficacy of counselors-in-training of the experimental group before and after viewing clinical supervision videos. The same was the result for the control group. In addition, no significant differences were found between the control and experimental groups before and after viewing clinical supervision videos. In this chapter, the results of the present study are discussed in light of the existing literature on the role of self-efficacy in counseling. The implications for action, limitations of the study, and

recommendations for future research are also discussed. The chapter is concluded with a summary of the discussion.

Interpretation of the Findings

The research questions that served as guide for the present study aimed to explore the difference of self-efficacy of counselors-in-training depending on the experience and timing of clinical supervision. The first research question focused on the difference of level of self-efficacy in terms of the presence of clinical supervision. The second research question determined the impact of a clinical supervision video on the level of self-efficacy of counselors-in-training, including the difference between the experimental and control groups. The third and last research question tackled the effect of timing of clinical supervision on the self-efficacy of counselor-in-training considering the different levels of clinical portion of the educational program (e.g. techniques, practicum, and internship).

Counselor Self-Efficacy and Clinical Supervision

Drawing from previous literature on the influence of clinical supervision on counselor's competence and skills (Bernard, 2014; Falender, Shafranske, & Falicov, 2014; Goodyear, 2014), it was hypothesized that there would be a statistically significant difference on the level of self-efficacy of counselors-in-training who have experienced clinical supervision and those who have no experience at all. Results of the independent sample *t*-test for research question one demonstrated that there was significance difference in the level of self-efficacy at pre-test between counselors-in-training that had any clinical supervision and those that did not. This suggests that the experience of clinical training is intimately linked to how the participants perceive their efficacy in performing their tasks as counselors. This finding lends further support to the notion that skills training can develop counselor self-efficacy (Urbani et al., 2002). Bandura (1986)

posited that mastery and modeling are two effective approaches in improving self-efficacy, which, in the present study, is reflected by the contrast of perceived self-efficacy of the participants based on their experience in clinical supervision. While this difference does not necessarily translate to the effectiveness of clinical supervision experience, it does provide evidence to the assertion by Larson and Daniels (1999) that supervision from a senior counselor can be an efficacious intervention for increasing counseling self-efficacy.

The significant difference of self-efficacy level between counselors-in-training with and without clinical supervision experience further substantiates previous studies focusing on the relationship between clinical counseling supervisory and counselor self-efficacy. This finding strengthens the notion that counselors who receive clinical supervision on a regular basis experienced can have an increased level of counseling self-efficacy compared with those who do not receive supervision on a regular basis (Cashwell & Dooley, 2001). From the perspectives of the supervisors, the good characteristics of supervisors that can affect the quality of supervisory relationships are being knowledgeable about the different kinds of interventions, being deeply familiar about what the supervisees need, have the capacity to give constructive feedback to supervisees' performance, and have the capability to form warm and supportive relationships with supervisees (Bell, et al., 2016; Inman et al., 2014; Keil, 2016). How a counselor perceives their own skills and competence and their effectiveness in performing tasks is of paramount importance in achieving successful clinical outcomes (Aliyev & Tunc, 2015). In other words, the higher their level of self-efficacy is, the more effective they can be in providing their counseling services and the guidance they give to their clients.

Clinical supervision video viewing and counselor self-efficacy. Research question two examined the influence of viewing a clinical supervision video on the level of self-efficacy of

counselors-in-training. It was hypothesized that there would be a significant difference in the self-efficacy of counselors-in-training after viewing a supervision video. Findings showed that (a) there was no significant difference in the level of self-efficacy between the experimental group and the control group prior to viewing the respective videos, (b) the control group did not have a higher level of self-efficacy than the control group after viewing the respective videos; (c) there was no significant difference in the level of self-efficacy in the experimental group after viewing the supervision video, and (d) there was no significant change in the level of self-efficacy in the control group after viewing the non-supervision related video.

The non-significant results are congruent to the notion that video-watching is less effective than other methods such as role-playing in increasing awareness of the role of clinical supervision (Larson & Daniels, 1999). Vicarious learning can take many different forms apart from observing others' successful performance. More examples include watching videos, role-playing, and imagery. Larson and Daniels (1999) found both video-watching and role-playing can be significant in improving self-efficacy of the counselors, but roleplaying is much more effective than videos. This may have been due to the absence of an authority figure, one that is critical in mentoring programs. The impersonal nature of a clinical supervision video can be counterproductive in developing a student's perception of their own ability in counseling. This is the main reason why mentoring programs pair two people, one with more experience or better skills at the specific task teaching the one with less or without experience or skills.

It is also important to consider the limitation of the current study in terms of utilizing clinical supervision videos in raising awareness. The one-time use of a video may have contributed to the non-significant result on the self-efficacy level of counselors-in-training, as self-efficacy takes a long time to develop and entails constant application of counseling knowledge and theories.

Hill, Crowe, and Gonsalvez (2016) posited that reflective dialogue based on clinical supervision videos is useful especially with relatively inexperienced counselors. Continuous reflections and collaboration between clinical supervisors and supervisees are encouraged, with videos used only as supplementary tools to increase counselor's perceived competence in their job responsibilities (Hill et al., 2016).

In summary, in understanding the relationship between self-efficacy level and clinical supervision, it is critical to initially compare how supervision experiences contribute to the development of self-efficacy of counselors-in-training. It was shown that the level of self-efficacy at pre-test between counselors-in-training that had any clinical supervision and those that did not had significant difference. This significant result reveals how supervision experience can contribute to the development of counselor self-efficacy. However, the non-significant result of the use of videos in clinical supervision suggests that this is not a most effective tool in increasing self-efficacy. Instead, videos can be used as supplementary methods for clinical supervision. In the next subsection, the findings on the influence of the timing of clinical supervision on self-efficacy are discussed.

Counselor Self-Efficacy and Timing of Clinical Supervision

There is a gap on the role of timing of clinical supervision on the level of self-efficacy of counselors-in-training. Based on research focusing on specific methods of training for improving counselor self-efficacy (Urbani et al., 2002), it was hypothesized that there would be a significant difference on the self-efficacy of counselors-in-training among the three levels of clinical education (e.g. techniques, practicum, and internship). Results of the ANOVA demonstrated that there were significance differences in the level of self-efficacy at pre-test and post-test by the differences in the timing of clinical supervision of the counselors-in-training. Specifically, the

counselors-in-training that were in internship class at the time of the study had significantly higher level of self-efficacy at pre-test than those counselors-in-training that were in technique class during the experiment. Additionally, counselors-in-training in practicum class had significantly higher level of self-efficacy at pre-test than those counselors-in-training that were not non-clinical portion. In the post-test, counselors-in-training that were in internship class had the highest level of self-efficacy. Conversely, counselors-in-training in technique class have the lowest level of self-efficacy at post-test.

These results offer a nuanced understanding on the relationship of counselor self-efficacy and the timing of the clinical supervision. It is the counselor's role within the session to facilitate and guide discussion and process with specific focus on the client's presenting issues or needs. For instance, the fact that counselors-in-training that were in internship class had a significantly higher level of self-efficacy than those in technique class reflects how clinical training and experience is associated with how the individual perceives his or her ability to engage in a task. Previous research has shown that in the counseling field, self-efficacy is rooted on the individual's perception of their own competence, which can consequently affect how well they can facilitate the necessary skills to handle situations that may arise within the session (Goreczny et al., 2015; Kiralp, 2015). In internships, counselors-in-training have the chance to apply their knowledge on counseling in practice. On the other hand, counselors-in-training who are in the techniques class have less opportunities to integrate their knowledge of theories and techniques in a real client counseling situation. Internships allow future counselors to gain more practical insight about effective counseling and treatment. Thus, it is important to consider the timing of clinical supervision and experience to fully utilize the different levels of the clinical education program.

According to social cognitive theory, the two most effective methods for boosting one's self-efficacy are mastery and modeling or through the first two sources of self-efficacy (Bandura, 1986). This is reflected by the high self-efficacy level of counselors-in-training that have undergone internship or were in practicum class. Practicum classes allow students to perform their clinical tasks in a controlled environment. In addition, practicum students are given supervision by doctoral students and working clinicians. Bandura (1986) claimed that people are likelier to learn from observing the modeled behavior of others and then repeating it. This could explain the significantly higher self-efficacy of counselors-in-training in practicum class. Clinical supervision methods that include experiential activities and observation of working professionals are integral in the development of competent, effective, and confident professionals (Fong, Borders, Ethington, & Pitts, 1997; Nelson & Neufeldt, 1998). The same is also observed in the post-test result, in which counselors-in-training from the internship class reported the highest level of self-efficacy while those in the techniques class had the lowest level of self-efficacy.

The significant differences on self-efficacy levels based on the timing of the clinical supervision contribute new knowledge on methods of training and how they contributed to improving counselor self-efficacy. This further lends support to the studies by Beverage (1999) and Humeidan (2002), which showed that counselor self-efficacy is closely associated with clinical supervision. These results also contribute to the boosting of literature focusing on the timing of clinical supervision and counselor self-efficacy, shedding some light as to which clinical portion of counseling education influences the level of self-efficacy of counselors-in-training. Discerning the nuanced influences of each point of the clinical education can be leveraged to achieve increased self-efficacy level of counselors-in-training.

To summarize, the findings revealed that the timing of clinical supervision can have distinct effect on the level of self-efficacy of counselors-in-training. Bandura argued (1982) that the amount of effort placed on an overcoming a challenge, the choices one made when determining the course of action, and the level of persistence one demonstrated when having encountered failures are all shaped by the person's level of self-efficacy. Thus, it is understandable that those who have had counseling experience through internships and practicum reported to have higher self-efficacy level than those who are in the techniques class. These results present fresh perspectives on the role of timing of clinical supervision on developing counselor self-efficacy depending on the student program sequences. The relative importance of the clinical portion of the program on the level of self-efficacy of counselors-in-training signifies the gravity of establishing educational curriculum in ensuring optimal learning and clinical outcomes. In the next section, the implications for actions are discussed in light of the results of the present study.

Implications for Action

The present study revealed how clinical supervision experience, technique, and timing affect the level of self-efficacy of counselors-in-training. Specifically, the results showed that there is a significant difference in self-efficacy of counselors-in-training based on their experience in clinical supervision. Additionally, it was demonstrated how timing of clinical supervision can have distinctive influence on counselor self-efficacy, with counselors-in-training reporting the highest level of self-efficacy from internship and lowest level from techniques class. These are especially important especially for researchers to understand the nuances and dynamics of clinical supervision and training and counselor self-efficacy. The results provide additional context regarding the influences of supervision experience, as well as the timing, on self-efficacy. Perhaps this also entails practical and social implications that could possibly contribute to the development

of clinical education programs considering the effectiveness of clinical supervision and modeling for future counselors even within their theoretical education.

Practical Implications

Counselor education, including its supervision component, provided properly and effectively, can improve self-efficacy (Larson & Daniels, 1998). Counselor education programs are crucial for counselors' self-efficacy between of the direct relationship between anxiety and self-efficacy levels. The results of the present study have addressed the research gap on the definite effects of timing of clinical supervision and how these are subject to change depending on the clinical portion of the education program which a counselor-in-training is currently taking. Central to these relationships is the role of experience. Future researchers can use the knowledge from this study to develop models that explain underlying self-efficacy theories and cognitive and behavioral processes of clinical supervision. For researchers, the present study contributed to the theoretical knowledge on the relationships among clinical supervision, self-efficacy, and educational program. The findings may help substantiate and develop a model that could encompass the different socio-psychological processes that occur in the context of counselors-in-training.

For counselor educators and organizational leaders, the insights from this study can be utilized to create and maintain programs that develop the self-efficacy of counselors-in-training through providing opportunities for supervision type experiences earlier in the educational process. This is critical in ensuring that counselor-in-training will have the chance to apply their knowledge into practice, while at the same time, increasing their self-efficacy in performing job responsibilities. Counselor educators are responsible in developing initiatives and policies designed to adhere to counseling standards, so counselors-in-training can operate and navigate

through the challenges in the counseling field with similar knowledge and skills as other professionals. For clinical supervisors, this study can be useful to develop supervisees through mentoring programs that can potentially benefit the counselors-in-training in the long run. Perhaps developing ways of integrating clinical skills and supervision in the beginning of the educational process for counselors.

Positive Social Change

The findings in this study can contribute to positive social change, especially considering the importance of developing counselors-in-training to provide clinical support to individuals with mental illnesses. Researchers suggested that clinical supervision is linked to the core competencies of the counselors (Falender, Shafranske, & Falicov, 2014). In the counseling profession, supervision assists the counselors to maintain focus on skills that they have formally learned in the past and the theoretical orientation they acquired in academia (Cashwell & Dooley, 2001). In general, supervision provides structure, feedback, and support necessary for professional growth within one field to be achieved (Cashwell & Dooley, 2001). The self-efficacy beliefs held by counselors can affect or influence motivational processes, effective processes, and cognitive processes – shaping their overall effectiveness. From the present study, it was found that depending on the clinical portion of the education program, counselor self-efficacy can be increased.

This knowledge can be a foundation for curriculum changes that highlight the importance of educational programs to provide opportunities for future counselors to hone their skills. This entails not only providing more opportunities for firsthand experiential exercises or clinical experiences, but also ensure that the educational programs deliver quality results for the counselors-in-training. Additionally, in terms of educational policies, these results support the need to reexamine our current policies that focus on developing counseling professionals in order

to provide quality mental health services. Given that clinical supervision timing and experience play an important role in increasing the level of self-efficacy of counselors-in-training, counselor educators must revisit programs and requirements on mental health services to ensure that these address the contemporary challenges in the counseling profession.

Limitations of the Study

Despite the significant results of the study, it is important to discuss the findings based on the limitations that arose throughout the research. One major theoretical limitation in understanding the results of the present study was the scarcity of recent research focusing on the relationships of clinical supervision experiences and counselor self-efficacy based on the timing of the supervision. Because of this, it has been challenging to draw out social psychological and cognitive processes that occur in this context. Instead, the present study was only able to point out the explicit relationships and differences of self-efficacy levels depending on clinical supervision experience and timing. This can be attributed to the quantitative nature of the study. Quantitative studies focus on numbers and analysis to draw conclusions about relationships of measured variables (Simon, 2011). While one of the advantages of using quantitative methods in the study is that the method can manage data from a large number of samples, it does not provide insight on underlying theories and processes of a relationship (Simon, 2011). Thus, future researchers can utilize qualitative methods to address this limitation. This can also help researchers contextualize the disparities in results.

Another limitation can be attributed to the operationalization of variables, specifically the scales of measure used for the independent variables of clinical supervision level, exposure to clinical supervision video, and timing. Nominal scale was used for these independent variables, which could not account for other aspects such as length of experience, quality of experience,

amount of time spent in practice. This could have limited insights on the specific dimensions of these variables and how these can invariably influence the level of self-efficacy of counselors-in-training. Thus, future researchers should assess how these variables can be broken down into different specified components to further nuance its relationship with counselor self-efficacy.

In summary, two major limitations are seen in the present study. The first limitation is the lack of research on the different dimensions of clinical supervision and their relationship with counselor self-efficacy. This impedes the contextualization of the result in the broader literature on self-efficacy. The second limitation refers to the methodology in which nominal scales were used for the independent variables. This limited in-depth distinction of the influence of clinical supervision variables on counselor self-efficacy. In the next subsection, the recommendations for future research are enumerated.

Recommendations for Future Research

Based on the findings of the study, the following are recommended for future research:

1. The present study was able to reveal explicit relationships between clinical supervision timing and counselor self-efficacy. Future researchers are recommended to build upon these results and conduct studies that analyze the specific aspects of each clinical supervision stage that are related to increasing self-efficacy. For instance, for counselors-in-training who are in an internship class, it is interesting to know if the increase in self-efficacy is accounted for by the length of internship, mentoring style of supervisor, or any other factor relating to the internship. This can provide a nuanced understanding of educational programs and their impact on the students' perception of their skills and competence in a clinical setting.

2. Another interesting angle is the perception of counselors-in-training on the effectiveness of an educational program in relation to its impact on their skills. Understanding the position of the counselors-in-training involves looking into their personal agency and how this can influence their self-efficacy. The perceived effectiveness of clinical supervision techniques is also important in delivering quality programs for counselors-in-training.
3. Another recommendation is to utilize a qualitative methodology to understand the lived experiences of counselors-in-training especially in navigating through the challenges of the profession. This may add knowledge on how demographic and socio-economic disparities occur in this profession. Furthering the present study's insights on the importance of providing opportunities for on-the-job training, this angle can also offer awareness on the challenges of the counseling field.

Conclusion

The purpose of this comparative study is to examine the difference of self-efficacy of counselors-in-training based on the level of clinical supervision (experience), viewing of clinical supervision video, and timing of clinical supervision. The first part determined that there was a significant difference in the level of self-efficacy of counselors-in-training who had experience with clinical supervision had higher level of self-efficacy and those who did not receive supervision. The second part, however, did not show significant difference in level of self-efficacy using a clinical supervision video. This may have been due to the limited use of video-watching as a tool for raising awareness on clinical supervision. It is suggested that video-watching can be utilized as a supplementary teaching tool for counselors-in-training. In the third part, it was revealed that clinical supervision timing can have distinctive impact on the level of self-efficacy of counselors-in-training. Experience and observation are two effective methods in honing the

skills of counselors, consequently increasing their perception of their competence in performing job responsibilities.

The findings of the present study provided a fresh perspective on the relationship between clinical supervision and counselor self-efficacy. It is important to consider the timing of clinical supervision so that educators can apply these at the appropriate time with the goal of increasing counselor self-efficacy. In addition, there is a need for boosting the quality of clinical education received by counselors-in-training, which entails providing more opportunities for real-life training and experience to gain insights on the counseling profession. Thus, future researchers are encouraged to look into the different aspects of clinical supervision and how these can be effectively used for the long-term benefit of counselors-in-training.

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APPENDIX A: POWER ANALYSIS USING G* POWER

G*Power 3.1.9.2

File Edit View Tests Calculator Help

Central and noncentral distributions Protocol of power analyses

critical F = 3.91632

Test family: F tests

Statistical test: ANOVA: Fixed effects, omnibus, one-way

Type of power analysis: A priori: Compute required sample size - given α , power, and effect size

Input Parameters

Determine =>	Effect size f	0.25
	α err prob	0.05
	Power (1- β err prob)	0.80
	Number of groups	2

Output Parameters

Noncentrality parameter λ	8.0000000
Critical F	3.9163246
Numerator df	1
Denominator df	126
Total sample size	128
Actual power	0.8014596

APPENDIX B

To What Extent Does Clinical Supervision and Experience Relate to the Self-Efficacy of Counselors-in-Training?

Demographic Questionnaire

1. Please indicate your gender:
 - a. Male
 - b. Female
 - c. Other
2. Age range:
 - a. 18-21
 - b. 22-29
 - c. 30-39
 - d. 40-49
 - e. 50 and above
3. What is your race/ethnicity? (please indicate all that apply)
 - a. Asian
 - b. Black or African American
 - c. Hispanic or Latino
 - d. Native Hawaiian or Pacific Islander
 - e. White or European American
 - f. Prefer not to answer
 - g. Other
4. What is the highest degree you have earned?
 - a. Bachelor's
 - b. Master's
 - c. Doctorate
5. Which counseling program are you currently enrolled in?
 - a. Clinical Mental Health
 - b. School Counseling
 - c. Combined Clinical Mental Health/School
6. How many credits have you received in your current program?
 - a. 0-12
 - b. 13-24
 - c. 25-40
 - d. Above 40
7. Which best describes your current status in the counselor education program:
 - a. I am currently enrolled in the techniques class.
 - b. I am currently enrolled in the practicum class.
 - c. I am currently enrolled in the internship class.
 - d. I am in the non-clinical (intro, theories, career, group, etc.) portion of the counselor education program.

8. Have you ever received Clinical Supervision?
- a. Yes
 - b. No

APPENDIX C

WEB FORM K
COUNSELOR ACTIVITY SELF-EFFICACY SCALES

General Instructions: The following questionnaire consists of three parts. Each part asks about your beliefs about your ability to perform various counselor behaviors or to deal with particular issues in counseling. Please provide your honest, candid responses that reflect your beliefs about your current capabilities, rather than how you would like to be seen or how you might look in the future. There are no right or wrong answers to the following questions.

Part I.

Instructions: Please indicate how confident you are in your ability to use each of the following helping skills effectively, over the next week, in counseling most clients.

No Confidence	Some Confidence	Complete Confidence
0	1 2 3 4	5 6 7 8 9

How confident are you that you could use these general skills effectively with most clients over the next week?

- | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|
| 1. Attending (orient yourself physically toward the client) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2. Listening (capture and understand the messages that clients communicate). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 3. Restatements (repeat or rephrase what the client has said, in a way that is succinct, concrete, and clear). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 4. Open questions (ask questions that help clients to clarify or explore their thoughts or feelings). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 5. Reflection of feelings (repeat or rephrase the client's statements with an emphasis on his or her feelings). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 6. Self-disclosure for exploration (reveal personal information about your history, credentials, or feelings). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 7. Intentional silence (use silence to allow clients to get in touch with their thoughts or feelings). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 8. Challenges (point out discrepancies, contradictions, defenses, or irrational beliefs of which the client is unaware or that he or she is unwilling or unable to change). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 9. Interpretations (make statements that go beyond what the client has overtly stated and that give the client a new way of seeing his or her behavior, thoughts, or feelings). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

- | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 10. Self-disclosures for insight (disclose <i>past</i> experiences in which you gained some personal insight). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 11. Immediacy (disclose <i>immediate</i> feelings you have about the client, the therapeutic relationship, or yourself in relation to the client). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 12. Information-giving (teach or provide the client with data, opinions, facts, resources, or answers to questions). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 13. Direct guidance (give the client suggestions, directives, or advice that imply actions for the client to take). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 14. Role-play and behavior rehearsal (assist the client to role-play or rehearse behaviors in-session). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 15. Homework (develop and prescribe therapeutic assignments for clients to try out between sessions). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Part II.

Instructions: Please indicate how confident you are in your ability to do each of the following tasks effectively, over the next week, in counseling most clients.

No Confidence					Some Confidence					Complete Confidence									
0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9

How confident are you that you could do these specific tasks effectively with most clients over the next week?

- | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|
| 1. Keep sessions "on track" and focused. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2. Respond with the best helping skill, depending on what your client needs at a given moment. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 3. Help your client to explore his or her thoughts, feelings, and actions. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 4. Help your client to talk about his or her concerns at a "deep" level. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 5. Know what to do or say next after your client talks. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 6. Help your client set realistic counseling goals. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 7. Help your client to understand his or her thoughts, feelings, and actions. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 8. Build a clear conceptualization of your client and his or her counseling issues. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 9. Remain aware of your intentions (i.e., the purposes of your interventions) during sessions. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10. Help your client to decide what actions to take regarding his or her problems. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Part III.

Instructions: Please indicate how confident you are in your ability to work effectively, over the next week with each of the following client types, issues, or scenarios (By "work effectively," I am referring to your ability to develop successful treatment plans, to come up with polished in-session responses, to maintain your poise during difficult interactions, and, ultimately, to help the client resolve his or her issues.)

No Confidence		Some Confidence				Complete Confidence				
0	1	2	3	4	5	6	7	8	9	

How confident are you that you could work effectively over the next week with a client who...

1. is clinically depressed.	0	1	2	3	4	5	6	7	8	9
2. has been sexually abused.	0	1	2	3	4	5	6	7	8	9
3. is suicidal.	0	1	2	3	4	5	6	7	8	9
4. has experienced a recent traumatic life event (e.g., physical or psychological injury or abuse).	0	1	2	3	4	5	6	7	8	9
5. is extremely anxious.	0	1	2	3	4	5	6	7	8	9
6. shows signs of severely disturbed thinking.	0	1	2	3	4	5	6	7	8	9
7. you find sexually attractive.	0	1	2	3	4	5	6	7	8	9
8. is dealing with issues that you personally find difficult to handle.	0	1	2	3	4	5	6	7	8	9
9. has core values or beliefs that conflict with your own (e.g., regarding religion, gender roles).	0	1	2	3	4	5	6	7	8	9
10. differs from you in a major way or ways (e.g., race, ethnicity, gender, age, social economic status).	0	1	2	3	4	5	6	7	8	9
11. is not "psychologically-minded" or introspective.	0	1	2	3	4	5	6	7	8	9
12. is sexually attracted to you.	0	1	2	3	4	5	6	7	8	9
13. you have negative reactions toward (e.g., boredom, annoyance).	0	1	2	3	4	5	6	7	8	9
14. is at an impasse in therapy.	0	1	2	3	4	5	6	7	8	9
15. wants more from you than you are willing to give (e.g., in terms of frequency of contacts or problem-solving prescriptions).	0	1	2	3	4	5	6	7	8	9
16. demonstrates manipulative behaviors in-session.	0	1	2	3	4	5	6	7	8	9

Note: Adapted from a survey instrument whose responses were analyzed and presented in R. W. Lent, C. E. Hill, and M. A. Hoffman, "Development and Validation of the Counselor Activity Self-Efficacy Scales," 2003, *Journal of Counseling Psychology*, 50, pp. 97–108; the survey instrument itself, which was not published in the article, is copyrighted by the lead author. © 2003 by R. W. Lent. Adapted with permission.

APPENDIX D

Research Information Sheet

Title of Study: *To What Extent Does Clinical Supervision and Experience Relate to the Self-Efficacy of Counselors-in-Training?*

Principal Investigator (PI): Thomas Michalos
Counselor Education
(248) 705-8694

Purpose:

You are being asked to be in a research study about the benefits of clinical supervision because you are a student counselor. This study is being conducted at Wayne State University.

Study Procedures

If you agree to take part in this research study, you will be asked to (a) read this document and tick the appropriate box at the end of the document which should take no more than 5 minutes, and (b) take an anonymous internet survey on clinical supervision and provide some information about yourself which should take about 20 minutes. Hit the 'submit' button after you have answered all the questions in the survey. Some of the questions that will be asked include:

- Your gender, age, stage of counselor education program
- Whether you receive clinical supervision and the frequency of clinical supervision
- Your beliefs about your ability to perform counselor behaviors / manage issues during counseling, e.g. listening, paraphrasing, etc.

If you are in the clinical portion of the Counselor Education program, following the above procedures, you will be randomly assigned to view one of two video presentations. Upon completion of the video presentation you will be asked about your beliefs about your ability to perform counselor behaviors / manage issues during counseling, e.g. listening, paraphrasing, etc.

Benefits

- As a participant in this research study, there will be no direct benefit for you; however, information from this study may benefit other people now or in the future.

Risks

- There are no known risks at this time to participation in this study

Costs

- There will be no costs to you for participation in this research study.

Compensation

- You will not be paid for taking part in this study.

Confidentiality:

- You will be identified in the research records by a code name or number.

Voluntary Participation /Withdrawal:

Taking part in this study is voluntary. You are free to not answer any questions or withdraw at any time. Your decision will not change any present or future relationships with Wayne State University or its affiliates.

Questions

If you have any questions about this study now or in the future, you may contact Thomas Michalos or one of the research team members at the following phone number (248) 705-8694. If you have questions or concerns about your rights as a research participant, the Chair of the Institutional Review Board can be contacted at (313) 577-1628. If you are unable to contact the research staff, or if you want to talk to someone other than the research staff, you may also call the Wayne State Research Subject Advocate at (313) 577-1628 to discuss problems, obtain information, or offer input.

Participation

By completing the questionnaire, you are agreeing to participate in this study.

The data that you provide may be collected and used by Wayne State University as per its privacy agreement. Additionally, participation in this research is for residents of the United States over the age of 18; if you are not a resident of the United States and/or under the age of 18, please do not complete this survey.

ABSTRACT**TO WHAT EXTENT DOES CLINICAL SUPERVISION AND EXPERIENCE RELATE TO THE SELF-EFFICACY OF COUNSELORS-IN-TRAINING**

by

THOMAS MICHALOS**December 2018****Advisor:** Dr. John Pietrofesa**Major:** Counselor Education**Degree:** Doctor of Philosophy

Clinical supervision is an integral part of the education and formation of a counselor. The following study focuses on measuring to what degree clinical supervision and experiences relates to the self-efficacy of counselors-in-training. A sample of 106 graduate level counselor education students were surveyed. Those students who have received clinical supervision had significantly higher levels of self-efficacy than who have never experienced clinical supervision. Additionally for those students in the clinical portion of the program it was found that the timing of clinical supervision relates to the counselors-in-training level of self-efficacy. What was found to be ineffective was raising the level of awareness of clinical supervision through the use of a video source and its relation to the level of self-efficacy.

AUTOBIOGRAPHICAL STATEMENT

Thomas Michalos

EDUCATION

- 2018 Doctor of Philosophy (PhD), Wayne State University – Detroit, MI
Major: Counselor Education
- 2000 Master of Arts, Wayne State University – Detroit, MI
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- 1995 Master of Divinity, Hellenic College Holy Cross Greek Orthodox School of
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