ONLINE COURSE EFFECTIVENESS: A MODEL FOR INNOVATIVE RESEARCH IN COUNSELOR EDUCATION

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ABSTRACT

This article will discuss the need for experimental research to document the effectiveness of online counseling skills courses. There are relatively few published studies that have investigated faculty and student performance outcomes when counseling skills and technique courses are taught through a completely online modality. Various studies have examined the interactions of faculty members and students in online courses and the performance of students in online education courses, but these studies have not considered fully online counseling skills courses, which are unique because they involve the instruction of interpersonal skills without traditional face-to-face communication in a classroom setting (Cicco, 2009; Cicco, 2012; Haberstroh, 2010; Trepal, Haberstroh, Duffey, & Evans, 2007). This article will present a model for innovative research that aims to fill this gap in the existing scientific literature on online counseling courses. The goal of completing such an investigation is primarily to determine whether or not counselors-in-training experience comparable levels of skill development in completely online skills courses as they do in traditional face-to-face courses. It is also expected that this type of research may identify areas for improvement in fully online counseling skills courses. The proposed research sample, design, methodology, measures, analyses, and expected outcomes will be addressed.

Keywords: Counseling Skill Development; Counselor Education; Experimental Research Design; Online Classroom; Online Courses; Online Instruction; Student Performance Outcomes; Virtual Classroom.

INTRODUCTION

Online instruction has become increasingly popular during the past decade, particularly in graduate education programs. Online course offerings have steadily multiplied, with many colleges and universities worldwide implementing fully online degree programs. As this educational trend has taken place, the need for accountability in documenting online course effectiveness has also grown (Yang & Chou, 2008). Although many educational researchers have undertaken the task of studying the interactions of faculty members and students in the online setting and the performance of instructors and students in online courses, their investigations have not adequately responded to the concerns of specific academic disciplines, namely counselor education (Cicco, 2009; Cicco, 2012; Haberstroh, 2010; Trepal, et al., 2007). Online counselor education programs do exist and the practice of online counseling is also expanding (Blackmore, Tantam, & van Deurzen, 2008; Shaw & Shaw,

2006). Counselor preparation programs, in their conversion to the online classroom, are somewhat unique because the fundamental threshold concepts for counselors-in-training involve mastery of interpersonal skills that are frequently observed and assessed in a traditional face-to-face setting (Irvine & Carmichael, 2009; Ivey, Ivey, & Zalaquett, 2010). Therefore, the transfer of course objectives, assignments, and assessments from a face-to-face counseling skills course to a fully virtual classroom setting must be examined carefully to ensure that counselors-in-training are receiving ample preparation for the challenging profession of counseling. There are clearly ethical implications involved in this discussion, as counseling faculty members hold a professional responsibility to ensure that their graduates are prepared to serve potential clients and not likely to cause harm to themselves or others in delivering their counseling services (Dahir, 2009; Cobia & Henderson, 2007).

The rationale for this article is to continue the inquiry process

on determining the effectiveness of fully online instruction as it directly applies to teaching, learning, and assessing counseling skills and techniques. The absence of empirical research on this topic will be highlighted with a brief sketch of the current available relevant literature. This discussion will be followed by the presentation of a model for innovative experimental research that compares student performance outcomes in fully online versus face-to-face counseling skills courses. The proposed research plan may provide the blueprint for counseling researchers who intend to respond to the concerns of faculty and administrators on the appropriateness of fully online counseling skills courses, those who intend to dispel myths regarding this form of instruction, and lastly those who desire to improve the practice of online counseling instruction (Cicco, 2012).

Lack of Empirical Research

In reviewing the literature on the delivery of completely online counseling skills courses, the educational researcher may be surprised to find that the available relevant studies are very few. While there are countless articles and studies published on online instruction in general, the area of fully online counseling skills instruction is still in its early stages. Trepal and her colleagues (2007) put forth suggestions for the successful delivery of online skills instruction, including discussion on the development of relationships among faculty members and students in the virtual classroom. Haberstroh (2010) examined the impressions of students on the expertness, attractiveness, and trustworthiness of counselors, based on their use of specific language in the online setting. Various researchers have observed the intricacies of online pedagogies, illustrating methods for emphasizing students' learning styles, development of critical thinking, and ongoing self-assessment (Fearing & Riley, 2005; Fish & Wickersham, 2009; Meyers, 2008; Yang & Chou, 2008). Other important investigations revealed the perceptions of students towards the online learning process and the accuracy of online instruction in evaluating skill mastery (Cicco, 2012; Glassmeyer, Dibbs, & Jensen, 2011; Reiner & Arnold, 2010). These studies are most closely related to the topic of this article. It must be noted that there is a clear absence and need for empirical research in this area of investigation. The purpose of the

innovative counseling research plan presented herein is to respond to this gap in the existing research literature.

Research Plan

It is evident that the delivery of online counseling skills instruction merits further inquiry. The sections below will describe a proposed experimental study that will respond to the following research question: Do counselors-in-training who complete a fully online course in counseling skills and techniques and counselors-in-training who complete a fully face-to-face course in counseling skills and techniques demonstrate different levels of counseling skill development following course completion? The answer to this question will fill the existing gap in the research by quantitatively comparing the student outcomes when skills instruction is delivered through a completely online versus a completely face-to-face setting. An experimental design was selected because it is the single and most powerful form of research that can determine causation (Erford, 2008; Wright, 2014).

This proposed study represents a very specific and innovative attempt to examine the effectiveness of the fully online instructional modality in teaching students about basic and complex counseling skills that typically have required face-to-face classroom interaction, the provision of live and immediate feedback from faculty and peers, ongoing practice opportunities in the form of role-plays and actual counseling sessions, and rigorous faculty supervision to limit students' potential for harming clients. These forms of experiential learning are not necessarily an expectation across counseling courses, but they are certainly required in counseling skills and techniques courses. In other words, the proposed study is not examining any random online course, but one specific type through which interpersonal skills are modeled, learned, practiced, and assessed regularly (Cicco, 2012; Ivey, Ivey, & Zalaquett, 2010).

Sample Design and Methodology

The researcher will obtain approval from his/her university's Institutional Review Board before conducting any of the study procedures. A sample of convenience will be utilized for this study. Graduate students enrolled in a counselor preparation program that are required to complete a

course in counseling skills and techniques will be asked to participate in the investigation. Potential participants will be informed prior to the onset of the study that agreeing to participate may result in having to complete the skills course in-person or online. They will sign an agreement to participate and may withdraw from the study at any time. A sample of at least 120 participants is desired. However, due to the small cohort sizes at various institutions, to arrive at this sample would typically require the collaboration of multiple universities. To avoid this possible compromise of empiricism, it is recommended that the study be conducted during the fall semester at one university, when enrollment of new students in core courses such as skills and techniques is much larger. Of the 120 participants, 60 will be randomly assigned to an online section of the counseling skills course, and 60 will be randomly assigned to a face-to-face section of the counseling skills course. Though use of a convenience sample would only allow for a quasi-experimental design, the random assignment of participants to each of the instructional conditions, or treatments, will follow a true experimental design model (Fraenkel & Wallen, 2006).

In this research model, there will be two levels of the independent variable of instructional method. The first level is completely online instruction and the second is completely in-person, face-to-face, classroom instruction. It is necessary to note that each method may include a combination of online and in-person communication, simply because professors may meet with their students outside of the class schedule and they may communicate through online methods such as email at any time. This may appear to be a limitation in the internal validity of the study, but it is believed to be beyond the realistic control of this experiment (Fraenkel & Wallen, 2006). Each of the faculty members participating in the study will also sign an informed consent form and will be assigned to teach one skills course online and another in-person. Faculty members will be asked to restrict the strictly instructional components of the courses, excluding academic advisement, to either of the respective instructional conditions, online or face-to-face. In the online course, all major business of the course will be transmitted through a Blackboard course shell, including various documents,

online learning modules that incorporate videos and podcasts, online discussion board forums, and online exams. The instructor will be able to utilize all the instructional tools provided with Blackboard capability. In contrast, the in-class course business will be communicated primarily in the face-to-face classroom setting, wherein all lessons, discussions, and exams will take place. It is expected that three to four counseling faculty members may be involved in the study, because many skills courses have a cap set at below 30 students, and various sections are offered during any singular semester. Each faculty member involved in the study will be required to have taught at least two online courses prior to the start of the study and they must also complete a four-week training module on online instructional methods.

The dependent variable in the study is counseling skill development, operationalized by the score obtained on a general counseling rubric. At the beginning of the study, each participant will be asked to perform a video-taped, impromptu counseling session. The participant will act as the counselor and an actor will perform the role of client. The actors who will play the role of the client will consist of approximately 10 alumni of the counseling program, who will receive random scenarios to perform during the mock counseling sessions. Each of the scenarios will depict a client with a moderate, not severe, counseling issue that could be addressed satisfactorily by a novice counselor or counselor-in-training. Examples of scenarios may include a client experiencing stress in the workplace or a client dealing with transitioning into a new family situation. The participant's performance as counselor in responding to the client's presenting issue while conducting the session will demonstrate his/her current level of counseling skill and technique development, which may range from no evidence of counseling skill to skill mastery. The general counseling rubric will be discussed in greater detail in a later section.

The semester will proceed, with the participants engaging in and completing either the fully online or in-person counseling skills course. Each of the participating faculty members will follow the same course syllabus and must certify that each course objective has been addressed

during their courses. Individual teaching methods for each of the instructors in online or in-class sections may vary, and this may seem to be beyond the realistic control of the investigator (Fraenkel & Wallen, 2006). However, to minimize this potential limitation, each of the participating faculty will complete a four-week training module on online teaching prior to the start of the study, to ensure that they are knowledgeable about online instructional strategies (Santovec, 2004). In order to participate in this study, they also will have had to teach at least two online courses prior to the semester of the study. At the conclusion of the semester, each of the participants will complete another mock counseling video with an actor serving as the client, following the same setup as that completed at the start of the study. The scenarios presented to participants at the conclusion of the semester will be similar in nature to those presented at the start of the semester. These scenarios will again depict moderate, not severe, counseling issues. Therefore, each participant will be evaluated based on two video-taped performances, one completed before the skills course, and the second completed at the conclusion of the skills course. This design utilizes a pre-test and post-test setup, which is intended to strengthen the internal validity of the study, because differences in participants' counseling abilities prior to start of the counseling skills course can be measured and taken into account in subsequent analyses (Erford, 2008). The pre-test will serve to control for and take into account the possibility that a participant may start the study with superior counseling ability. The post-test score will examine the growth or improvement in counseling skill development, which would occur in the participant as a result of completing the skills and techniques course.

Measures and Analyses

The pre-test and post-test video recordings will be evaluated by participating faculty members, utilizing a researcher-made counseling rubric. The general counseling rubric includes 25 items, scored along a Likert-type point system, from 1 to 6, with 6 indicating skill mastery (Erford, 2008). The 25 items were derived from the conceptual pyramid designed by Ivey, Ivey, and Zalaquett (2010). Each of the items represents a component of

counseling skill development, from basic attending skills to more complex development of personal theory and style. The total maximum score an individual can obtain on the rubric is 150, which would be indicative of superior counseling skill development, denoting skill mastery. Each of the items in the rubric represents part of the totality of the construct of counseling skill development and an individual's score on the rubric will vary along the continuum. Therefore, each of the items does not play the role of an independent variable in and of itself. Instead, each item is part of the total dependent variable, which is the variable of counseling skill development. The total scores each participant receives on pre- and post-tests will be collected and analyzed as described below. This general counseling rubric has been reviewed by the researcher and several counselor educators to establish validity. However, the measure will require additional validity and reliability analyses to prove effective and appropriate for this study. Information on the rubric's reliability will be available after the first administration to participants, when a Cronbach's Alpha will be computed to estimate its internal consistency (Fraenkel & Wallen, 2006).

With each participant obtaining a pre- and post-test score, the pre-test score will be utilized as a control mechanism, for any possible differences in counseling ability occurring in the participants prior to the start of the study. The data will be collected and then analyzed using a statistical software package. An Analysis of Covariance (ANCOVA) will be computed to compare the difference in mean scores on the counseling rubric between the online course group and the face-to-face course group. If the mean scores of each group are significantly different, with a p value at or below .05, it will be an indication that students do in fact experience different levels of counseling skill development in the two instructional conditions (Erford, 2008). Though a significant difference may or may not be revealed as a result of this analysis, it is necessary to consider the effect size, which would indicate the magnitude of the effect of the two instructional conditions on participants' counseling skill development. Because the study is concerned with comparing differences in mean scores between these two independent groups, if the Cohen's d value is .8 or larger, this would be considered a large effect, and would

indicate non-overlap of 47.4% in the two distributions of scores (Erford, 2008).

Expected Outcomes and Limitations

The results of the ANCOVA will reveal whether the two groups involved in the study demonstrate similar or different levels of counseling skill development. Due to the lack of prior research on this topic area, at least of the empirical kind, the researcher will not express a directional hypothesis. Instead, if in fact a significant difference is found, with a large effect size, it will provide support for rejecting the null hypothesis (Fraenkel & Wallen, 2006). If either of the two groups experiences a higher level of skill development, one may interpret this to be an indication of superior instruction, learning experience, and perhaps evaluation in the respective instructional condition, whether it be fully online or face-to-face.

There are limitations in this research plan, which potential investigators may or may not choose to address. However, this study, once executed would serve as a pilot study. If a significant difference between instructional groups, with strong effect were to be revealed at the conclusion of the data analyses, it would provide the impetus for further investigation. Then future replication studies with larger sample sizes could potentially be conducted with similar groups across different universities. The use of a researcher-made assessment limits the current available data on its validity and reliability. These computations will be available over time. For example, upon the first administration of the pre-test, it will be possible to compute a Cronbach's Alpha to estimate the rubric's internal consistency. Preliminary reliability studies of this nature are underway for the general counseling rubric, within the counseling department of the university that has been identified as the potential site for this pilot study. Future investigators on the topic of this article may choose the same or a different measure to evaluate skill development, one that has pre-established levels of validity and reliability, but based on the review of the rubric instrument by experienced counseling faculty members, it shows excellent promise. The study design is simple and can realistically be carried out in a pilot study, with quantitative data collected before and after the study and then analyzed in one ANCOVA. A third instructional condition may be considered for this or other pilot studies, one which combines face-to-face and online components, in a hybrid form. This condition would require a clear account of the percentage of online and in-class instructional time and technique to avoid the risk of confounding variables. It will be useful for future researchers to explore diverse designs, such as those that would capture qualitative data as well in the form of mixed-methods studies (Erford, 2008). Investigating the experiences of the participants in each of the learning modalities would provide deeper insight into the areas of the courses that were most beneficial for students or those that are most in need of improvement.

Implications for Educational Researchers

There is much work that needs to be done in properly converting counseling skills and techniques courses to the fully online modality. This is a growing area of interest because of the increased demand for online courses and completely online counseling degree programs. The possibility for hybrid formats is unlikely to be an option in fully online degree programs. Counselor educators must consider their ethical obligations when designing online courses to select appropriate, accurate, and triangulated forms of assessment for measuring student's skill development and mastery. Practice opportunities and ongoing constructive feedback must be provided in both online and in-class courses, to ensure that students will receive optimal learning experiences in both course modalities (Cicco, 2013; Trepal et al., 2007). Student's success in the counseling skills and techniques course is fundamental to the progress throughout any counselor preparation program, because the core threshold concepts of skill development must be mastered and evidenced in this course before students can advance to more specific specialization courses (Kiley & Wisker, 2009).

The pedagogical trends and realities described in this article propel educational researchers to continue to study to gain a clearer indication of the most effective practices employed in online courses. Empirical research findings will be invaluable in determining the quality of teaching, learning, and evaluative experiences that are possible in online counseling skills courses (Cicco, 2012; Cicco, 2013).

Counselor educators should utilize this type of information to enhance online and in-class courses to maximize the learning experiences and performance outcomes of counselors-in-training. Furthermore, counselor educators should engage in deeper conversations about their best practices and needs for development in online instruction (Santovec, 2004; Fish & Wickersham, 2009). If the result of a pilot study would indicate that students do not achieve similar levels of counseling skill development in the two instructional modalities, then the focus must be turned to making each instructional method better, particularly the one deemed to be less effective.

Conclusion

Growing numbers of online course offerings in graduate counselor preparation courses compel counselor educators to explore the proper delivery of skills-based courses through a completely online course modality. The advantages and shortcomings of online instructional methods have been documented, and educators are employing new and more engaging strategies to produce optimal student performance outcomes in their online courses (Cicco, 2013; Meyers, 2008; Reiner & Arnold, 2010). The available literature on the effectiveness of online counseling skills and techniques courses is severely limited, particularly in the form of empirical research (Cicco, 2012; Trepal et al., 2007). This article presented an innovative research plan that would fill the gap in the existing research literature by revealing the levels of student skill development when taught through a fully online skills course as compared to a fully face-to-face skills course. The experimental design exemplified in this proposed study, once executed, would provide a clear and strong response to the unanswered questions and concerns of counselor educators who aim to properly deliver skills instruction and assessment in the completely virtual classroom. The procedures and methods presented in this study may be modified by potential researchers to produce additional quantitative and qualitative data to discern specific ways for improving online skills instruction (Wright, 2014). Counselor educators and researchers may utilize this innovative research proposal as the blueprint for further investigation on the best practices in online skill

instruction.

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