Online versus On-Campus: A Comparison Study of Counseling Skills Courses

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ABSTRACT

This study examined the skill acquisition of students enrolled in an on-campus and online introductory counseling skills course. Participants were advanced undergraduate and entry-level graduate students enrolled in online and on-campus course sections. Results indicated no significant difference between students’ basic counseling skill acquisition in either course format.

Online learning has become a catalyst for change in distance learning and higher education. In recent years, the use of online, distance courses has increased in higher education. According to the Council for Higher Education Accreditation (CHEA), total enrollments in post-secondary, credit-granting distance learning courses in 2000 totaled 1,363,670, and in the year 2007, the National Center for Education Statistics (NCES) reported total enrollments in post-secondary, credit-granting distance learning courses at 12,153,000 (CHEA, 2000; NCES, 2008). Additionally, the NCES reported that 66 percent of undergraduate courses and 60 percent of graduate courses offered at 2-year and 4-year Title IV degree-granting post-secondary institutions are credit granting distance education courses (Parsad, Lewis & Tice, 2008). The increase in distance learning courses offered by degree granting institutions coupled with an increase in enrollment has greatly impacted distance education, as graduate students have become a target population for courses delivered using non-traditional approaches (Albrecht & Jones, 2001; CHEA, 2000; Eaton, 2002; Eduventures, 2006; Parsad et al., 2008).

For many students earning college credit, distance education is the best or only option for furthering their education and completing a degree (Albrecht & Jones, 2001; Lorenzetti, 2005; Parsad et al., 2008; Phipps, Wellman, & Merisotis, 1998). Often, students considering or enrolled in graduate level degree programs face the challenge of trying to balance their education with a number of other responsibilities (i.e. family life, employment). Many students look to a distance education or an online setting in order to manage the demands of higher education and allow time for other responsibilities (Lorenzetti, 2005). In order to accommodate the increased demands of students enrolled in graduate degree programs and make higher education more accessible to students, many higher education institutions have increased the number of online courses and programs offered (NCES, 2008; Parsad et al., 2008).

ONLINE LEARNING AND COUNSELOR TRAINING

Distance education and online learning has created a number of opportunities and challenges when considering the training and education of counselors. As the use of technology to provide instruction has
become more readily available in higher education, counselor educators have been faced with the challenge of taking advantage of new technology while providing traditional humanistic and experiential courses (Eaton, 2001; Gillespie, 1998). In fact, “technology use has grown rapidly since the late 1970s and the use of technology in the counselor education field has become a current trend” (Justus Ferreira, 2005, p. 45). Although there is an increased demand for online and distance education in higher education, counselor educators most commonly continue to use the traditional classroom as a means to prepare and train counselor trainees (Bernard & Goodyear, 2004). Although many counselor educators prefer the traditional classroom format, some have begun to use online learning in their programs and integrate available technology into training and practice as revisions in accreditation standards have encouraged the increased use of technology (e.g., Council for the Accreditation of Counseling and Related Educational Programs: CACREP, 2009). Because counseling is taught within a humanistic and experiential framework, counselor educators have faced challenges in translating this framework into an online format; as such courses often require students to demonstrate some level of knowledge and skill integration. Thus, counselor educators are faced with a dilemma of creating a humanistic, experiential dynamic in an online setting.

Traditionally, counselor education faculty have utilized face-to-face teaching methods for instructing counseling students despite the increased demands for online and distance education coursework (Bernard & Goodyear, 2004). Hill and Corbett (1993) suggested most counselor educators approach skills training by providing an example of the actual skill followed by role-plays and ongoing supervision to the trainee. Student’s modeling appropriate use of skills has become a standard in counselor basic skills training and has been consistently reported to enhance training outcomes (Newman & Fuqua, 1998).

Counselor training programs often include some version of a beginning counseling skills course or an introduction to the counseling profession. The beginning counseling course usually includes the teaching of basic skills of interviewing and listening while introducing the field of counseling to students. Ivey’s micro counseling model is widely used in these introductory courses and research offers strong support regarding the effectiveness of this method (Hill & Corbett, 1993; Ivey & Ivey, 2008). This skills training model emphasizes the basic skills involved in communication and utilizes modeling practice and feedback to learn one skill at a time (Hill & Corbett, 1993). In this method, counselor educators clearly define skills for their students and the student reviews videotapes of role-played, counseling sessions of him- or herself participates in a short practice interview, and receives reinforcement and comments from the instructor or trainer (Baker & Daniels, 1989).

The applicability of such traditional training methods in an online environment is of concern to counselor educators because of the inability of the instructor to see the student’s non-verbal behaviors or empathy development throughout the course (Baum & Gray, 1992). To address this limitation of distance education, some counselor educators have employed the use of videotapes to assess students’ empathy development and nonverbal behaviors. Although videotapes are widely accepted in the training of counselors, with substantial benefits derived from student self-observation, the instructor cannot view the student’s peer interactions and interpersonal relationships within the classroom environment when the student is enrolled in a strictly online setting (Baum & Gray, 1992). Despite the many concerns of counselor educators regarding the use of technology in counselor training, some researchers have suggested that the integration of technology into the field of counseling is beneficial (e.g., Dixon, 2007; Greene, 2006).
Scholars and researchers in the field of counselor education and training have begun to recognize technology’s usefulness and have considered using technology for teaching content courses in counselor education (e.g., career counseling and counseling theories) (Dixon, 2007; Greene, 2006), providing individual and marriage and family counseling services to clients (Chester & Glass, 2006; Mallen, Vogel, & Rochlen, 2005; McAdams III & Wyatt, 2010; Pollock, 2006; Trepal, Haberstroh, Duffey, & Evans, 2007), addressing career issues online (Lewis & Coursol, 2007), perspectives (Haberstroh, Parr, Bradley, Morgan-Fleming & Gee, 2008) and skill evaluation (Cardenas, Serrano, Flores, & De la Rosa, 2008) of counselors in training to facilitate online sessions, creation of an web based assessment tool for active listening skills development (Cheon & Grant, 2009), and using email and other computer-based applications to facilitate counselor supervision (Chapman, 2006; Clingerman & Bernard, 2004; Vaccaro & Lambie, 2007). In regard to counselor training, Lee and Pulvino (1998) suggested, “computers need not be antithetical to learning about the counseling process” (p. 111). Similarly, McCarthy, Moller, and Beard (2003) suggested that using online media to train counselors will also prepare them to use this technology in the field.

As counselor educators implement computers in the training of counselors, considerable time and effort is required to develop courses that meet accreditation and ethical standards for training and practice using this format (Lee & Pulvino, 1988). Jerry and Collins (2005) conducted an evaluation of an online counselor training program with face-to-face residency using video clips and chat rooms with students enrolled core counseling skills course and found a number of challenges in using a web based format including “delivery format, bandwidth issues, and faculty development and teaching time” (p. 197). Counselor educators and counseling professionals alike must consider pertinent ethical guidelines regarding how to appropriately provide counseling services and counselor training in an online environment, as well as, the advantages and disadvantages of using technology in counseling and counselor education (American Counseling Association: ACA, 2005; Baltimore, 2000; Mallen et al., 2005; National Board for Certified Counselors: NBCC, 2010; Trepal et al., 2007; Vaccaro & Lambie, 2007).

Despite the trends in higher education and recommendations to integrate technology into counselor training programs, research is needed to examine the effectiveness of counselor skills training offered using online technology. The challenge that counselor educators face is how to effectively teach counseling skills in an environment where they are not physically present with their students if modeling is integral to the training of counselors.

**ONLINE LEARNING AND STUDENT LEARNING OUTCOMES**

As online courses and programs continue to gain popularity in higher education, the questions and concerns of quality and comparability of online instruction with traditional classroom methods will continue to increase (Beard & Harper, 2002; Harris & Parrish, 2006; Petina & Neeley, 2007; Reuter, 2009; Summers, Waigandt, & Whittaker, 2005; Taylor, 2006). In general, researchers in higher education have found that student outcomes such as performance, persistence, and learning outcomes are similar to traditional face-to-face educational situations (Carey, 2006; Robertson, Grant, & Jackson, 2005; Reuter, 2009; Waschull, 2001). For example, Burkhardt, Kinnie, and Courover (2008) found that online students scored at least as well if not higher than their on-campus counterparts on a standardized exam. In one of the most comprehensive reviews of distance education research, The No Significant Difference Phenomenon (Russell, 2001), the author reviewed 355 research studies, summaries, and professional
papers comparing distance education classes to traditional on-campus classes. The author concluded that there is “no significant difference” in learning between most distance education formats and traditional classroom settings; and there is evidence that technology does not interfere with or devalue instruction (Russell, 2001; Russell, 2012).

The ability of students to reach learning outcomes in either a traditional setting or a distance education setting has been a continued consideration for educators. In a meta-analysis of 86 experimental and quasi-experimental studies, Shachar and Neumann (2003) studied the differences between academic performance in students enrolled in distance education courses and those enrolled in traditional settings and concluded that students who enrolled in distance education did better academically than students enrolled in a traditional setting. Although some researchers found no few differences in learning outcomes between students enrolled in on-campus and online courses, the Institute for Higher Education Policy (IHEP: 1999) reported that there are significant errors in research design and methodological flaws in many of the studies that examined the comparison of distance education and face-to-face education. These concerns included little control for extraneous variables, participants self-selecting into one group or another, and the unknown reliability and validity of the measures used to assess student outcomes.

Contrary to The No Significant Difference Phenomenon (Russell, 2001), Harris and Parrish (2006) found that when comparing online and face-to-face elective social work courses, students in the face-to-face course received significantly higher grades than those enrolled in the online course format. Similarly, in a study of introductory psychology courses, Wachull (2001) found students enrolled in an online course section were significantly more likely to fail than their face-to-face counterparts; and in their study of students enrolled in a Master’s level Cognition, Learning, and Assessment course, Ferguson and Tryjankowski (2009) found that students’ final exam scores were significantly higher in the face-to-face course.

Although the results of previous research seem contradictory, some have suggested that different students may be more appropriate for enrollment in online courses than others; therefore, institutions of higher education need to determine which educational setting is most appropriate for students on an individual basis. Those who disagree with research that supported the no significant difference phenomenon in distance and online education cautioned education leaders to continue studying the impact of distance education on student outcomes (IHEP, 1999). These considerations for further research have been expanded to compare courses and programs that are delivered online, in a blended course format, or in a face-to-face setting.

Researchers have also investigated various student populations on attitudes about online learning (Robinson & Doverspike, 2006; Waschull, 2001), satisfaction with the experience (Beqiri, Chase, & Bishka, 2010; Robertson et al., 2005; Reeves, 2008), perception of online learning (Dobbs, Waid, & del Carmen, 2009; Ellis, Ginns, & Piggott, 2009; Eduventures, 2006), and factors impacting choice to enroll in online learning course formats (Beard, Harper, & Riley, 2004; Eduventures, 2006; Pentina & Neeley, 2007) with mixed results.

**ONLINE LEARNING AND SKILL ACQUISITION**

In general, higher education institutions have embraced distance learning as a viable option to provide effective instruction despite the concerns regarding the effectiveness of distance education on student outcomes and skills acquisition (Carey, 2006). Researchers have examined the effectiveness of online learning in general; however, further research is needed to assess whether skill development (i.e.,
basic counseling skills) can be facilitated in an online environment as successfully as in a traditional face-to-face classroom setting.

Researchers have begun to conduct empirical studies regarding the comparison of skill development in an online environment and a traditional face-to-face classroom. Liebowitz (2003) studied an organizational behavior class designed to train human resources professionals to interact with employees; the course was taught in both online and on-campus settings. The author found that 98% of the online students met their learning objectives, as compared with 86% of the on-campus students, and concluded there was not a statistically significant difference between students meeting learning objectives based on the course format. Similarly, Justus Ferria (2005) reviewed student performance of basic counseling micro-skills using both classroom environments. The author examined micro-skill training performance based on Ivey and Ivey’s (1999) model (e.g., opening skills, questioning, demonstration of empathy, etc.) in students enrolled in an introductory counseling course. The author found that there were no significant differences in students’ micro-skills development when comparing students enrolled in the online and traditional classroom environments. The results of these studies supported the no significant difference phenomenon when studying skill acquisition and interpersonal skill development (Russell, 2001); however, the literature examining the use of online and face-to-face course formats for training counselors remains limited.

Purpose and Research Question

The purpose of this study is to examine basic counseling skills, based on Ivey and Ivey’s (1999) model, of students enrolled in online and on-campus course sections of an introductory counseling skills course in order to determine whether skill development was facilitated successfully in both courses. The primary research question addressed in this study was: what are the differences in basic counseling skills, based on Ivey and Ivey’s (1999) micro-skills, between students enrolled in on-campus and online course sections of an introductory to counseling skills course?

METHODS

Participants

The sample was comprised of advanced undergraduate (n = 29; 78.4%) and entry-level graduate (n = 8; 21.6%) students enrolled in two introductory counseling courses (one online and one on-campus) at a university in the Rocky Mountain region of the United States of America. Students’ participation in this study was voluntary, and participation was not a factor in their final grade for either course. Students were given consent forms outlining the purposes of the study, confidentiality, and potential risks. Participants signed the form acknowledging participation was voluntary and returned the form to the researcher prior to participating in the study.

Eighteen (48.6%) participants were enrolled in the on-campus, face-to-face course, and 19 (51.4%) participants were enrolled in the online course. Thirty two (86%) of the 37 participants completed at least a portion of a demographics questionnaire as a part of the study, while the remaining five chose not to respond to any questions. Of participants who completed at least a portion of the questionnaire, 10 indicated their gender as female that were enrolled online and 13 indicated their gender as female who were enrolled on-campus and three online and three on-campus indicated their gender as male. Participants reported ages ranging from 20 years of age to 55 years of age. The minimum age of online participants was 20 years and the maximum age was 48 years and for on-campus participants the
minimum age was 21 years and the maximum age was 55 years. Eleven participants from the on-campus course and two participants from the online course reported being previously exposed to the helping professions, while five participants from the on-campus course and eight participants from the online course reported no previous exposure.

Participants self-reported their grade point averages (GPA) from the previous semester, the total credit hours they have earned in a post-secondary setting, and the number of credits they have earned in helping professions courses such as psychology, sociology, social work, and family and consumer sciences. Online participants reported a mean GPA of 3.38 (SD=.43) and on-campus participants reported a mean GPA of 3.35 (SD=.44). Online participants reported a mean of 121.7 (SD=38.9) total credit hours with 67.3 (SD=30.2) credit hours earned in what they considered helping professions courses. On-campus participants reported a mean of 134.3 (SD =31.8) total credit hours earned with 62.1 (SD=38.8) credit hours earned in helping professions courses.

Instrument

The Counseling Interview Rating Form (CIRF), developed by Russell-Chapin and Sherman (2000), was designed to measure students’ use of basic counseling skills in a counseling session and was intended for use with students enrolled in counseling programs. The CIRF was developed based on Ivey and Ivey’s (1999) counseling interview stages and assesses six categories of basic counseling skills including (1) opening and developing rapport, (2) exploring and defining the problem, (3) problem solving and defining skills, (4) action phase and confronting incongruities, (5) closing and generalization, and (6) professionalism (Russell-Chapin & Sherman, 2000). For the purpose of this study, the first two categories of the instrument (opening and developing rapport and exploring and defining the problem) were used to rate the participants’ level of basic counseling skill acquisition based on the introductory nature of the course and the material covered in the course. Students received scores based on raters’ evaluations of the counseling skills demonstrated in transcribed counseling sessions. Raters noted the frequency that each skill was exhibited and gave each student a mastery rating. Mastery ratings range from one to three with a one rating indicating the counselor used or identified the counseling skill, a two rating indicating the use of the skill with a specific impact on the client, and a three rating indicating the counselor could or did teach the skill to the client.

Russell-Chapin and Sherman (2000) reported content validity index coefficients for the CIRF using Aiken’s (1985) content validity index coefficients. The coefficient assists in determining the rater’s opinion of the degree to which the items included in each section were representative of the skills necessary. When using counseling professionals as raters, six of the seven categories on the instrument were statistically valid including opening with a coefficient of .90 (p = .07) and exploration with a coefficient of .90 (p < .07) therefore, the CIRF currently has six categories. Reliability of this instrument was determined by using Aiken’s (1985) agreement coefficient, which measures the extent to which the raters agree with each other’s ratings (Russell-Chapin & Sherman, 2000). The results showed the instrument can assist in distinguishing between students’ levels of basic skill acquisition (Russell-Chapin & Sherman, 2000).

Procedure

After receiving approval from the institutional review board, the researcher asked students enrolled in two introductory counseling courses taught during a 15-week semester at a university in the Rocky Mountain Region to volunteer to participate in this study. Two sections of the course were taught
simultaneously; one was taught in an online format, while the other was taught in an on-campus, face-to-face format. Both courses were introductory counseling skills courses and were comprised of advanced undergraduate students considering pursuing graduate education in counseling or related fields, as well as entry-level graduate students enrolled in a masters-level program in counseling. The online and on-campus course sections were taught by the same instructor using similar materials and stimulating activities to meet course objectives (i.e. acquisition of basic counseling skills). Additionally, students in both courses were similar in their demographic composition and were asked basic demographic questions if they chose to participate in the study.

As part of their coursework, students were asked to complete peer counseling sessions with a partner who was enrolled in the same course section. Students participated in peer counseling sessions throughout the course to enable students to practice basic counseling skills. On-campus students met with their partners in a counseling clinic, videotaped the counseling sessions, transcribed the video recorded sessions verbatim, and submitted them to the instructor. Students enrolled in the online course conducted the peer counseling session in a private chat room with a peer. Participants completed the informed consent, allowing the instructor to access and print chat logs from their peer counseling sessions for research purposes.

Peer counseling sessions included in the analysis were conducted at the end of the semester (i.e., during the 12th week of a 15-week course) to assess students’ level of basic counseling skills. Fifteen randomly selected transcripts were independently reviewed by an external rater who was a professional counselor and counselor educator to rate basic counseling skills acquisition using the Counseling Interview Rating Form. This rater had no personal knowledge of the participants and names were removed from transcripts prior to rating. Before rating students’ counseling skills, the rater was trained to use this instrument according to the test manual (Russell-Chapin & Sherman, 2000). The rater then rated the counseling interview transcripts using the Counseling Interview Rating Form subscales of Opening/Developing Rapport and Exploring/Defining the Problem based on the introductory nature of the course. Finally, the rater was compensated with $50 gift card.

RESULTS

The focus of this study was to examine the acquisition of basic counseling skills of students enrolled in a basic counseling skills class in either an online or face-to-face course format. Results from the CIRF were used to assess the differences between basic counseling skills of students enrolled in the on-campus and online introductory counseling skills course. Descriptive statistics for the CIRF based on course format are summarized in Table 1. An analysis of variance (ANOVA) was conducted to determine differences in counseling skills demonstrated by students taking on-campus and online classes using the areas rated. ANOVA results indicated no statistically significant difference (F = .421, p = 0.54) when comparing the basic counseling skills based on course delivery methods (i.e., on-campus versus online). Results indicate that the method of delivery did not have an effect on students’ acquisition and demonstration of basic counseling skills.

| Table 1: Descriptive Statistics Based on Course Format |
|-----------------|--------|--------|--------|--------|
|                | M     | SD     | Minimum| Maximum|
| Online          | 25.40 | 8.64   | 18.00  | 38.00  |
| On-Campus       | 30.80 | 16.48  | 17.00  | 56.50  |
Discussion

This study examined the basic counseling skill development of opening a session, developing rapport, and exploring and defining the problem of students enrolled in an on-campus or online introductory counseling skills course. When examining these skills, this study found no statistically significant differences between students enrolled in an online versus and an on-campus introductory counseling skills course. Students enrolled in both courses were demographically similar to each other and had equitable exposure to the helping professions. Results indicated that students enrolled in both course formats demonstrated the same level of basic skills related to opening and developing rapport and exploring and defining the problem. The counseling skills demonstrated by students enrolled in both courses (online and on campus) was not significantly different, suggesting all students demonstrated the same level of basic counseling skills despite course format.

Counselor educators consider these counseling skills (i.e. opening and exploration skills) as foundational skills and often dedicate time in an introductory counseling skills course to helping students develop these skills (Ivey & Ivey, 1999). These findings are supported by previous studies indicating that online learning and classroom learning are equally effective when the content of the courses are similar and there is a similarity in the demographics of the learners (Sitzman, 2005). The results suggest educators should continue to explore whether or not practical skills can be taught in an online format, which has been previously questioned by scholars (Carey, 2006). In fact, the results of this study may support the “no significant difference” phenomenon found in the literature regarding online versus on-campus instruction and begins to address some of the issues facing counselor educators attempting to instruct an introductory counseling skills course online (Russell, 1999).

Implications

The results of this study have substantive implications for addressing trends in higher education through the use of online instruction in counseling programs

Addressing trends in higher education. Higher education has shifted to a student-consumer focus, and counselor education programs are beginning to find they can serve a need by creating online courses (Varughese, 2005). Developing more online courses in counseling programs can increase the accessibility of these programs to students who could not otherwise pursue higher education. Additionally, careful planning and implementation of new online courses has the potential to benefit counselor education programs financially and provide an opportunity to offer an increased number of courses to a larger audience of students (Beard & Harper, 2002). It is predicted competition for adult student enrollment will increase, age will no longer predict learning behavior, and more institutions will offer accelerated, fast track, or online learning options for students (Eduventures, 2006; Recruitment & Retention in Higher Education, 2005). In order to follow the current trends in higher education, counselor educators need to consider the use of technology and online learning when designing course pedagogy.

Teaching counseling skills online. Although counselor educators typically teach counseling skills courses in a face-to-face format, the results of this study using these two courses could indicate that students can learn basic counseling skills in an online format as well. Traditionally, counselor educators typically teach counseling skills through a humanistic experiential approach which includes the use of modeling and peer interaction (Bernard & Goodyear, 2004; Hanna, 1998; Hill & Corbett, 1993). The first step in teaching counseling skills courses in an online format is for counselor educators to begin to design introductory counseling skill courses in an online format. The CACREP (2009) Standards recommend
counselor educators use innovative methods in instruction to meet learning objectives and this includes the use of technology and distance education. Counselor educators have begun to embrace using an online course format to teach knowledge-based courses; however, the results of this study indicate using this format needs to be investigated further.

Many of the techniques and methods used to teach counseling skills in a face-to-face, on-campus course can be utilize in an online format as well. Modeling and peer interaction instructional methods used in on-campus courses can also be used in an online environment with modifications. For example, Walker (2009) used 3D virtual environments to provide an avenue for students to role play counseling skills in an alternative format and found statistically significant difference in scores on a learning survey where students perceived higher learning in the 3D virtual environment compared to other avenues for role playing. In accordance with CACREP (2009), counselor educators can create innovative methods and techniques for teaching counseling skills in an online course format.

When considering creating an online course to teaching counseling skills, counselor educators must continue to be deliberate around course development and implementation. First, developing and implementing an online course requires a “major commitment by a faculty member,” and without this, a dedication to this delivery system, the course could be less effective (Albrecht & Jones, 2001, p. 69). Thus, special consideration should be given by counselor educators preparing to teach an online course regarding their investment, time commitment, and thoughtful preparation; especially when instructing a counseling course with special considerations like confidentiality and increased self-awareness of the student. The Institute for Higher Education Policy (2000) Benchmarks for Success in Internet-Based Distance Education (course structure benchmarks) might offer helpful guidelines in the development of an online course. Additional considerations for counselor educators include ethical considerations of online course delivery, class size, modification of techniques in an online environment, and student competence in using technology associated with the online course (Albrecht & Jones; Robey, 2009). In the future, teaching counseling skills could include an online component with careful planning by faculty, accrediting boards, and institutions.

Limitations

The primary limitation of the study is related to sampling. First, the sample was comprised of students from a single University. In order to be able to generalize the results across universities, future studies should include students enrolled in online and on-campus courses from multiple universities. Additionally, the small sample size was a limitation of the study and could have impact the results as the possibility of finding a statistically significant difference increases when using a small sample. Although the sample size was small, the researcher was able to control for extraneous variables that may impact the development of counseling skills (i.e. teaching styles of different instructors, different course objectives between courses). Additionally, no pre-test of counseling skills was administered to the participants; therefore, they could have begun the class with basic counseling skills. Participants were also assessed in different contexts as an online chat is not necessarily comparable to in-person interaction considering, comfort with peers, typing speed and reactions to non-verbal cues. Additionally, students were allowed to self-select the course format, therefore, students who were more comfortable with the technology and open to learning counseling skills in an online environment may have selected to enroll in the online section. Despite the limitations regarding sampling, the current study can be considered a pilot study. Future studies need to be conducted using larger samples from various regions and universities.
In addition to sample size, the instrument used to analyze counselor transcripts may be considered a limitation. The CIRF is a subjective measure used by a rater to analyze transcripts. Use of the CIRF in the research is limited and additional data is needed to further determine the psychometrics of this instrument. Although this is a subjective assessment, measuring counseling skill acquisition is often subjective in nature. Often, a single counselor educator determines whether a student has acquired the skills necessary for each counseling course, practicum, or internship experience so using a professional counselor and counselor educator as a rater is not unlike a typical training experience. The context of peer interaction and a sense of course community are also substantially different in an on-campus versus online course and this could be somewhat managed through video chat or an increase in chat times for the online course. Additionally, using transcripts of live sessions and peer chat sessions can be a limitation when considering differences acknowledged previously between face-to-face interaction and online interaction as raters only reviewed transcripts in an effort to review sessions equally. In the future, researchers may choose to use a more objective measure than the CIRF to assess skill acquisition and consider using peer chat sessions for both groups of participants or arranging for both groups to conduct face-to-face sessions and provide transcripts of those sessions.

**Directions for Future Research**

Ramage (2002) suggested the great number of factors (i.e. learning styles, teaching methods, preferences) to be considered when comparing online education with face-to-face settings calls for much further research to be conducted to address effectiveness in both formats. Given the increased use of technology in counselor education, continued research could support successful implementation of a humanistic training format into an online learning format. For example, future research is needed to expand the results of this study. The use of a similar design with a broader and larger sample is necessary to increase the generalizability of findings and provide for more adequate power for statistical comparisons. For example, future studies may include students enrolled in online and on-campus basic counseling skills courses from multiple universities across the United States. Additionally, future studies should be conducted using random sampling methods to determine students and/or universities to participate in the study. Although employing random sampling methods in future studies is ideal, it may not be practical as many universities do not offer an online introductory counseling skills course.

A number of web-based technologies exist to recreate the classroom environment and assist students who are learning counseling skills at a distance. Rockinson-Szapkiw and Walker (2009) outline available synchronous and asynchronous possibilities to enhance clinical instruction in a web-based format. For example, podcasts and vodcasts, weblogs or blogs, wikis, a multiuser virtual environment, and collaborative conferencing systems as well as available course management systems (Rockinson-Szapkiw & Walker, 2009). Use of these newly developed tools in counseling skills training could allow for further research on the learning environment for all formats.

Additionally, the scope of the present study was examining the acquisition of basic counseling skills according to Ivey and Ivey’s (1999) hierarchy of micro-skills. The results of this study cannot be generalized to students enrolled in courses where more advanced skills are taught (i.e. demonstration of empathy). Future research is needed to determine the effectiveness of teaching advanced counseling skills in an online format. Also, students may be competent at demonstrating basic counseling skills in a laboratory or peer to peer format and the successful transfer of skills to an actual counseling session should also be considered in future research. Although it seems the results indicated that the ability to teach students basic counseling skills at a distance is possible, future research is also needed to develop...
assessments and tools to insure quality student learning and to observe the interpersonal skill development of students enrolled in online courses.

CONCLUSION

As trends in higher education continue to change and the demand for teaching courses in an online format increases, counseling programs need to consider further integrating online coursework into their pedagogy. Historically, counselor educators have been hesitant to teach counseling skills in an online format; however, there is an increasing demand for courses to be offered in this format. The results of this study seem to support previous findings indicating there is no significant difference between student learning outcomes in students enrolled in online and on-campus courses and that teaching counseling skills online can be as effective as in an on-campus, face-to-face course. Although the results of this study suggested that for these two groups teaching counseling skills online may be effective, future studies are needed to further examine the effectiveness of teaching counseling courses in an online format.

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