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The Acquisition of Social Work Interviewing Skills in a Web-Based and Classroom Instructional Environment: Results of a Study

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ABSTRACT. This article reports findings from a study initiated to explore similarities and differences in the acquisition of interviewing skills of two groups of students enrolled in a required undergraduate social work practice course. One group was taught interviewing skills in a classroom-based teaching environment by one instructor and the other group was taught interviewing skills in an online instructional environment by a different instructor. Results indicate no statistically significant difference in actual skill acquisition at the completion of the course between students in both groups as rated by an independent expert evaluator. Future research direction is recommended. doi:10.1300/J017v24n04_04
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The infusion of technology into social work courses has progressed exponentially in past few years. Surveys have indicated that approximately 16 to 20 percent of all social work programs offer some form of distance education programs (Coe & Elliot, 1999; Siegel, Conklin, Jennings, & Flynn, 2000). One study indicated "no significant difference" between the efficacies of learning outcomes with courses taught in an online learning environment versus those in a face-to-face classroom-based learning setting (Macy, Rooney, Hollister, & Freddolino, 2001).

Learning social work practice skills in an online instructional environment has already been suggested as a possibility if one adheres to adult learning principles (Friedman, 2002) and effective active learning paradigms which are conducive to a technology-supported instructional environment (Brooks, 1997; Ewell & Jones, 1996; Ouellette & Sells, 2003). Attempts have been made to teach an advanced practice course by combining the use of several technological mediums such as teleconferencing and Web-instruction (Ouellette & Sells, 2001), the results of which have shown much promise. In addition, some have suggested that the task of teaching and learning social work practice in an online environment can be greatly facilitated by careful and proper attention to preparation and by following a step-by-step approach to course design of a technology-supported learning environment (Brooks, 1997; Ouellette & Sells, 2003).

One criticism often heard from social work educators with respect to the use of technology as an instructional medium is that this environment is not particularly conducive to the training of social work practitioners (Kreuger, 1997). As a result, many have been reluctant to offer their programs in an online instructional format and have been suspicious of the use of technology in education and practice (Burton & Seabury, 1999; Butterfield, 1998; Marson, 1997). This argument is largely articulated based on the unsubstantiated notion that only a face-to-face, classroom-based, social environment provides meaningful interaction between students and the instructor. From this perspective, the teacher becomes the major communicator of new information and influence for students. When it comes to practice courses, there is an assumption that such courses need to be taught by face-to-face interaction (Macy, Rooney, Hollister, & Freddolino, 2001), however, a recent

study found no significant differences between a practice methods course taught by distance education and a practice methods course taught in a traditional classroom (Kleinpeter & Potts, 2003). Another study that compared results of a web-assisted practice course with a practice course using face-to-face instruction also found no statistically significant differences between the two groups on assignments, a mid-term exam, and a videotaped exam project (Petracchi, Mallinger, Engel, Rishel, & Washburn, 2005).

An online instructional environment shifts a considerable amount of power, authority, and control from the instructor to the students (Jaffee, 1998). It is more compatible with progressive educational approaches that are characterized by a climate of mutual collaboration between student and teacher in developing learning activities and goals (Trigg & Cordova, 1987). Research has shown that among students enrolled in distance education courses for social work, 77% reported the quality of instruction was comparable to traditional courses, and 78% felt that distance education met their learning needs (Weinback, Gandy, & Tartagliak, 1984). One study examined the use of web-based training modules to teach the use of qualitative research and evaluation methods. Findings indicate an increase in participants' self-efficacy as well as a significant change in students' self reports regarding their perceived acquisition of skills (Steckler, Farel, Bontempi, Umble, Polhamus, & Trester, 2001).

Little is known, however, regarding to what extent students actually learn social work practice skills strictly in an online instructional environment, most especially with respect to the acquisition of social work interviewing skills. To date, the integration of technology for teaching social work practice skills has primarily been used as a way to enhance classroom-delivered content (Petracchi et al., 2005; Ouellette, 1999). Doubt as to whether or not interviewing skills can realistically be learned in an online environment still prevails in the field of social work education (Burton & Seabury, 1999). Research that specifically addresses the extent to which social work students actually learn interviewing and practice skills from an online instructional environment is needed.

A study was initiated to further advance our understanding about how students learn practice skills and, specifically, interviewing skills in an online instructional environment as compared to the traditional classroom. One of the most important facets of this study was to develop a research method that can, through replication, evolve further insights about how teaching and learning is a very unique experience in a technology-supported instructional environment most especially as it

pertains to the direct application of specific skills essential to social work practice.

This study focused primarily on exploring the similarities and differences of two groups of students enrolled in a required undergraduate social work practice course. Specifically, the question for this investigation was to examine how students' perception of their learning experience and their perceived level of skill acquisition with respect to interviewing was similar or different from their actual interviewing skill acquisition irrespective of the teaching medium used to learn these skills. One group was taught interviewing skills in a traditional 3 hours per week classroom-based teaching environment by one instructor. The other group was taught interviewing skills by a different instructor using strictly a Web-based instructional environment with no face-to-face contact with the instructor. Both instructors used the same course syllabus with the same required text and reading materials. The instruction for both groups took place during the same 15 week period. Preliminary findings, reported in a previous article, showed no significant difference between in students' perceptions the two groups regarding their learning experience and their perceived skill acquisition irrespective of the training medium and the instructor used (Ouellette & Chang, 2004).

This article reports the findings from an independent expert practitioner and evaluator with respect to the students' actual acquisition of interviewing skills for both students in the classroom-based group and students in the online group. Results are compared with students' perceptions of their learning experience and what they perceived as their level of skill with actual skill acquisition. Recommendations for further research are suggested.

METHODS

Research Description

The transfer of learned skills from the training setting to actual practice continues to be a challenge for social work educators. With respect to learning interviewing skills, there are many factors that contribute to a student's skill acquisition. For example, these may include the quality of the instruction, teaching methods used, opportunities for skills practice, opportunities to practice observation skills, and opportunities to self-evaluate performance, as well as provide constructive feedback to others.

To further enhance our understanding of how interviewing skills are acquired regardless of the teaching medium used, a study was initiated with two groups of undergraduate students enrolled in different sections of a social work practice course in Generalist Social Work practice. Both instructors followed the same course syllabus and adhered to similar teaching and learning principles. One section of the course was taught in a classroom-based instructional environment and the other was on a Web-based instructional environment. The purpose of the study was to explore the similarities and differences of two groups of students who were taught interviewing skills in different instructional contexts. Differences and similarities were explored regarding students' self-assessment of their learning experience and interviewing skill acquisition and their actual interviewing performance based on the conclusion of an independent expert practitioner and evaluator.

The Instructors. The instructors for each section of this undergraduate social work practice course had equivalent years of professional social work practice and experience. As social work educators, they both shared a similar constructivist approach to education. Each of the classes utilized the same required texts, course objectives, and course syllabus. Both instructors utilized similar pedagogical activities for students to learn, practice, and acquire individualized feedback regarding basic interviewing skills associated with the beginnings stages of a social work interview.

Instructional Process. Both courses used the same six-step circular process for teaching interviewing skills as describe in Figure 1. That is, a particular set of interviewing skills pertaining to the beginning stages of an interview were described and demonstrated, students were to practice and observe the skills in action, students self-evaluated their performance based on observation instrument provided by the instructor, and were provided with individualized instructor feedback.

The learning assignments and teaching strategies used by the classroom instructor included the following:

1. Read about and discussed appropriate use of the skill in class
2. Students learned a system for evaluating the skill (Chang & Scott, 1999)
3. Students watch and evaluated a videotape demonstration of the skill in the classroom
4. Students role-played the skill with a peer serving as client
5. Students acquired peer feedback

6. Students demonstrated skill acquisition by a final interview at the end of the course

The above process was repeated for each interviewing skills associated with the early stages of a social work interview.

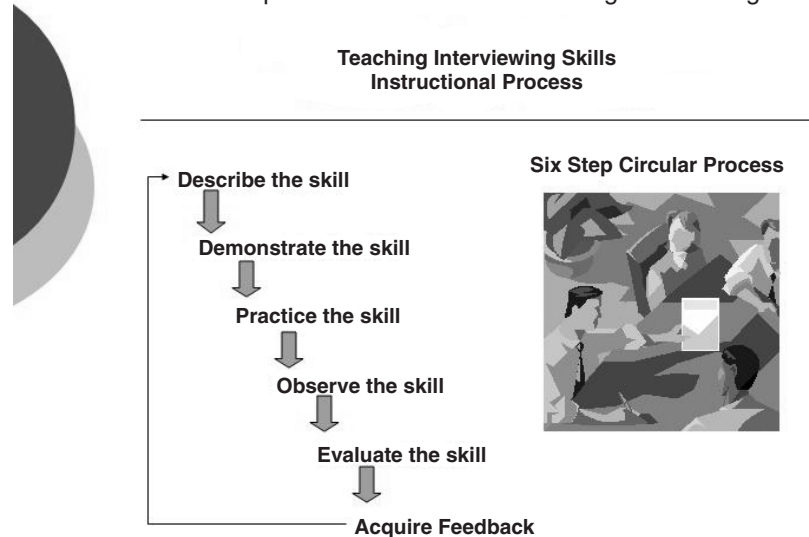
The learning assignments and teaching strategies used by the online instructor included the following:

1. Use of web-based interactive notes to provide information on specific skills used during the beginnings of an interview
2. Use of self-test or quizzes to assess understanding of reading materials
3. Use of streaming video interview segments to demonstrate the skills
4. Students video tape interview segments to practice the skills with simulated clients role played by a peer
5. Students used the same simulated role play to practice the skills
6. Students self-assessed their video tapes using an observation form provided by the instructor.
7. Students acquired peer feedback through peer reviews of their video tapes
8. Students acquired instructor feedback on practice sessions
9. Students demonstrated skill acquisition by a final interview at the end of the course

Design. The study employed a quasi-experimental design (Cook & Campbell, 1979). Students registered in the BSW program were provided with the opportunity to enroll for a required core practice course in one of two sections having the same number of students. The primary instructional method for one section was the use of a classroom-based instructional format. The group met once per week for a three hour class session during the entire 15 week semester. The other section followed a Web-based instructional format with no face-to-face meetings between the instructor and the students. Online students received a different unit of study each week with learning objectives and learning activities to be completed on a weekly basis. Both courses occurred during the same semester and were implemented during the same time frame.

Once the semester was completed, students who participated in the study were asked to attend a face-to-face session at the University to conduct a 10-minute interview segment with a simulated client who was

FIGURE 1. Six-Step Circular Process for Teaching Interviewing Skills



coached and trained by the principal investigators. The interview was video taped for further analysis by an independent evaluator.

Selection Process. Once the course was initiated, students from each class were invited to voluntarily participate in a study to examine the acquisition of practice skills. A total of 60 students were invited to participate in the study. A consent form was provided that outlined the purpose of the study, what was to be expected, and what steps were taken to ensure confidentiality. A demographic survey questionnaire was completed by students who chose to participate in the study. A total of 59 students volunteered to participate in the study. The one student that did not, successfully completed the course but was not available to conduct the simulated interview at the end of the course. All students who participated in the study had little or no previous social work interviewing skills. None of the students were involved in a concurrent field practicum experience as this was their first practice course in the BSW program.

Data Collection Procedures

Three sets of data were collected for this study. The first set of data was based on information regarding the demographic nature of the

study participants. A second set of data was collected to gather information on student perspectives of their learning experience and to what degree they perceive their level of skill acquisition. A third set of data was collected to acquire information on the acquisition of actual interviewing skills.

Three data collection methods were used to solicit information from students in both groups.

1. Demographic Survey: At the time of student recruitment pre-interview demographic survey questionnaire was used to gather demographic characteristics of the students who chose to voluntarily participate in the study. This questionnaire provided information on age, ethnicity, gender, prior experience using interviewing skills, and prior experience with taking online courses.
2. End of semester survey questionnaire: Once the course was completed students in the study were requested to complete an end of semester questionnaire to gather subjective information on the students' perception of the clarity and effectiveness of the learning exercises used to teach interviewing skills. Likert-type scales measures were used to acquire data on the following characteristics: (i) organization of learning exercises, (ii) the extent interest levels were sparked by the learning exercises, (iii) clarity of instructions, (iv) student perception regarding implementing interviewing skills, (v) student perception of their learning experience, and (vi) students' level of confidence with the use of interviewing skills. In addition, students were provided an opportunity to add subjective data for each of the characteristics.

Two subscales were developed using eight items from the end of semester survey questionnaire. The first subscale of four items measured the students' perception of their satisfaction with the instruction provided in the class and the second subscale of four items measured the students' perception of their acquisition of beginning interviewing skills. The Cronbach's Alpha for the satisfaction of instruction scale was .83 and the Cronbach's Alpha for the perception of interviewing skill acquisition was .92. This suggests that both scales had good internal reliability.

3. Video Tape Interviews: After the course was completed and grades were turned in, students were invited to conduct a 10-minute interview with a simulated client. This interview was conducted and video taped at the University. The simulated client was trained and role-played by two graduate-level and one undergrad-

uate senior level social work students. All three students used for the client simulation were coached and trained to role play the same simulated client role scenario. The students used for the simulated client were not part of either the classroom or online group being studied nor were they known to the study participants.

Instrument to Evaluate Interviewing Skills

A 21-item instrument was developed for use by the rater to assess the 29 interviews that were actually completed. Prior to the selection of the 21 items, a four person panel of content experts reviewed two other scales that have previously been used for assessing basic interviewing skills (Katz, 1979; Chang & Scott, 1999). Items were added and modified based upon the panel's content expertise. Based on the use of the four person content expert panel and the review of past interviewing scales it is thought that the final 21 items selected for the Basic Practice Interviewing Scale (BPIS) had content validity. The final 21 items are listed in Appendix A. Prior to implementation of the instrument, operational definitions were developed for each item to improve the reliability of the rater. As an example, the operational definition for attentiveness consists of leaning slightly toward and facing the client squarely. Each of the 21 items were rated using a six-point Likert scale. The values ranged from 0 to 5. Zero indicated the skills was not used, 1 meant poor use of skill, 2 fair use of skill, 3 good use of the skill, 4 very good use of the skill, and 5 excellent use of the skill. To improve the reliability of the ratings the low points (0) and the high points (5) for each of the 21 items were anchored with specific descriptions of the skill at that level (see Appendix A for definitions).

The internal reliability of the scale was assessed using Cronbach's coefficient alpha. This was computed using SPSS and equaled .93 which suggests that the scale has excellent internal consistency.

Use of Independent Evaluator

All videotaped interviews conducted by the students for the purpose of this study were evaluated by an independent evaluator and seasoned practitioner and social work educator with extensive clinical experience and expertise on social work interviewing skills. The independent evaluator was not aware of the group (i.e., classroom vs. on-line) to which participants belonged. Intra-rater reliability was conducted by using four taped interviews that were not part of the sample used to assess in-

interviewing skills. The independent evaluator first became knowledgeable of the BPIS scale described above. Using this scale, the independent evaluator rated the four interviews then waited several days and re-rated to assess the correlation between the first ratings and the second.

Method of Analysis

Qualitative and quantitative data analysis was conducted on information collected from the demographic survey and the end of semester survey questionnaire. A t-test was used to determine if there was a significant difference between groups regarding student perceptions of the clarity and effectiveness of the learning exercises used and their perception of their level of skill acquisition.

Qualitative data collected from the two survey questionnaires were coded and examined using NIVO software to assess student attributes and emerging themes from their comments. The qualitative data were reviewed by the two co-investigators independently.

As indicated in the introduction of this paper, the goal of this study was to evaluate the actual acquisition of interviewing skills for students enrolled in two sections of an undergraduate practice course, one of which was taught in a traditional face to face class and the other using a Web-based instructional format with no face to face contact with the instructor. Comparison of the results of the two groups was statistically analyzed using two statistical procedures. First an initial comparison was done between the online student and traditional classroom student interview skills using the total scores based on Basic Practice Interviewing Scale (BPIS). The Mann-Whitney U was used to test for significant differences. After the comparison of total scores the individual scores of the 21 items that comprised the BPIS were statistically compared again using the Mann-Whitney U for the two sections. Since the sample sizes for the comparisons were very small and this would limit the power of the statistical tests to obtain significance, effect sizes were also computed for the various comparisons. Effect size allows one to characterize the magnitude of the difference between the two classes rather than a raw difference score or a simple percentage difference. Cohen (1988) suggests that an effect size of 0.20 to 0.49 can be considered small, effect sizes of .5 to 0.79 to be medium, and an effect size of 0.80 and above to be large.

RESULTS

Demographic Characteristics: Table 1 presents the gender, age, and ethnic characteristics of the 30 students. As can be seen, the majority (93.3%) were female. More than half (53.3%) were between the ages of 20 and 29, while 30 percent were between the ages of 30 and 39, and 16.6 percent were older than 40. Sixty percent were Caucasian, 33.3 percent were African American, 3.3 percent were Hispanic, and 3.3 percent were from other cultural backgrounds.

Analysis of Possible Confounding Variables

In response to our invitation, a total of thirty students agreed to voluntarily participate in the study. Table 2 outlines the number of students from each class section that participated in the study.

Prior to analyzing differences between the two groups, we examined the following possible confounding variables to determine if there were

TABLE 1. Study Participants by Gender, Age, and Ethnicity

Gender	Total Number	Percentage	Online	Classroom
Male	2	6.67%	2 (12.5%)	None
Female	28	93.3%	14 (87.5%)	14 (100%)
Totals	30		16	14

Age range	Number	Percentage	Online	Classroom
20-29	16	53.3%	7 (43.75%)	9 (64.29%)
30-39	9	30%	5 (31.25%)	4 (28.57%)
40+	5	16.67%	4 (25%)	1 (7.14%)
Totals	30		16	14

Ethnicity	Number	Percentage	Online	Classroom
African American	10	33.33%	6 (37.5%)	4 (28.5%)
Hispanic	1	3.33%	1 (6.25%)	0
Caucasian	18	60%	9 (56.25%)	9 (64.2%)
Other	1	3.33%	0	1 (7.1%)
Totals	30		16	14

TABLE 2. Study Participants by Section

Section	Total Number	Percentage
Classroom setting	14	46.6%
Online setting	16	53.3%
Totals	30	

group differences; age, credit hours taken during the semester, previous interviewing experience, grade point average, and hours per week of paid employment during the semester. Age was the only variable found to be statistically significant. In addition, the online group was found to be slightly older than the classroom group.

To determine if age was a factor in learning, a Kendall's tau_b correlation was computed between age and all the variables in the interviewing rating scale. Only one item was found to be significant to age, that of summary statements at the end of the interviewing sequence.

Student Perceptions of Learning Experience

The following presents information on how students in the online and the classroom group assessed the clarity and effectiveness of the learning exercises that were used. Table 3 compares the group means and statistical significance of the student responses regarding the clarity and effectiveness of the learning exercises used in each course. From the data we can conclude that a majority of the students in both groups agreed or strongly agreed with all of the characteristics used to assess clarity and effectiveness of learning exercises. The classroom group tended to respond more favorably relative to their perception of learning a lot from the pedagogical activities used to teach interviewing skills. On all other variables regarding clarity and effectiveness of learning exercises, the groups show no significant differences in their responses based on the Mann Whitney U test. The effect sizes ranged from $-.21$ to $-.635$. As indicated previously by Cohen (1988, effect sizes of 0.50 and above are indicative of medium differences. Negative values indicate that the traditional class reported higher scores on clarity and effectiveness of the learning exercises and positive scores indicate that online students reported higher scores. The absolute value of 6 of effect sizes were lower than 0.50 and thus would be considered small. Two ex-

ceeded it. As can be seen from Table 3, two of the eight comparisons indicate there was medium differences between the groups based on effect sizes being equal to 0.50 or greater and this suggests that the traditional students reported higher scores in these areas.

Students' Qualitative Responses with Respect to Their Learning Experience

What follows is a description of the typical responses students provided when asked to add additional comments for each characteristic used to define clarity and effectiveness of learning exercises. With respect to the organization of learning exercises, the following is an example of student responses:

TABLE 3. Mean Differences of Clarity and Effectiveness of Learning Exercises

Variables	Mean Online Group (n = 16)	Mean Classroom Group (n = 13)	Mann-Whitney U	P value	Effect Size Pooled SD	95% Confidence Interval Effect Size
Learning exercises well organized	4.44	4.6216	85.50	.574	−0.210	−.961 to .540
Learning exercises sparked my interest	4.13	4.54	76.50	.308	−.0466	−1.224 to .292
I enjoyed participating in learning exercises	4.25	4.38	91.00	.795	−0.231	−.982 to .520
Instructions were clear	4.44	4.08	75.50	.294	0.464	−.294 to 1.223
I can implement beginning skills	3.88	4.23	78.00	.354	−0.488	−1.247 to .272
I learned a lot about interviewing	4.00	4.54	66.00	.112	−0.635	−1.402 to .131
My interviewing confidence is high	3.56	4.00	78.00	.341	−0.505	−1.265 to .255
Interviewing skills confidence is high	3.56	3.85	78.50	.326	−0.464	−1.223 to .294

The order of the interview skills was good—beginning with small skills and building upon them.

The following comment exemplifies how students felt learning exercises sparked their interests:

I feel that the learning exercises were interesting because they contained so much information such as: empowering the client to allow him/her to use resources that he/she already possess, asking open questions, and not focusing on what's wrong—putting emphasis on what's already working and helping the client to develop skills to strengthen the resources that already exist.

Many students expressed being uncomfortable when initially experimenting with practicing interviewing skills. The following is a typical response from students in both the classroom and the online group.

Doing the taped interviews without previous personal experience was really uncomfortable, I was very unsure of myself.

Students in both groups indicated that they found the learning exercises useful in preparing to conduct interviews.

These learning exercises were very helpful in letting me know which questions to ask and how to ask them.

Acquisition of Interviewing Skills

The results of the two statistical analyses comparing the two groups' acquisition of interviewing skills are in Table 4.

These results indicate very few statistically significant differences between the online class and the traditional class. The groups did not differ significantly on the total scores for the BPIS nor on 19 of the 21 specific interviewing skills ratings. The mean online score for "attentiveness" was 3.44 for the online class and 2.54 for the traditional class. For "being relaxed" the online mean score was 3.27 and the traditional class mean was 2.15. These findings suggest that for these two skills the online students were somewhat more proficient than the traditional class students.

Sixteen of the 21 computed effect sizes were small, four medium, and one large. Of the four medium effect sizes three suggested the online

TABLE 4. Comparison of Total Scores and Individual Scores for Two Classes

Item	Online Group Mean N = 16	Traditional Classroom Mean N = 13	Mann-Whitney U	P value	Effect Sized Pool SD	95% Confidence Interval Effect Size
Total Score	43	39	38.00	.567	.243	-.661 to 1.147
Attentiveness	3.44	2.54	59.50	.045*	.726	-.029 to 1.482
Eye contact	3.88	3.54	81.50	.279	.404	-.335 to 1.143
Relaxed	3.27	2.15	46.50	.015*	.929	.147 to 1.710
Positive Regard	2.87	2.58	77.50	.530	.211	-.550 to .972
Session Introduction	2.13	2.31	96.50	.724	-.153	-.886 to .580
Initial Structuring	1.69	2.31	67.00	.088	-.512	-1.256 to .231
Problem Determination	3.33	2.92	81.50	.448	.316	-.437 to 1.063
Minimal Encouragers	3.06	2.54	75.00	.185	.446	-.295 to 1.186
Verbal Following	2.67	2.62	96.00	.943	.037	-.705 to .780
Understanding Responses; Paraphrasing	2.50	2.31	95.50	.703	.121	-.611 to .854
Understanding Responses; Reflecting Feelings	1.93	2.54	76.50	.325	-.339	-1.087 to .409
Primary-level Accurate Empathy	2.06	2.15	98.00	.780	-.0741	-.803 to .661
Summarizing Responses	2.69	1.83	76.50	.350	.434	-.323 to 1.191
Strengths Affirmation	1.00	1.38	92.00	.582	.303	1.039 to .433
Goal Structuring	.75	.23	63.50	.075	.571	-.176 to 1.317
Problem Solving	.79	.92	84.00	.698	-.181	-.838 to .575
Self Disclosure	.13	.00	84.00	.212	.496	-.264 to 1.256
Advice Giving	1.06	.69	73.50	.121	.599	-.149 to 1.347
Concreteness	2.94	3.08	97.50	.769	-.105	-.837 to .628
Closing Summary Statement	1.13	.50	78.00	.341	.497	-.263 to 1.257

*Statistically Significant

students demonstrated higher skills in those areas for one that the traditional class demonstrated higher skills. Only one large effect was found; it suggested that the online students appeared to be more relaxed during the interview than the traditional students.

It is also important to note that the means scores for both student sections for the following skills were one or lower, which suggests that they were seldom used; advance accurate empathy, goal structuring, and problem solving. The low use of these skills probably reflects that the interviews were only 10 minutes in time. These skills would normally be used later in an interview after initial rapport has been established and the interview has progressed into the problem identification and solution phase.

In summary the results suggest that the interviewing practice skills of the students taught in an online class versus those taught in a traditional face-to-face classroom setting, as rated by an independent expert, were approximately equal at the completion of the courses based on the statistical test and the comparison effect sizes. It is also possible that the two statistically significant differences could be due to chance, since one would expect one statistical comparison for over 20 comparisons to be significant due to chance when using a p value of .05.

Comparison of Acquisition of Interviewing Skills with Perceptions of Learning Experience

The Kendall's tau_b was used to compare the correlation between the students' perception of satisfaction of their learning experience and their perception of interviewing skill acquisition with the independent evaluator's ratings of the students' acquisition of interviewing skills. Results are in Table 5. The statistical results indicate no statistically significant correlation between students' perception of their learning experience and self-assessment of their skill acquisition with the independent evaluator's rating of the student's acquisition of interviewing skills.

TABLE 5. Correlation of Learning Experience with Independent Evaluator's Score

Item	Kendall's tau _b	P Value
Student perception of interviewing skill acquisition	.106	.557
Student perception of learning experience	.216	.215

DISCUSSION

This study addresses the issue of learning efficacy in an online environment with respect to learning basic interviewing skills considered so essential in the development of effective social work practitioners. The results of this study suggest that the acquisition of beginning interviewing skills of students taught in an online class and those taught in a traditional face-to-face classroom were approximately equal at the completion of the course. In addition, results indicate that there were no statistically significant correlation between students' perception of their satisfaction with the instruction and their perceptions regarding their acquisition of interviewing skills with the independent evaluator's rating of the actual acquisition of interviewing skills of students in either group.

The results of this study support previous studies that have indicated "no significant difference" between the efficacies of learning outcomes from courses taught in an online learning context versus those in a traditional face to face classroom setting (Macy, Rooney, Hollister, & Freddolino, 2001), even if the course is a practice course (Kleinpeter & Potts, 2003). This should begin to dispel the myth that social work interviewing skills can only be taught in a face-to-face, classroom-based instructional setting.

Major limitations of the study include the following: (1) small number of student participants, (2) limited testing for instrument reliability, (3) brevity of the interview being sampled which put limits on those competencies that could reasonably be assessed, (4) insufficient control for client effects including lack of standardization of client behavior, and (5) use of only one rater. It is recommended that future research give consideration to replication of this study with a larger sample of students and that refinements provide for a heightened control for client effects through use of fewer clients and improved standardization of their behavior, along with refinements of the rating instrument to enhance its suitability for a ten minute interview process, minimize any overlap in items, and further test its reliability. In addition, further research using the same investigative process of student self-assessments and independent evaluator ratings of an entire interview as opposed to only the beginning segments of an interview such as this study emphasized would provide additional insights as to how skills are learned and are transferred into actual practice outcomes.

To further enhance our understanding of what constitutes good teaching and good learning in an online instructional environment, future research should direct its attention to examining what specific on-

line pedagogical strategies appear most effective for teaching a specific skill rather than only focusing on comparing online versus classroom-based instruction. Several such studies would provide more insights into how the interaction between different factors including whether the training content is taught online or face-to-face tends to result in better educational results.

As Ehrmann (1995) has suggested, future research and discussion must focus on learning methods specific to the instructional environment and not on the technology itself. One outcome of this study is to suggest that further exploration is needed to move our pedagogical discussion towards a greater understanding and appreciation of the conditions that appear to facilitate the creation of a context for good learning, regardless of where or when an educational experience is delivered.

By ensuring that we focus on sound principles of good teaching and learning when developing medium-specific learning tasks, our journey in developing high quality, technology-supported learning systems will greatly be facilitated. What remains important is that we continue to strive towards a better understanding of the learning processes that guarantee social work students receive a quality educational experience.

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APPENDIX A: Interviewing Skills Rating Instrument

**Anchored Skill Dimensions
Interviewer Characteristics****Verbal following**

Excellent: Follows topics introduced by the client

Poor: Makes frequent and/or inappropriate jumps in topics

Attentiveness

Excellent: Leans slightly toward and faces client squarely

Poor: Slumps back and/or rests on arm in an overly casual manner

Eye contact

Excellent: Looks at client in direct and spontaneous manner

Poor: Frequently looks down or away from the client

Relaxed

Excellent: Posture and overall physical presentation looks comfortable

Poor: Appears tense evidencing fidgetiness and/or physical rigidity

Positive regard

Excellent: Communicates in a non-evaluative and respectful manner

Poor: Makes statements that are judgmental in content or tone

Genuine

Excellent: Open, non-defensive, and authentic; no mask of impersonality

Poor: Avoids responding to personal questions

Mutuality

- Excellent: Easy give and take in interview
Poor: Overly controlling of the interview direction

Interpersonal skills–discretionary behavior**Introduction**

- Excellent: Introduces self, obtains client's name, and socializes briefly
Poor: Does not give own name and/or inquire as to the client's name

Initial structuring

- Excellent: Orients client to the agency along with interview purposes and process
Poor: Provides limited or insufficient information about the agency, interview purpose or what will take place

Problem determination

- Excellent: Determines client perceptions of problem and reasons for seeking help
Gathers information about nature/extent of problem
Poor: Makes no specific inquiry regarding reasons for seeking help or does so in superficial manner

Minimal encouragers

- Excellent Presents frequent nonverbal prompts that elicit further elaboration from the client, e.g., head-nods, one/two word statements, etc.
Poor Sits relatively passive presenting minimal non-verbal affirmations of the clients communication

APPENDIX (continued)

Verbal following

- Excellent Follows topics introduced by the client
 Poor Makes sudden or inappropriate shifts in topics

Understanding responding: Paraphrase

- Excellent: Communicates accurate understanding of the content of client communications
 Poor: Misreads or distorts the content of client communication

Understanding responding: Reflection of feelings

- Excellent: Communicates understanding of feelings being expressed
 Poor: Distorts the feelings being expressed by client

Primary-level accurate empathy

- Excellent: Accurately perceives and communicates overt feeling and meaning of client's communication
 Poor: Distorts or misses significant portions of the feeling and/or meaning expressed by client

Summarizing responses

- Excellent: Reflects major content and feeling themes in the client's communication
 Poor: Reflections of content and feelings are distorted or inaccurate

Goal structuring

- Excellent: Identifies or proposes relevant goals on which to focus
 Poor: Presents goals in arbitrary and/or non-collaborative manner

Problem-solving

- Excellent: Explores alternative courses of action or solutions to problems presented
 Poor: Recommends problem solutions in authoritative, non-collaborative fashion

Strengths recognition

Excellent: Points out or affirms some specific, recognizable strength

Poor: Minimizes client problems with over-reassurance

Self-disclosure

Excellent: Shares information about self in appropriate and selective way

Poor: Avoids responding to personal questions asked by client

Advice

Excellent: Suggests specific and appropriate course of action for client to pursue

Poor: Presents advice in an ill-timed or overly prescriptive/dogmatic manner

Advanced accurate empathy

Excellent: Accurately expresses implicit meanings of client communications and implications of the client's behavior; moves the client beyond self-exploration to self-understanding

Poor: Focuses only on the surface meaning of content or feelings expressed by the client

Concreteness

Excellent: Focuses exploration on specifics rather than generalities, e.g. experiences, thoughts, etc.

Poor: Does not elicit clarity or specificity relative to the client's general responses

Closure

Excellent: Ends interview with appropriate closing summary or remarks

Poor: Ends interview abruptly with no closing-related remarks