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Rebekah F. Cole
Uniformed Services University

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Using Flipgrid Discussions to Increase School Counseling Students' Cultural Competence in the Online Classroom

Rebekah F. Cole

This pre-test/post-test quasi-experimental design study investigated the use of Flipgrid to increase school counseling students' cultural competence, which was measured by the Global Perspectives Inventory (GPI). Student participants in the experimental group used Flipgrid to engage in cultural discussions while participants in the control group used Blackboard discussion boards. An independent samples and paired-samples *t*-test was used to analyze the participants' scores in the experimental and control groups. The statistically significant findings of the paired samples *t*-test suggest the effectiveness of utilizing Flipgrid to increase students' cultural competence in the online learning environment. The study's implications for teaching and research are discussed.

Keywords: Flipgrid, cultural competence, school counselor, discussion, online learning

Online learning is rapidly growing in higher education settings (McClendon et al., 2017), especially as a result of the COVID-19 pandemic (Chang & Fang, 2020; Romero-Ivanova et al., 2020). With this increased reliance on the virtual learning environment (Gardner, 2020), higher education faculty are called to pioneer effective, evidence-based practices to use in their online classrooms (Holbeck & Hartman, 2018; Means et al., 2009; Toquero, 2020). In an answer to this call for innovative data-driven online learning, the purpose of this study was to explore the use of Flipgrid, an online instructional tool, to teach school counseling students in the online learning environment.

Online Counselor Education and Instructional Innovation

Even before the COVID-19 pandemic, counselor education programs have been rapidly growing online (Haddock et al., 2020; Snow et al., 2018). In these online courses, counselor educators train and prepare students to be effective practitioners in the field using virtual teaching strategies, which have not been studied in depth by the field (Moorhead et al., 2013). While online asynchronous discussion boards have been relied on by counselor educators in the past (Moorhead et al., 2013), school counselor educators, inspired by the virtual teaching challenges of the COVID-19 pandemic, are called to investigate modern online instructional tools to innovatively train their school counseling students (Toquero, 2020).

School Counselor Education and Cultural Competency

One of the most important aspect of online school counselor instruction and training is cultural competency (Alvaraz, 2019). Culturally competent school counselors are aware of their cultural assumptions, are knowledgeable about others' cultures, and possess the skills to inspire change through the counseling relationship (Pedersen, 2002; Pietrantoni & Glance, 2019; Schmidt et al., 2011). This cultural competency is important because school counselors are important players in helping students be successful in school (American School Counselor Association, 2020) as they are trained to help students socially, emotionally, and academically (Martin & Carey, 2014). Because student populations in schools across the United States are increasingly diverse, it is crucial that school counselors be culturally competent so that they can

Rebekah F. Cole, Uniformed Services University. Correspondence concerning this article should be addressed to Rebekah F. Cole, rebekah.cole@usuhs.edu.

effectively serve students of all backgrounds (Nelson et al., 2015).

In its position statement on the School Counselor and Cultural Diversity, the American School Counselor Association (ASCA) emphasizes the importance of this cultural competence, asserting that it is "essential that school counselors be more globally responsive and culturally competent in the current educational and social environment" (ASCA, 2015, para. 2). In addition, the Ethical Standards for School Counselors describe how school counselors must "monitor and expand personal multicultural and social-justice advocacy awareness, knowledge and skills to be an effective culturally competent school counselor" (ASCA Ethical Standards, 2016, B.3.i,). Finally, the ASCA Standards for School Counselor Preparation Programs mandate that school counseling students engage in self-reflection and demonstrate cultural competence as they prepare to enter the field (ASCA, 2019). Therefore, it is crucial that school counselor educators include a focus on cultural competency in their online school counseling training programs.

While cultural competence is a crucial and foundational characteristic for school counseling graduate students to learn (Moore-Thomas & Day-Vines, 2010; Rodgers & Furcron, 2019; West-Olatunji et al., 2011), there is no evidence-based research on the most effective ways to teach cultural competency in online school counselor education programs. Instead, past research has focused on ways to determine or measure the level of cultural competence in school counseling students (Constantine & Yeh, 2001; Nelson et al., 2015) and to teach cultural competence to counseling students in general (Dorn-Mederios et al., 2020; Manis, 2012). In addition, past studies have explored ways that school counselors can demonstrate cultural competency in approaching their work with students (González-Falcón et al., 2016; Levy & Adjapong, 2020; Uehara, 2005). However, no studies to date have focused on specific strategies for preparing school counseling students in the online learning environment to work with diverse populations.

Flipgrid and Cultural Competency

To fill this research gap, this study used Flipgrid, to help school counseling students explore, discuss, and learn about cultural topics through interactive video discussions in an introductory school counseling course. Ultimately, these Flipgrid discussions aimed to increase the participants' knowledge and awareness of other cultures, two of the key aspects of cultural competency (Sue &Torino, 2005). Unlike traditional discussion threads previously used in online classrooms, the participants in this study were able to see and interact with each other as they created and shared their videos using this free online learning resource (Flipgrid, 2020). The use of this online platform may create greater access for some students who live in culturally homogeneous communities and may not be able to travel to other areas to learn more about the cultures there. However, using Flipgrid may prove to be a barrier to students with special learning needs, if they are unable to see or hear the videos.

Flipgrid has been found to be an effective online teaching resource by other educational professionals as a way to innovatively facilitate student discussion in the online learning environment (Miller et al., 2020; Petersen et al., 2020; Romero-Ivanova et al., 2020). These studies have used Flipgrid to create a space for their students to asynchronously "meet" together face-to-face and discuss new concepts and ideas, even though they are geographically separated (Miller et al., 2020). In addition, past research examining Flipgrid as a teaching tool in higher education has shown it to be an effective teaching resource and well-received by adult learners, who appreciate its accessibility as well as its resemblance to social media tools that they use in their daily lives (Petersen et al., 2020; Romero-Ivanova et al., 2020).

Purpose Statement and Research Question

The purpose of this study was to investigate the use of Flipgrid to increase students' cultural competence in an online learning environment. It was guided by the following research question: Does using Flipgrid to engage students in cultural discussion increase students' cultural competency in the online learning environment?

Methodology

Research Design and Variables

This quantitative study used a pre-test/post-test quasi-experimental design. Students in the online

introductory school counseling course blindly registered for the experimental and control group course sections in the 2020 Summer II, Fall I, and Fall II semesters upon course registration. Participants in the experimental course section used Flipgrid to engage in cultural discussion while participants in the control course section used Blackboard discussion threads to create discussion posts and reply to one another as they engaged in cultural discussion. Both the experimental and control groups responded to the same discussion prompts, so the only difference in design was the use of Flipgrid in the experimental group and the use of the traditional Blackboard discussion threads in the control group. Each participant took the Global Perspectives Inventory (GPI) at the beginning and end of the introductory school counseling course. Therefore, the independent variable in this study was the presence or absence of the participants' use of Flipgrid, and the dependent variable was the participants' GPI scores.

Participants

The participants in this study were students in an online school counseling program taking an introductory school counseling course. This class was offered every seven weeks as a part of a master's level school counseling program. The course is seven weeks long and consists of seven modules. Every student in the 2020 Summer II, Fall I, and Fall II course sections was invited to participate in this study. A total of 102 students participated in the study (58 participants in the experimental group and 44 participants in the control group), with 2.9% of the participants identifying as American Indian, 13.7% identifying as Black, 78.4% identifying as White, and 4.9% identifying as Hispanic. As far as geographical location, 51.95% of the participants were from rural areas, 28.4% were from suburban areas, and 19.6% lived in urban areas. Of the participants, 50% were between the ages of 20 and 30 years, 24.4% were between the ages of 31 and 40 years, 20.5% were between the ages of 41 and 50 years, 2.9% were between the ages of 51 and 60 years, and 0.09% were between the ages of 61 and 70 years. Finally, 89.2% of the participants identified as female, and 10.7% identified as male (see Appendices A and B for demographic characteristics charts). None of the participants declined the invitation to participate, resulting in a 100% response rate. Four of the participants dropped out of the course during the course of the semester, and as a result, their scores were removed from the data set. For a population of 106, at the 99% confidence level and .05 confidence interval, the recommended sample size is 92. Therefore, this study exceeds the recommended sample size for the population.

Measure

The students' cultural competency was measured by the GPI, which assesses individual experiences and the development of a global perspective (Braskamp et al., 2014). This measure was selected based on its focus on assessing students' cultural competence. It has been widely used at approximately 200 universities to assess intercultural competence and global learning in college students (Braskamp et al., 2014, 2015; Merrill et al., 2012). The GPI is a valid and reliable instrument, developed by researchers at Iowa State University, and measures three dimensions: cognitive (thinking), interpersonal (feeling), and intrapersonal (relating) with six scales (Braskamp et al., 2014; Merrill et al., 2012). The coefficient alpha scores for these scales ranged from 0.65 to 0.76 (Braskamp et al., 2014). Tests for face validity, concurrent validity, and construct validity as well as test-retest reliability were conducted and confirmed throughout the development of the GPI (Braskamp et al., 2014).

There are 35 items in the GPI inventory. Sample items include: (1) When I notice cultural differences, my culture tends to have the better approach; (2) Some people have culture and others do not; (3) I take into account different perspectives before drawing conclusions about the world around me; (4) I am open to people who strive to live lives very different from my own life style (Research Institute for Studies in Education, 2017). For each item, the participants rate their responses on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) (Research Institute for Studies in Education, 2017). The participants in this study were asked to take the inventory via Blackboard in the first and last modules of the course to investigate any change in their score over the course of the semester. The mean scores on the scales for each student were recorded, with a higher mean signifying more positive traits related to each dimension (Research Institute for Studies in Education, 2017).

Assumptions

When using a *t*-test to analyze data, several assumptions must be met. First, the two samples must be independent from one another (Illowsky & Dean, 2013). In this study, the experimental and control groups were in separate course sections and did not have any interaction with or influence on each other.

The second assumption is that the data should be a simple random sample from a normally distributed population (Illowsky & Dean, 2013; Kim, 2015). In this study, Shapiro Wilk's test was used to test for normality (Chou et al., 1998). The *p* value for the initial GPI scores in the experimental group was .405, and the *p* value for the control group was .264. Because both values were greater than .05, the researcher was 95% confident that the dependent variable is normally distributed. Finally, the samples must consist of two related groups (Illowsky & Dean, 2013). In this study, this assumption was met because the experimental and control groups were in sections of the same course. The participants were students in the same school counseling graduate program and were taking the course during the same semesters.

Procedures

In Module 1 of each course, the student participants took the GPI. The test was taken in the Blackboard course room, and the results were scored and recorded by the study's primary investigator (PI). In Module 2, the participants in both the experimental (using Flipgrid) and control groups (using Blackboard discussion threads) were prompted to give introductions describing their cultural background and heritage. Students were asked to respond to their peers' discussion posts, asking questions about aspects of each other's cultural heritages that they are not familiar with and commenting on the strengths of each other's cultures.

Next, in Module 3, the participants were prompted to describe their most important cultural traditions—past and present—as well as any important artifacts or events that are a part of these traditions. The students were required to comment on at least two of their peers' posts, making connections to their own cultural traditions and asking any questions about each other's cultural traditions that they may be unfamiliar with. In Module 4, the participants were prompted to describe any hardship or struggle that is an inherent part of their culture. The students were required to comment on at least two of their peers' posts, asking any clarifying questions and commenting on the strengths of each other's cultures.

In Module 5, the participants were asked to describe another culture they would like to learn more about as well as ways in which their own cultural backgrounds would impact their understanding of this new culture. The students were required to comment on at least two of their peers' posts, making connections to their own cultural interests or experiencing and providing insights to the cultural curiosity expressed by their peer. Finally, in Module 6, the participants repeated the GPI, and the scores were recorded and compiled by the PI.

Data Analysis

At the conclusion of the study, an independent samples *t*-test was used to compare the means of the students' scores in the control group to the means of the students' scores in the experimental group at the beginning of the course and then at the end of the course. In addition, a paired-samples *t*-test was conducted by the PI to compare the students' test scores before and after their use of Flipgrid to determine whether the students' cultural competency level changed as a result of using Flipgrid as a part of their online learning experience. To further explore the significant results of the paired-samples *t*-test, effect size was calculated to measure the magnitude of the relationship between the means of the pre- and post-scores in the experimental group (Christensen et al., 2020; Thomas et al., 1991).

Results

An independent samples *t*-test was conducted to examine the differences of the means of the experimental group and control groups' GPI scores at the beginning of the course. The students' GPI scores were significantly different at the .05 level between the intervention (132.13 ± 12.45) and control groups (135.27 ± 10.05) before the intervention ($t = 1.365$; $p = 0.041$). An independent samples *t*-test was subsequently conducted to compare the experimental group and control groups' GPI scores at the end of the course. The students' GPI scores were

not significantly different in the intervention (136.89 ± 11.64) group compared with the control group (134.27 ± 11.56) after the intervention (t = -1.130; p = .475).

A paired-samples t-test was also conducted to compare the scores of the participants using Flipgrid at the beginning of the course and at the end of the course (see Table 1). There was a significant difference in scores for the students who used Flipgrid at the beginning of the course (132.1379 ± 12.45) compared with their scores at the end of the course (136.8966 ± 11.64); $t(57)$ = -4.396; p = .000. Since the p value is less than .05, it is concluded that the differences in the means of the test scores were not likely due to chance.

In contrast to these significant results calculated from the experimental group where Flipgrid was used in the discussions, there was not a significant difference in scores of the control group participants at the beginning of the course (135.27. ± 1.51) compared to their scores at the end of the course (134.27 ± 1.74); $t(43)$ = .782; p = .439. Because the p value is greater than .05, the differences in the means of the test scores are likely due to chance (Kirk, 1996; Thomas et al., 1991).

To further explore the significant paired samples t-test results in the experimental group where the hypothesis was rejected, Cohen's d was calculated to examine the extent of the differences of the means in the pre-test experimental group compared to the post-test experimental group (Cohen, 1990). The effect size for this analysis (d = .39) fell into Cohen's small effect size category (d = .20) (Cohen, 1988), indicating a small difference between the two means.

Discussion

The purpose of this study was to investigate the use of Flipgrid to increase students' cultural competency in an online learning environment. Overall, the mean of the experimental group's GPI scores increased after using Flipgrid throughout the semester. Although the mean of the control group's GPI scores decreased after using Blackboard discussion boards throughout the semester, this change was not statistically significant. This initial data, coupled with the statistically significant findings of the paired samples t-test, initially suggest the effectiveness of using Flipgrid to increase students' cultural competence in the online learning environment, confirming the results of previous research studies related to Flipgrid's effectiveness and utility in online higher education (Petersen et al., 2020; Romero-Ivanova et al., 2020).

However, when considering the significance of the results of this study, the small effect size calculated between the means of the pre- and post-scores of the experimental group should be taken into consideration regarding the true nature of Flipgrid's impact. More definite conclusions regarding the effectiveness of this tool should be made after continued research on its impact on school counseling students' learning in the online classroom. While previous studies have proven the effectiveness of Flipgrid as a teaching and learning tool (Miller et al., 2020; Petersen et al., 2020; Romero-Ivanova et al., 2020), this is the first study to explore Flipgrid's effectiveness in teaching cultural competence to graduate school counseling students. Thus, it offers a first look at the potential of this tool for the counselor education field and provides a foundation for future research regarding the use of Flipgrid and other educational technology to teach and prepare counselor education students to be successful in the field.

Implications and Recommendations

Based on these preliminary findings of Flipgrid's effectiveness, school counselor educators might consider using Flipgrid as an instructional tool in

Table 1

Paired Samples t-Test Results

Groups	Before course	After course	p-value*	df
Control	135.27 ± 1.51	134.27 ± 1.74	.439	43
Experimental	132.1379 ± 12.45	136.8966 ± 11.64	.000	57

*Significant at the $p < .05$ level.

their online classrooms to facilitate student discussion regarding cultural competence. Flipgrid offers students the opportunity to see each other's body language, to verbalize their ideas freely, and to interact with each other in a dynamic way that is not possible through traditional written discussion posts (Flipgrid, 2020). This visibility allows students in online courses to interact with each other in a dynamic way they would not be able to experience otherwise by using traditional online discussion threads. Instead of imagining what their classmates' cultural identities are like when reading about them, students are able to see visual representation firsthand. In addition, by using Flipgrid to discuss their own cultures, students are invited to think about how they want to visually and creatively present their cultural identities to their classmates, increasing the depth of their self-awareness and self-analysis. Overall, based on this study's results, these dynamic interactions may have an impact on school counseling students' cultural identity and their ability to work with diverse populations.

Because of the growing importance of using evidence-based teaching tools in the online learning environment (Acevedo, 2020; Holbeck & Hartman, 2018; McCall et al., 2020; Means et al., 2009; Toquero, 2020), school counselor educators should prepare doctoral students in counselor education programs to research and use online teaching tools. Then, these doctoral students can skillfully integrate these tools in their future teaching as they prepare school counseling students to be effective practitioners in the field. Teaching counselor education doctoral students to be proficient in using evidence-based online learning tools is key as online counselor education programs continue to grow and expand rapidly (Haddock et al., 2020; Snow et al., 2018).

Limitations

Several limitations threaten the generalizability of this study. First of all, the sample size was small (102 participants) and lacked racial and gender diversity. A testing threat to internal validity may have occurred as well because students took the same instrument twice and may have been more familiar or more comfortable with the questions the second time they took it, increasing their scores (Flannelly et al., 2018). In addition, this study was only conducted over the course of three semesters, which is a short period of time. The history threat to validity may have been present as well (Matthay & Glymour, 2020) because the study was conducted in late summer and fall 2020, which was during the course of the 2020 presidential election. This election was accompanied by racial turmoil throughout the country that may have impacted the students' cultural identities during the duration of the study (American Psychological Association, 2020). Finally, several teaching and learning variables may have affected the outcomes of this study. The participants' introductory school counseling courses were taught by different instructors, who were all experienced counselor educators. Some of the participants were also taking additional courses at the same time as the introductory school counseling course that was the focus of this study.

Future Research

Future qualitative studies might explore school counseling students' experiences of using online instructional tools like Flipgrid to increase their cultural competence. While this study provided preliminary quantitative data, descriptive phenomenological qualitative data might yield a more rich and in-depth understanding of how the students' perception of their own culture as well as other students' cultures evolved throughout the semester and what role Flipgrid played in facilitating this process.

In addition to these qualitative studies, future quantitative research might use greater sample sizes to explore the effectiveness of Flipgrid as a teaching tool in the online learning environment. These expanded sample sizes should contain participants with diverse ethnic, socio-economic, geographical, and gender backgrounds. These quantitative studies might also expand to students in other online counselor education programs such as clinical mental health counseling, marriage, couple, and family counseling or career counseling and might compare the differences and similarities in counselor development in each of these programs while using Flipgrid.

Finally, future mixed methods studies could explore additional online instructional discussion tools such as Parlay (https://parlayideas.com/) or Kialo (https://www.kialo-edu.com/) in developing students' cultural competence. These studies could

look at measured growth of not only students' abilities to work with diverse populations but also their perceptions of their identity growth and development as they gain knowledge and understanding of their own cultural backgrounds as well as their peers' cultural backgrounds. Future mixed methods studies might also investigate the usefulness of online discussion tools in helping school counseling students develop other aspects of their professional identity, such as their ability to empathize with their students.

Conclusion

Mindful of the increased growth of online counselor education programs (Haddock et al., 2020; Snow et al., 2018), school counselor educators are called to develop evidence-based, innovative teaching methods to use with their students in the online learning environment (Holbeck & Hartman, 2018; Means et al., 2009; Toquero, 2020). This study provided preliminary data on the usefulness of Flipgrid, one such teaching method, in increasing students' knowledge and awareness of their own culture and their peers' culture. This growth is key to their multicultural competency as they mature in their professional identities and prepare to work in a diverse and dynamic field (Chao, 2013; Rodgers & Furcron, 2019; Schmidt et al., 2011; Sue & Torino, 2005; West-Olatunji et al., 2011). Ultimately, capitalizing on technology's potential to increase the learning potential of our students is a worthwhile and much needed endeavor as our students develop their professional identities in a society becoming reliant on making distance the new closeness.

Disclosure Statement

The opinions and assertions expressed herein are those of the author and do not necessarily reflect the official policy or position of the Uniformed Services University or the Department of Defense.

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This research protocol was reviewed and approved by the institutional review board at Arkansas State University in accordance with all applicable federal regulations governing the protection of human subjects in research.

References

Acevedo, M. A. (2020). Teaching quantitative ecology online: An evidence-based prescription of best practices. *Ecology and Evolution, 10*(22), 12457–12464. https://doi.org/10.1002/ece3.6607

American Psychological Association (2020). *2020 presidential election: A source of significant stress for more Americans than 2016 presidential race*. https://www.apa.org/news/press/releases/2020/10/election-stress

American School Counselor Association (2016). ASCA ethical standards for school counselors. https://www.schoolcounselor.org/getmedia/f041cbd0-7004-47a5-ba01-3a5d657c6743/Ethical-Standards.pdf

American School Counselor Association (2019). *ASCA school counselor preparation program standards*. https://www.schoolcounselor.org/getmedia/573d7c2c-1622-4d25-a5ac-ac74d2e614ca/ASCA-Standards-for-School-Counselor-Preparation-Programs.pdf

American School Counselor Association (2020). *Role of the school counselor*. https://www.schoolcounselor.org/getmedia/ee8b2e1b-d021-4575-982c-c84402cb2cd2/Role-Statement.pdf

Braskamp, L.A., Braskamp, D., & Engberg, M.E. (2014). *Global Perspective Inventory (GPI): Its purpose, construction, potential uses, and psychometric characteristics*. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.584.9216&rep=rep1&type=pdf

Braskamp, D. C., Braskamp, L. A., & Glass, C. R. (2015). Belonging: The gateway to global learning for all students. *Liberal Education, 101*(3), 22–29.

Chang, C., & Fang, M. (2020). E-learning and online instructions of higher education during the 2019 novel coronavirus diseases (COVID-19) epidemic. *Journal of Physics: Conference Series, 1574*(012166). https://doi.org/10.1088/1742-6596/1574/1/012166

Chao, R. C. (2013). Race/Ethnicity and multicultural competence among school counselors: Multicultural training, racial/ethnic identity, and color-blind racial attitudes. *Journal of Counseling and Development, 91*(2), 140–151 https://doi.org/10.1002/j.1556-6676.2013.00082.x

Christensen, L. B., Burke Johnson, R., & Turner, L.A. (2020). *Research methods: Design and analysis* (13th ed.). Pearson.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum.

Cohen, J. (1990). Things I have learned (so far). *American Psychologist, 45*(12), 1304–1312.

Constantine, M. G., & Yeh, C. J. (2001). Multicultural training, self-construals, and multicultural competence of school counselors. *Professional School Counseling, 4*(3), 202–207.

Dorn-Medeiros, C. M., Christensen, J. K., Lértora, I. M., & Croffie, A. L. (2020). Relational strategies for teaching multicultural courses in counselor education. *Journal of Multicultural Counseling and Development, 48*(3), 149–160. https://doi.org/10.1002/jmcd.12174

Flannelly, K. J., Flannelly, L. T., & Jankowski, K. R. B. (2018). Threats to the internal validity of experimental and quasi-experimental research in healthcare. *Journal of Health Care Chaplaincy, 24*(3), 107–130. https://doi.org/10.1080/08854726.2017.1421019

Flipgrid (2020). *Empower every voice*. https://info.flipgrid.com/

Gardner, L. (2020). Covid-19 has forced higher ed to pivot to online learning. Here are 7 takeaways so far. *Chronicle of Higher Education*. http://bonner.pbworks.com/w/file/fetch/139643901/Covid-19%20Has%20Forced%20Higher%20Ed%20to%20Pivot%20to%20Online%20Learning.%20Here%20Are%207%20Takeaways%20So%20Far.%20-%20The%20Ch.pdf

González-Falcón, I., Coronel, J. M., & Correa, R. I. (2016). School counsellors and cultural diversity management in Spanish secondary schools: The role of relations with other educators and intervention models used in care of immigrant students. *Intercultural Education, 27*(6), 615–628. https://doi.org/10.1080/14675986.2016.1259462

Haddock, L., Cannon, K., & Grey, E. (2020). A comparative analysis of traditional and online counselor training program delivery and instruction. *The Professional Counselor, 10*(1), 92–105. https://doi.org/10.15241/lh.10.1.92

Holbeck, R., & Hartman, J. (2018). Efficient strategies for maximizing online student satisfaction: Applying technologies to increase cognitive presence, social presence, and teaching presence. *Journal of Educators Online, 15*(3). https://doi.org/10.9743/jeo.2018.15.3.6

Illowsky, B., & Dean, S. (2013). *Introductory statistics*. Openstax. https://openstax.org/details/introductory-statistics

Kim, T. K. (2015). T test as a parametric statistic. *Korean Journal of Anesthesiology, 68*(6), 540–546. https://doi.org/10.4097/kjae.2015.68.6.540

Kirk, R. E. (1996). Practical significance: A concept whose time has come. *Educational and Psychological Measurement, 56*(5), 746–759. https://doi.org/10.1177/0013164496056005002

Levy, I. P., & Adjapong, E. S. (2020). Toward culturally competent school counseling environments: Hip-hop studio construction. *Professional Counselor, 10*(2), 266–284.

Manis, A. A. (2012). A review of the literature on promoting cultural competence and social justice agency among students and counselor trainees: Piecing the evidence together to advance pedagogy and research. *Professional Counselor, 2*(1), 48–57. https://doi.org/10.15241/aam.2.1.48

Matthay, E. C., & Glymour, M. M. (2020). A graphical catalog of threats to validity: Linking social science with epidemiology. *Epidemiology 31*(3), 376–384. https://doi.org/10.1097/EDE.0000000000001161

McCall, M. C., Fanshawe, T. R., McCartney, D., Young, D., Nunan, D., & Heneghan, C. (2020). Online supplementation for teaching evidence-based medicine: Feasibility of a randomised-controlled trial. *BMJ Evidence-Based Medicine*. [Epub ahead of print: July 27, 2020]. https://doi.org/10.1136/bmjebm-2020-111372

McClendon, C., Neugebauer, R. M., & King, A. (2017). Grit, growth mindset, and deliberate practice in online learning. *Journal of Instructional Research, 8*, 8–17. https://doi.org/10.9743/JIR.2017.2

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). Evaluation of evidence-based practices in online learning: a meta-analysis and review of online learning studies. U.S. Department of Education, Washington DC.

Merrill, K. C., Braskamp, D. C., & Braskamp, L. A. (2012). Assessing individuals' global perspective. *Journal of College Student Development, 53*(2), 356–360. https://doi.org/10.1353/csd.2012.0034

Miller, S. C., McIntyre, C. J., & Lindt, S. F. (2020). Engaging technology in elementary school: Flipgrid's potential. *Childhood Education, 96*(3), 62–69.

Moore-Thomas, C., & Day-Vines, N. L. (2010). Culturally competent collaboration: School counselor collaboration with African American families and communities. *Professional School Counseling, 14*(1), 53–63. https://doi.org/10.1177/2156759X1001400106

Moorhead, H. H., Neuwer-Colburn, A. A., Edwards, N. N., & Erwin, K. T. (2013). Beyond the myth of the pajama party: Delivering quality online counselor education and supervision. *VISTAS, 2* https://www.counseling.org/docs/default-source/vistas/beyond-the-myth-of-the-pajama-party-delivering-quality-online-counselor-education-and-supervision.pdf?sfvrsn=ed102cd0_10

Nelson, J. A., Bustamante, R., Sawyer, C., & Sloan, E. D. (2015). Cultural competence and school counselor training: A collective case study. *Journal of Multicultural Counseling and Development, 43*(3), 221–235. https://doi.org/10.1002/jmcd.12016

Pedersen, P. B. (2002). The making of a culturally competent counselor. *Online Readings in Psychology and Culture, 10*(3). https://doi.org/10.9707/2307-0919.1093

Petersen, J. B., Townsend, S. D. C., & Onak, N. (2020). Utilizing Flipgrid application on student smartphones in a small-scale ESL study. *English Language Teaching, 13*(5), 164–176. https://doi.org/10.5539/elt.v13n5p164

Pietrantoni, Z., & Glance, D. (2019). Multicultural competency training of school counselor trainees: Development of the Social Class and Classism Training Questionnaire. *Journal of Multicultural Counseling & Development, 47*(1), 2–18. https://doi.org/10.1002/jmcd.12117

Research Institute for Studies in Education (2017). *Global Perspective Inventory: Theoretical foundations and scale descriptions*. Iowa State University.

Rodgers, L., & Furcron, C. (2019). Multicultural competence: Exploring the link between globalization, select demographics, and school counselors' self-perceptions. *International Journal for the Advancement of Counselling, 41*(2), 296–311. https://doi.org/10.1007/s10447-018-9367-6

Romero-Ivanova, C., Shaughnessy, M., Otto, L., Taylor, E., & Watson, E. (2020). Digital practices & applications in a COVID-19 culture. *Higher Education Studies, 10*(3), 80–87.

Schmidt, S. W., Glass, J. S., & Wooten, P. (2011). School counselor preparedness: Examining cultural competence regarding gay, lesbian, and bisexual Issues. *Journal of School Counseling, 9*(11). https://files.eric.ed.gov/fulltext/EJ933177.pdf

Snow, W. H., Lamar, M. R., Hinkle, J. S., & Speciale, M. (2018). Current practices in online counselor education. *Professional Counselor, 8*(2), 131–145. https://doi.org/10.15241/whs.8.2.131

Sue, D. W., & Torino, G. C. (2005). Racial-cultural competence: Awareness, knowledge, and skills. In R. T. Carter (Ed.), *Handbook of racial-cultural psychology and counseling, Vol. 2. Training and practice* (pp. 3–18). John Wiley & Sons Inc.

Thomas, J. R., Salazar, W., & Landers, D. M. (1991). What is missing in p less than .05? Effect size. *Research Quarterly for Exercise and Sport, 62*(3), 344-348.

Toquero, C. M. (2020). Challenges and opportunities for higher education amid the COVID-19 Pandemic: The Philippine context. *Pedagogical Research, 5*(4). https://doi.org/10.29333/pr/7947

Uehara, D. L. (2005). Diversity in the classroom: Implications for school counselors. *Multicultural Perspectives, 7*(4), 46–53. https://doi.org/10.1207/s15327892mcp0704_8

West-Olatunji, C., Goodman, R. D., & Shure, L. (2011). Use of multicultural supervision with school counselors to enhance cultural competence. *Journal of School Counseling, 9*(16).

Appendix A

Demographic Characteristics of Experimental Group Participants

Characteristics	*n*	%
Sex		
Female	57	87.9
Male	7	2
Geographical location		
Rural	30	51.7
Suburban	14	24.1
Urban	14	24
Ethnicity		
White	45	77.5
Black	7	12
Hispanic	5	8.6
American Indian	1	1.7
Age range, years		
20-30	53	50
31-40	25.8	25.4
41-50	17.2	20.5
51-60	1.7	2.9
61-70	1.7	0.09

Appendix B

Demographic Characteristics of Control Group Participants

Characteristics	*n*	%
Sex		
Female	39	88.6
Male	5	11.3
Geographical location		
Rural	23	52.0
Suburban	15	34.0
Urban	6	13.6
Ethnicity		
White	37	79.5
Black	7	15.9
Hispanic	0	0
American Indian	2	4.5
Age range, years		
20-30	20	43
31-40	11	25
41-50	11	25
51-60	2	4.5
61-70	0	0