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Survey of Telepractice in Speech-Language Pathology Graduate Programs

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Survey of Telepractice in Speech-Language Pathology Graduate Programs
Abstract: The purpose of this project is to gain knowledge on the rate of telepractice technology used in different speech-language pathology graduate school programs across the country. There is little information known about the training available to graduate students in the field of speech-language pathology. This study examined the current state of graduate level training in telepractice technology in speech-language pathology graduate programs.

Method: A 26 question survey was sent via email to 259 of the graduate school program directors in speech-language pathology graduate programs across the United States. The names of the program directors were found on the American Speech-Language-Hearing Association (ASHA) EdFind database and their email addresses were found from each of the individual graduate programs' websites. 84 program responses were collected in total.

Results: A 32.43% response rate was achieved with a majority of respondents indicating that the students respond positively to learning about and using telepractice technology. Only 21.95% of participants indicated that telepractice is taught directly in classes and used in clinical applications.

Conclusion: Telepractice is increasingly gaining popularity in the profession of speech-language pathology. With this increase, graduate programs need to adopt training methods in academic and clinical areas in order to adequately train students in this area. This training will better prepare graduate students for their future work environment.
The Survey of Telepractice in Speech-Language Pathology Graduate Programs is intended to evaluate the amount of telepractice training in speech-language pathology graduate programs. "Telepractice is the application of telecommunications technology to the delivery of speech language pathology and audiology professional services at a distance by linking clinician to client/patient or clinician to clinician for assessment, intervention, and/or consultation." (ASHA, n.d.). Telepractice is a video conferencing device where the clinician and client can see each other through a webcam on a computer monitor. Speech therapy is provided over the computer screen, without actual face-to-face contact. Telepractice therapy is convenient for clients with mobility issues, those that do not have access to transportation, and those whom live in rural areas, far from speech services. Speech therapy through telepractice often involves parent training as well as direct therapy to children and adults. Venues for telepractice include schools, medical centers, rehabilitation hospitals, community health centers, outpatient clinics, universities, clients/patients' homes, residential health care facilities, childcare centers, and corporate settings. There are no limits to where telepractice can be implemented, as long as the services are available and follow the national, state, institutional, and professional regulations and policies (ASHA, n.d).

Method:

A 26 question survey titled "Survey of Telepractice in Speech-Language Pathology Graduate Programs" was created by SurveyMonkey.com, which is a site used to produce professional, online surveys. Our survey link was then emailed to the graduate program directors of speech-language pathology graduate programs across the country. Questions included asked information on the demographics of the graduate programs, the use of telepractice technology,
the implications of telepractice, and the successes of the technology. Our survey was approved by the Institutional Review Board (IRB) at The University of Akron in Akron, Ohio.

Participants:

ASHA’s EdFind database was used in order to locate the speech-language pathology graduate schools. Individual program websites were used to locate the graduate program directors email addresses. In total, 259 graduate program directors were contacted through email and asked to participate in our survey.

Procedure:

We initially sent out the first round of emails to the graduate program directors in March of 2015. In order to gain more responses, we sent the email with the link to the survey several more times through the following months until July when the last email reminder was sent out. The survey link was also sent to Midwest Clinic Director’s Listserve in order to gain more responses from program directors across the nation. In total, we received responses from 84 different program directors.

In order to participate in the study, each participant was required to read an informed consent letter that had been approved by the University of Akron Institutional Review Board (IRB.) The email included a letter of consent, an explanation of our research, and the link to the survey. By participating in the survey, the participants agreed to the terms and conditions of the survey. All responses were kept confidential and collected over a four month period.

Demographics:

A total of 84 participants completed the survey. Responses were received from states across the country. Respondents were asked to identify how many graduate students are enrolled in their program currently. The number of students enrolled in each graduate school varied from
25-199 students. Respondents were also asked how many faculty were on staff currently. The number of faculty in each program ranged from 5 to 36. Respondents were asked to identify the number of clients their clinic served annually. The number of clients served annually through the clinic ranged from 30-500 plus clients per year. Of the 59 responses recorded, 56 of the programs were identified as a face-to-face program (94.92%). Only 3 (5.08%) of the programs were a hybrid (face-to-face and distance learning,) and just 1 (1.69%) of programs was considered a 100% online-based program.

**Telepractice is:**

The first official question in the survey asked respondents to identify whether telepractice was either not offered (31.71%), addressed (in lecture, readings, and discussions) in one or more classes (35.37%), addressed in both courses and clinical training (21.95%) part of clinical training only (9.76%), obtained in off-campus practicum/training sites (7.32%) or other (please specify) (6.10%). There were a total of 82 responses collected. The majority of the answers were that telepractice is addressed (in lecture, readings, and discussions) in one or more classes (35.37%). Some of the "other" responses are as follows: "Addressed in some classes and in some practica but not part of the core curriculum." "Briefly mentioned in graduate professional issues course." "Currently working on clinical component."
In what year of your speech-language pathology curriculum is telepractice taught?:

Only participants who answered that telepractice was included in the curriculum in the previous question were asked to proceed to this question. A total of 38 responses were collected for this question. 20 participants (52.63%) indicated it was included in the first year of graduate school, 16 participants (42.11%) indicated it was included in the second year of graduate school, 5 participants (13.16%) indicated it was not taught in the curriculum, and 4 participants (10.53%) indicated other (please specify.) Some of the "other" responses typed in included: "Undergraduate seniors," "Clinical practicum in graduate school," and "It depends on where student takes assistive technology course."
How long have you included telepractice in your speech-language pathology curriculum?

Only participants who answered that telepractice was included in the curriculum in the previous question were asked to proceed to this question. A total of 38 respondents answered this question. 5.26% answered less than one year, 10.53% answered 1 year. 31.58% answered 2 years. 13.16% answered 3 years. 15.79% answered 4 years, 2.63% answered 5 years. 7.89% answered 6-10 years. 0% of respondents answered that telepractice was included in the curriculum for more than 10 years. This is most likely because telepractice is relatively new and was likely not available to graduate programs 10 or more years ago. 13.16% indicated that telepractice is not included in the curriculum.
What challenges did you experience including telepractice in your curriculum?

Only participants who answered that telepractice was included in the curriculum in the previous question were asked to proceed to this question. A total of 38 responses were collected for this question. Examples of some of the written responses received are as follows:

"Understanding licensure requirements; setting up expectations and cultural differences in how services are typically delivered." "This is a brief topic, identified as a resource, but not taught how to employ therapy via telepractice." "Having enough time to fit it in." "Meeting privacy regulations. Obtaining clear guidelines from our state licensing agency." "We have not integrated it officially into the curriculum. It is a topic in our Professional Issues course." "Too much content to be covered in courses." "Ongoing tech support and updating of software and hardware, ongoing staff training." "Technical difficulties with the audio portion." "Limited info with regard to EBP." "Making the transmission HIPAA secure; working with the computer system at
the receiving site which may have insufficient bandwidth." Note: These are 10 examples of the 38 written comments provided.

**How did you attempt to overcome these challenges?**

Only participants who answered that telepractice was included in the curriculum in the previous question were asked to proceed to this question. A total of 38 written responses were collected from this question regarding the challenges experienced including telepractice in the graduate school curriculums. This question yielded a wide variety of answers. Examples of some of the written responses are as follows: "We plan to pilot telepractice." "We haven't. Reimbursement in this state does not allow for services delivered via telepractice at this time." "Provide a brief introduction of telepractice." "Work with IT and problem-solving during sessions." "We include seminars and trainings in the graduate on-campus clinical practicum to add depth of knowledge." "Use phone as a back up." "Had to educate faculty and others about the need to include this content." "Establish a relationship with the telepractice SLPs in the area." "Purchased new technology." "Through statewide contacts." Note: These are 10 examples of the 38 written comments provided to this question.

**Have you seen higher therapy attendance rates with telepractice clients or on-campus clients?**

Only participants who indicated that telepractice is included in their curriculum were asked this question. 38 responses were collected in total for this question. The majority of the respondents indicated that this question was not applicable to their graduate program at 55.26%. 5.26% indicated that there was higher therapy attendance rates from telepractice clients. 2.63%
indicated there was higher attendance rated from on-campus clients who were seen in person. 5.26% indicated that high attendance rated were seen with both telepractice and on-campus clients, and 34.21% indicated that there was no significant difference in therapy attendance rates.

Please rate the following: How have your students responded to learning about and working with telepractice? (1= very negative, 10=very positive.):

Only respondents who indicated that telepractice was included in their curriculum were asked to answer this question. There were a total of 35 respondents to this question. The majority of respondents rated the students response as 10, or very positive (31.43%). This indicated that the majority of students who have learned about or worked with telepractice technology have responded positively and enjoyed it. 0% of respondents rated the students' responses at a 1, 2. The average weighted response was a 7.69, indicating a high success rate of students response from learning about and working with telepractice.
Please rate the following. There is a decrease in on-campus client services due to traveling challenges. (1= strongly disagree, 10= strongly agree)

This question was only asked to those who indicated that telepractice was included in the curriculum. There were a total of 28 responses in all. The highest number of participants ranked the question at a 1 (32.14%,) showing that there is typically not a decrease in on-campus client services due to traveling challenges. The weighted average is a rating of a 4.39.
Please rate the following. Telepractice is equally beneficial to the clients’ being served in the on-campus clinic? (1= strongly disagree, 10= strongly agree)

This question was only asked to those who indicated that telepractice was included in the curriculum. A total of 27 responses were collected. The majority of participants ranked the benefit of telepractice vs. typical on-campus therapy at a 5 (33.33%). A large portion of participants also ranked the question at a 10 (25.93%), meaning they think telepractice therapy and typical on-campus therapy are equally beneficial. The average rating for this question is a 7.07.
Please rate the following. There is increased client distraction while using telepractice for therapy. (1= strongly disagree, 10=strongly agree)

Only respondents who indicated that telepractice was included in the curriculum were prompted to answer this question. A total of 27 answers were collected from this question. The majority of responses leaned towards disagreeing that there was more client distraction while using telepractice for therapy. The average weighted score for this question is 4.11.
Which clinical experience does your program offer in telepractice? Check all that apply.

Only respondents who indicated that telepractice was included in the curriculum were prompted to answer this question. A total of 38 responses were collected for this question. The prominent choice at 47.37% indicated that clinical experience using telepractice is obtained from an on-campus setting. 7.89% indicated internship, 13.16% indicated externship, 36.84% indicated not applicable, and 10.53% specified an "other" option. Some of the "other" responses are as follows: "Students are on-campus doing teletherapy with a public school off-site." "Mostly our AUD students experience telepractice, and few of our SLP students experience it when they go to the VA." "Conducted some single subject research with telepractice with students."
How long have you offered clinical experiences in telepractice?

Only respondents who indicated that telepractice was included in the curriculum were prompted to answer this question. 37 responses were collected in total for this question. The majority of respondents indicated that they have not yet offered clinical experiences in telepractice, meaning that telepractice is only taught in classes and not used clinically. 0% of respondents indicated that they have included clinical experiences in telepractice for more than 10 years.
What areas are serviced with telepractice? Check all that apply.

Only respondents who indicated that telepractice was included in their curriculum were prompted to answer this question. A total of 33 responses were collected. The most common area serviced with telepractice was "language intervention" at 42.42%. Other common area serviced in telepractice were "articulation/ phonology intervention" at 36.36% and "fluency intervention" at 27.27%.
What populations do you serve with telepractice? Check all that apply.

Only respondents who indicated that telepractice was included in their curriculum were prompted to answer this question. 20 responses were collected for this particular question in total. The most common population served with telepractice at 70% was the school aged population, 6-18 years. The least common population served with telepractice at 20% was the geriatric population, 65+ years.
In which course(s) is telepractice included in your speech-language pathology curriculum?

Only respondents who indicated that telepractice was included in their curriculum were prompted to answer this question. A total of 38 responses were written. Some examples of the written answers provided include: "Professional Issues," "Clinical methods," "Pediatric Language Disorders clinic," "Undergraduate Instructional Methods in CSD," "School Age Language Disorders," "Various clinical practicum courses," "Neurogenic Language Disorders," "Clinical Methods, Dysphagia," "Stand-alone courses in telepractice," and "Introduction to Communication Disorders." Note: These are 10 examples of the total of 38 responses.

Do you have plans to include telepractice in your curriculum?

This question was only prompted to participants who indicated that telepractice was not currently included in their curriculum. A total of 24 answers were received. 25% indicated that they do have plans to include telepractice in their curriculum. The majority of answers at 45.83%
indicated they do not have plans to include it, and 29.17% were not currently sure if it would be included or not.

Please indicate why telepractice is not currently included in your graduate clinic training?

Check all that apply.

This question was only prompted to participants who indicated that telepractice was not currently included in their curriculum. A total of 24 responses were received. The most common reason for not including telepractice in the curriculum was because of lack of funding/resources at 58.33%. Other leading reasons for not including telepractice in the curriculum include: lack of technology at 50%, having no faculty trained in this area at 50%, and having no room in the current curriculum at 41.67%.
Discussion:

There is much documented information regarding the use of telepractice for speech-language pathologists in professional settings, but little information has been collected regarding the training graduate students in speech-language pathology programs receive. The present study surveyed program directors in speech-language pathology to determine the extent to which academic and/or clinical training in telepractice service models is available to graduate programs in the United States. We also determined the nature of training in speech-language pathology graduate programs as well as the different barriers when implementing telepractice training on a graduate school level. According to a 2002 survey completed by The American Speech-Language Hearing Association, titled "Survey Report on Telepractice Use Among Audiologists and Speech-Language Pathologists," Approximately one tenth (11%) of the respondents (both speech-language pathologists and audiologists) reported using telepractice to deliver services and 43% of respondents that did not currently use telepractice, expressed interest in using it in the
future. (ASHA, 2002.) This shows that professionals in the field of speech pathology are currently using telepractice and also interested in its growth in the field, and it is therefore important to learn about the training graduate students receive in this area.

When we asked participants about their inclusion of telepractice in academic and clinical training, a modest 21.95% reported teaching it in both course material and clinical practice. The most common answer reported were that telepractice was either only taught in one or more courses (35.37%) or that telepractice is not offered at all (31.71%). This shows that the training in telepractice technology is certainly lacking and many graduate students are not immediately prepared to come on to a job that involves telepractice without additional training in that area.

When considering the programs who have yet to include telepractice in their curriculum, there are several different factors influencing the innovation. For example, when we asked the participants why it is not included in the curriculum, we received a variety of responses. The responses included reasons about lack of funding or resources, lack of room in the curriculum, no faculty being trained in this area, and more. These responses show that there are still many limitations to why telepractice is not being taught in certain university programs. To begin telepractice training, there often needs to be resources, funding, time, and faculty willing to be trained in this area. For programs lacking these essentialities, it is difficult to add telepractice to curriculums.

Limitations:

This study was an initial attempt to gather information regarding clinical and academic available training in telepractice technology in speech-language pathology graduate programs.
Our results provide a look into the current status of training across the nation. Our results yielded a variety of responses from different states and demographics, however, there are some limitations to this study. First of all, one of the main limitations is the response rate of participants. Out of the 259 graduate programs our survey was sent to, a total of 84 responses were returned at a 32.43% rate. In order to provide more accurate results, a higher number of responses would be beneficial. We also are not aware of the total percentage of speech-language pathology services provided by telepractice currently. This information would help us better assess the graduate programming training in this field and the need for training.

**Conclusion:**

The main goals for this study were to evaluate the extent to which graduate programs in speech-language pathology are including telepractice training in their academic and clinical curriculum, to evaluate the limitations of including telepractice, and the current benefits of telepractice training. Currently only 21.95% of participants indicated that telepractice is taught directly in classes and used in clinical applications. 45.83% of respondents indicated that they do not currently have plans to include telepractice in their curriculum and 25% do have plans to include it in the curriculum.

Advancements in technology will popularize the application of telepractice in the field of speech-language pathology and opportunities for greater access to speech services will increase with the use of telepractice. Telepractice is growing as the access and use of technology grows and we predict it to become a widely used form of therapy, especially in rural communities far from speech-language pathology services. In order to prepare students for the work environment and for the growing field of telepractice, graduate programs will need to incorporate both
academic and clinical training into their curriculum. These opportunities for training at the graduate school level will improve efficiency and be more cost-effective in the long run once students are in the work field. In the future, more research should be done to investigate different ways to implement telepractice training into graduate school curriculums.
Works Cited:


<http://www.asha.org/Practice-Portal/Professional-Issues/Telepractice/>.