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The Effects of Covid-19 on Clinical And Academic Instruction Across Communication Sciences And Disorders And Audiology Programs: Student And Instructor Perspectives

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THE EFFECTS OF COVID-19 ON CLINICAL AND ACADEMIC INSTRUCTION ACROSS COMMUNICATION SCIENCES AND DISORDERS AND AUDIOLOGY PROGRAMS: STUDENT AND INSTRUCTOR PERSPECTIVES

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ABSTRACT

This qualitative study analyzed student and instructor responses to survey questions regarding the effect of COVID-19 on clinical and academic instruction. Two hundred sixty-three accredited communication sciences and disorders and audiology programs across the United States received the survey. Overall, there were 931 participants, including both students and instructors. These participants responded to 19 content questions on the survey developed to help answer five research questions: (1) how were participants affected in terms of their emotional state? (2) Were students and instructors prepared for Forced Online Instruction (FOI)? (3) Were students and instructors comfortable with the level of education provided online? (4) Were students and instructors comfortable with the technology required for FOI? (5) Did students and instructors miss the socialization of classroom learning? The study found that instructor and student responses differed along the lines of academic instruction. Only 25% of students agreed that they received comparable education online compared to in-person, whereas 40% of instructors felt they provided equivalent instruction online. Furthermore, students also reported that their clinical education was not comparable online to in-person. On the other hand, instructors believed they provided equivalent instruction. Instructors (31%) felt as though they provided equivalent clinical education online,

whereas 20% of students felt as though the clinical education they received was equivalent online to in-person.

Keywords: COVID-19, forced online instruction, communication sciences and disorders and audiology programs, academic instruction, clinical instruction, student perspective, instructor perspective, speech-language pathology

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CHAPTER I

INTRODUCTION

In March 2020, the COVID-19 pandemic caused widespread closings of universities in the United States and forced a transition to remote instruction. This change had implications in communication sciences and disorders and audiology programs for both students and instructors. One area that presented with grave uncertainty was the sudden introduction of teletherapy. Most students providing in-clinic therapy services, as well as clients receiving speech and hearing services, were suddenly catapulted to an uncertain and unfamiliar service delivery platform utilizing telecommunication technology (ASHA, 2020a). From the academic perspective, content information delivery involved adjusting the courses' curricula to fit various online platforms. Many instructors were not prepared to teach online because they were unused to instructing via these different technological methods. Most instructors had minimal preparation time to deliver a course of study online that was initially designed for face-to-face instruction. The "typical planning, preparation, and development time for a fully online university course is six to nine months before the course is delivered" (Hodges et al., 2020).

The purpose of this study is to examine the effects of forced online instruction (FOI) from the perspectives of students and instructors. This study looked at how each

participant responded to the COVID-19 pandemic and compared clinical and academic responses from instructor and student perspectives. It examines participants in terms of the following domains: (1) emotionality in response to the pandemic, (2) socialization or lack thereof as a result of university closings in response to COVID-19, (3) comfort level with technology, (4) comfort level with the education provided via online platforms and (5) preparedness for online learning and teaching.

Research Questions

Five research questions were identified for this study:

1. How were participants affected in terms of their emotional state?
2. Did students and instructors miss the socialization of classroom learning?
3. Were students and instructors comfortable with the technology required for FOI?
4. Were students and instructors comfortable with the level of education provided online
5. Were students and instructors prepared for FOI?

Defining Terminology

The following terms used in this study are operationally defined as follows:

Forced Online Instruction for this study refers to remote or online instruction secondary to COVID-19 university closures.

Comfort level with education – refers to online learning curriculum adhering to the set curriculum for the course.

Synchronous learning – online or distance learning that happens in real-time.

Asynchronous learning – online or distance learning that does not require real-time interaction

Teletherapy – As defined by ASHA, is the application of telecommunications technology to the delivery of speech-language pathology and audiology professional services at a distance (ASHA, 2020a)

COVID-19 – The official name for the disease that caused the 2019 novel coronavirus outbreak (CDC, 2020)

Literature Review

The American Speech-Language-Hearing Association (ASHA) released surveys to their members in March and May 2020 related to the implications of COVID-19. The article by ASHA discussed how the participants responded to survey questions that revealed the top three challenges university-based professionals and students faced during the pandemic from a field of 41,521 responses (ASHA, 2020b). University-based professionals and students agreed that adequately balancing personal and professional responsibilities was one of the top challenges. From this ASHA survey, students also reported difficulty adapting to learning online and the inability to complete graduation requirements as being among their top challenges. In contrast, university-based professionals reported teaching remotely and delivering clinical services via teletherapy as being in their top three challenges (ASHA, 2020b).

In commenting on the ASHA surveys, Volkers (2020) revealed that 89% of faculty survey respondents and 76% of student respondents listed online teaching and learning as a significant challenge related to the pandemic. Volkers also shared the findings that 98% of graduate speech-language pathology students and 94% of faculty members who

responded to the survey reported that the pandemic had a major or moderate impact on their academic life.

The few recent studies investigating the effects of COVID-19 identified many stressors on both students and instructors related to obtaining all of the ASHA required 400 clinical hours before graduation. Lecointe (2020) reported that ASHA made a statement informing members and students that the Council for Clinical Certification decided not to increase the allotted 75 simulation hours that would count towards the 375 clinical clock hours required to graduate. This decision was concerning to both instructors and students with limited time before graduation. These concerns were abated when teletherapy became an option for providing a new and effective way to obtain clinical hours (Garrett & Mayo, 2020). However, Garrett and Mayo addressed that while teletherapy was an effective option to offer clinical services, students could not access assessments or materials to provide effective therapeutic interactions because the universities were closed for the pandemic. From an instructor's point of view, there were concerns that students did not have access to the technology (i.e., personal computers and WIFI) necessary to provide teletherapy services and to attend online classes (Mayo, 2020).

An article by Doug Lederman addressed the shift to remote learning secondary to COVID-19. This article discussed the results of a survey including 826 faculty members and administrators at 641 universities across the country as they began to close down in-person learning. Lederman reported that the majority of institutions (90%) engaged in a form of emergency virtual education to conduct or complete the spring term. Also, those institutions that did not were typically colleges that already were exclusively online.

Lederman focused immensely on how instructors changed their teaching approaches and compared results between instructors who have versus have not taught online before the shift secondary to COVID-19. The study found that when comparing instructors with and without previous online teaching experience, they shared similar expectations for their students, with only a few exceptions. Furthermore, Lederman pointed out that instructors with previous online experience were 15 percentage points less likely than their colleagues to lower their expectations for how much work students could do. These instructors were also less likely to change the nature of the assignments they required students to complete.

An article published on Baylor University's website entitled "Socialization in Online Learning" discussed the challenges of socialization in the online learning setting. This article stated that socialization is how individuals establish connections with others and adopt specific values needed for social interactions. More specifically, the article referenced a study by Capdeferro and Romero (2012) on the impact that online learning has on socialization. Capdeferro and Romero found that there were adverse effects on students' emotions and learning outcomes in online learning settings. The Baylor article also stated that there are many potential barriers to student learning and socialization in an online environment. A few of these barriers included time lapses between interactions, lack of explicit communication norms, and the absence of visual and auditory conversation cues. In conclusion, the article stated that the instructor has a responsibility for encouraging socialization and a sense of community for online learners. The article suggested that facilitating effective discussion is an important pathway to socialization in the classroom, whether in an in-person or online setting.

Older online learning literature. Since online learning dates back many years, it was important to look at what was said about online learning at the inception compared to more recent studies. In considering older online learning literature, an article discussing the growth of online learning by Allen and Seaman (2007) discussed how online learning changed over five years. This study answered multiple research questions related to the strengths and weaknesses of online education to determine further acceptance of this style of education and identify barriers. According to Allen and Seaman, online learning has become more popular, indicated by increased enrollment rates for online classes. In 2006, approximately 3.5 million students (nearly 20% of all higher education students in the country) enrolled in at least one online course, a 10% increase over the five years this study analyzed. The article stated that institutions provide access to online courses for improved student access and increased degree completion rates. Some barriers to widespread adoptions of online learning were: (1) A need for more discipline from online students, (2) Faculty acceptance of online instruction, (3) Online course development and delivery have a higher cost, and (4) Academic leaders believe that potential employers are less likely to accept online degrees. Since the time this article was published, the likelihood that the number of students enrolled in online courses has increased, considering Allen and Seaman (2007) reported that 69% of academic leaders believed that the demand from students for online learning was growing. While this article was very informative as it discussed the widespread and growing use of online learning among higher education students prior to the COVID-19 pandemic, it did not discuss the implications of an unexpected and forced shift to online learning.

McBrien et al. (2009) aimed to discover what students identified as strengths and weaknesses of synchronous learning. They found that students often commented on the convenience of online learning. The comments were often related to the ease of attending class from home, saving money on travel expenses, and attending class when ill or having to care for children. Students in this study also discussed how online created opportunities for more advanced conversation and supported their engagement in class discussions. However, students in this study also reported various challenges with synchronous online learning. One challenge being technical issues negatively affecting student engagement. Signing on to class sessions, microphone difficulties, and being disconnected from the session were some of the technical issues students listed. In this article, some students in the study mentioned that they missed face-to-face contact with their peers, indicating that online learning may not be their preferred form of learning. McBrien et al. (2009) discussed how for some students, face-to-face human interaction that is missing in online learning reduces their sense of participating and belonging in class. This aspect of online learning is critical to know for the future of online learning and instructors. This lack of student belonging and participation in online classes indicates a need for technical training and support to reduce technical issues and consider ways to include opportunities for simulated face-to-face interactions during online learning.

Newer online learning literature. The following articles allow for comparisons and consider how online learning has evolved leading up to COVID-19. Research by Dumford and Miller (2018) indicated significant relationships between taking online courses and student engagement. The students in the study who took greater numbers of

online courses were less likely to engage in collaborative learning, student-faculty interactions, and discussions with others compared to students in traditional classrooms. Dumford and Miller also reported that students taking a greater number of online courses reported less exposure to effective teaching practices and lower quality interactions. They also discussed how institutions and faculty members should consider the relationship between the number of online courses taken and the level of engagement. Institutions may consider these findings when designing online courses and encourage their faculty members to contemplate ways of enhancing student engagement across varying content delivery types. For this study, this piece of literature is vital as it verifies that student engagement in online courses remains lower for some students compared to in-person classrooms.

Finally, Sadeghi (2019) discussed the advantages and disadvantages of distance learning for students seeking a college degree or university program. In this article, Sadeghi listed the advantages of online learning as follows: (1) Study from Anywhere, Anytime, (2) Saving Significant Amount of Money, (3) No Commuting, (4) Flexibility to Choose, (5) Saving Time, and (6) Earn While You Learn. Overall, the advantages Sadeghi listed all related to the flexibility and freedom of not being bound to the rigidity of in-person learning. However, the article also discussed the disadvantages of distance learning which may be important to consider for this study. Sadeghi (2019) listed the disadvantages of online learning as (1) High Chances of Distraction, (2) Complicated Technology, (3) No Social Interaction, (4) Difficulty Staying in Contact with Instructors, and (5) Job Markets Do Not Accept Online Degrees.

None of the previously discussed studies specifically addressed the direct impact that FOI had on students and instructors in communication sciences and disorders and audiology programs in terms of emotionality, socialization, preparedness, comfort level with technology, and comfort level with education. This current study explicitly addresses these concerns about higher education students and instructors within an FOI environment and covers five specific domains.

CHAPTER II

METHODOLOGY

Cleveland State University's Institutional Review Board (IRB) approved this qualitative study on October 2, 2020. The data collection commenced using a survey provided through Qualtrics. Participants for the study were recruited from accredited communication sciences and disorders and audiology programs across the United States as listed on The American Speech-Language-Hearing Association (ASHA) website. The researcher sent an email to each program director or named representative for the university from a list of accredited universities on the ASHA website. The email contained a link to the survey and a request to forward the survey to each instructor and student in their program. The survey included a statement that completing the survey constituted consent to participate in the study (see consent form in Appendix A).

Survey

The survey consisted of a consent form attached at the beginning of the survey to accept anonymous participation in the study, followed by a demographics section including seven questions and nineteen content questions. The survey questions fell into five domains: emotionality, preparedness, comfort level with education, comfort level with technology, and socialization. Three subsections within the survey addressed

questions intended for instructors only, students only, and both instructors and students (see survey in Appendix B). The researcher developed each survey question to reflect their concerns about personal experiences during the COVID-19 pandemic from a speech-language pathology graduate student perspective. The researcher included survey questions related to instructors to reflect the opposite viewpoint of the student as the researcher wanted to analyze opinions related to this topic beyond the student perspective.

Participants

Participants in this study included graduate and undergraduate students in the fields of speech-language pathology and audiology, academic and clinical faculty from accredited communication sciences and disorders and audiology programs across the nation. The researcher chose these participants to include the primary student and instructor types expected to be involved in communication sciences and disorders and audiology programs. Overall, there were 931 responses to the Qualtrics survey received by 263 institutions; however, after sorting through the data for the signed consent agreement (checked box), there were 812 participants who provided consent to participate and completed the survey entirely. The researcher anticipated these participants to identify as either a "student" or an "instructor"; however, 35 participants unexpectedly indicated that they are both an instructor and a student. This disparity provided additional data leaving the number of instructor responses and student responses at 847 (812 participants + 35 who answered as both student and instructor = 847). This disparity could have been due to different program requirements (i.e., instructors must also continue their education, making them a student) or varying personal beliefs

regarding how they identify with the survey demographics. In conclusion, the sorting of participants who identified themselves as an academic instructor, clinical instructor, or both an academic and clinical instructor left the number of "instructors" at 124. In comparison, sorting the data for the number of participants who also (or only) identify as "student" left 723 responses for comparing to "instructors" (124 instructors + 723 students = 847).

Table 1 Participants

Number of Completed Surveys	Number of Students	Number of Instructors	Number who Indicated Both
812	723	124	35

Data Sorting

The researcher exported the data from Qualtrics to Microsoft Excel for organization and further analysis. Utilizing Excel, the data were sorted to include only 100% completed surveys and surveys that checked "yes" on the consent form. This sorting process left 812 usable participant responses. From there, the data were sorted according to "yes" responses to demographic questions (for example, "I am an academic instructor") to assign a numerical value for the types of participants in the study (Number of participant types in Table 1). Next, the data were organized even further to distinguish how the participants responded to each question.

Each participant type was organized into separate folders within the main excel spreadsheet that contained all of the data uploaded from Qualtrics. These folders were titled according to how they responded to the demographics questions. The folders included classroom instructors, clinical instructors, academic and clinical instructors, SLP students, audiology students, 1st-year graduate students, 2nd-year graduate students,

students with clinical experience, students not in graduate school, “instructors” in general, and “students” in general. The number of participants in each participant type was found using the filter feature in the main spreadsheet containing all of the data.

The Microsoft Excel filter feature was used during this step of sorting this study's data. This feature allows the user to find specific data quickly by allowing the individual to control what data they want temporarily included and excluded. The filter hides columns or rows in the spreadsheet if they do not meet the filtering criteria indicated by the individual using it. For this study, the filter feature was utilized by selecting responses to each demographic question that would only include the participants’ surveys in the targeted demographic. For example, when trying to identify answers that participants who only identify as "academic instructors" provided, the filter feature was used to include "yes" responses to the demographics question "Are you a classroom instructor for a certified Speech and Hearing program?" and "no" to all other demographics questions. This process provided a specific number of participants in each demographic group and organized the data to provide numerical information for how they responded to each of the survey questions. Finally, the numerical information from the Excel spreadsheet was inserted into figures using Microsoft Word. These figures were used to analyze how each participant responded to the survey questions and compare instructor and student responses.

CHAPTER III

RESULTS

The purpose of qualitative research is to present the participants' own experience of a particular phenomenon from their perspective, and it aims to interpret what was said and why. Consequently, much of the data are reported descriptively, staying faithful to the participant's response. This qualitative study presents the data gathered from communication sciences and disorders and audiology programs across the country in terms of descriptive statistics.

The results of this study are presented from the survey sent out to 931 participants. Figure 1 shows the demographics of the participants. As previously reported, of the 931 participants who responded, only data from 812 were reportable. There were 119 participants whose data could not be included in this study because of failure in each case to complete the entire survey. The demographics of those who completed the entire survey are represented in figure 1. The survey covered 19 questions, excluding demographic information (figures 2-26).

Figure 1

Demographics

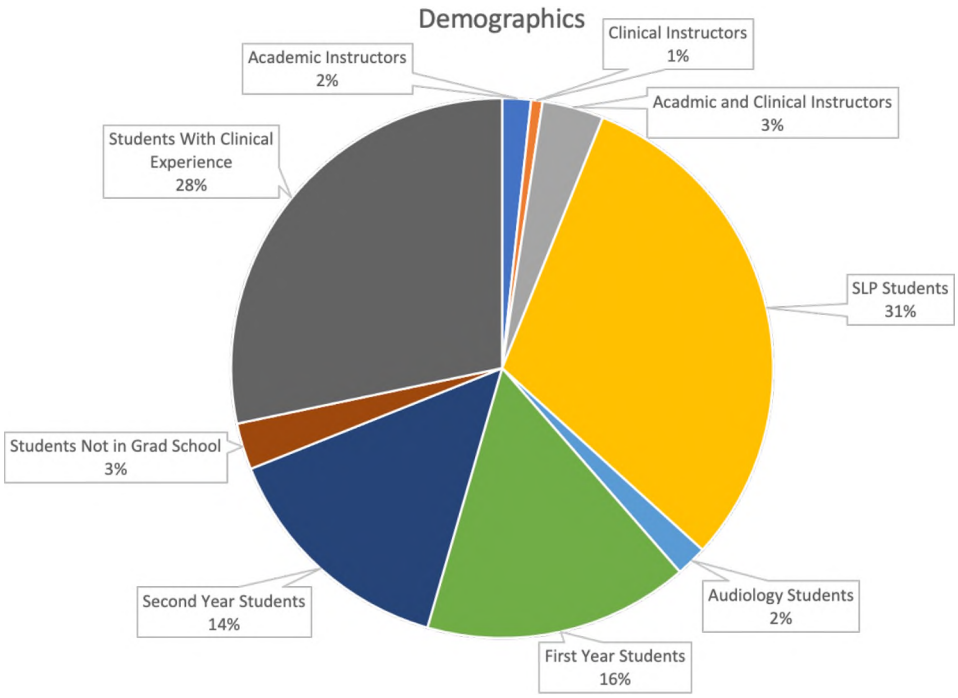


Figure 1 presents the participant demographics for this study. Thirty-five (2%) participants identified as academic instructors, 14 (1%) identified as clinical instructors, and 75 (3%) considered themselves both academic and clinical instructors. There were 628 (31%) SLP 38 (2%) audiology students. Three hundred twenty-four (16%) students were in their first year of graduate school, 296 (14%) were second-year graduate students, and 57 (3%) were not in graduate school. Of the student respondents, 579 (28%) reported having clinical experience.

Survey Questions for Both Instructors and Students

Figure 2

Socialization of the Classroom: Student Responses

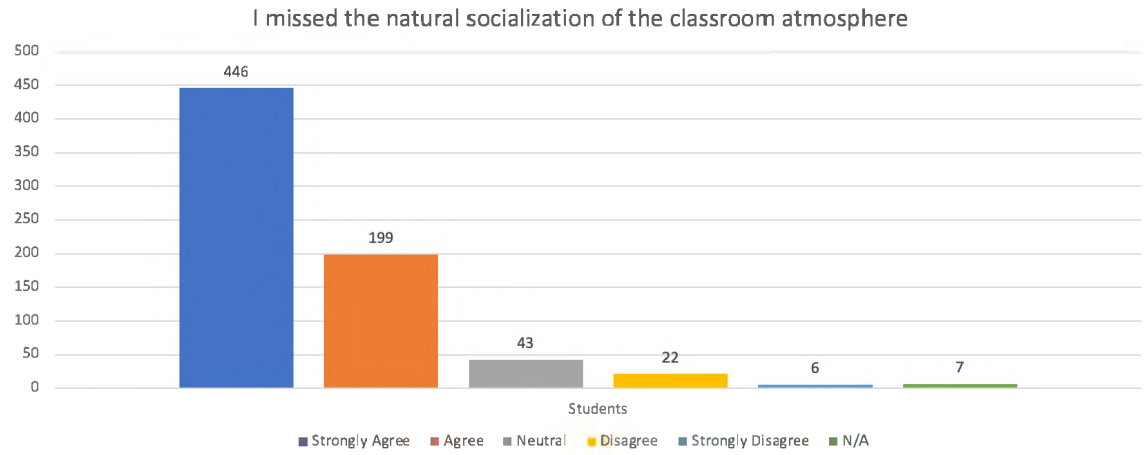
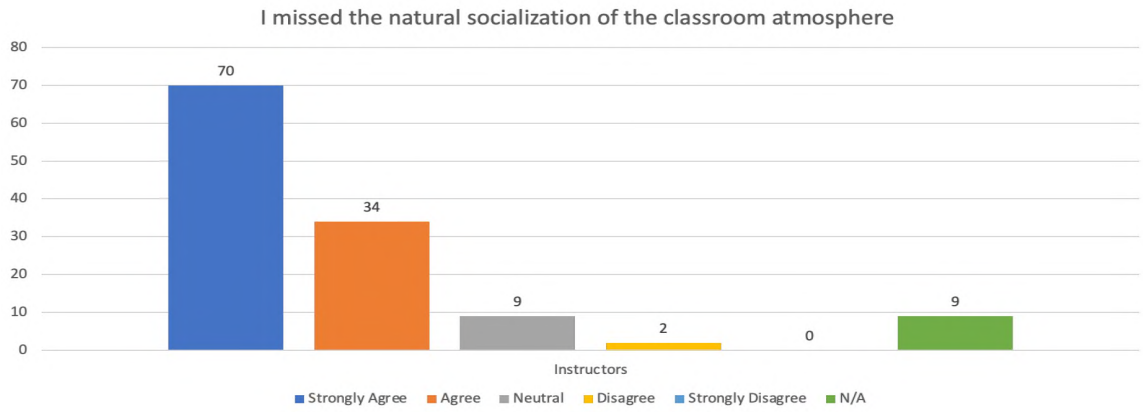


Figure 2 presents student responses to question 1 of the survey: "I missed the natural socialization of the classroom atmosphere." Four hundred and forty-six students strongly agreed with this question. One hundred and ninety-nine students agree with the statement. On the other hand, 43 were neutral. In terms of disagreement, 22 students disagreed that they missed the natural socialization of the classroom, 6 strongly disagreed, and 7 had no opinion.

Figure 3

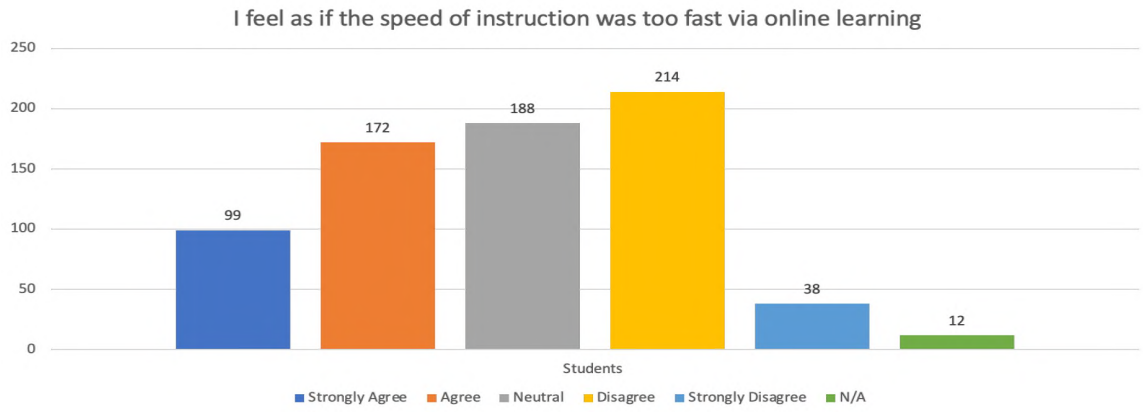
Socialization of the Classroom: Instructor Responses



From the instructor perspective, Figure 3 provides responses to question 1 of the survey: "I missed the natural socialization of the classroom atmosphere." Seventy instructors strongly agreed with this question. Thirty-four instructors agree with the statement. On the other hand, 9 were neutral. In terms of disagreement, 2 instructors disagreed that they missed the natural socialization of the classroom, 0 strongly disagreed, and 9 had no opinion.

Figure 4

Speed of Instruction: Student Responses



When asked to respond to the statement in question 2 of the survey, "I feel as if the speed of instruction was too fast via online learning," 99 students strongly agreed with this question. One hundred seventy-two students agree with the statement. On the other hand, 188 were neutral. In terms of disagreement, 214 students disagreed that the speed of instruction was too fast via online learning, 38 strongly disagreed, 12 had no opinion (Figure 4).

Figure 5

Speed of Instruction: Instructor Responses

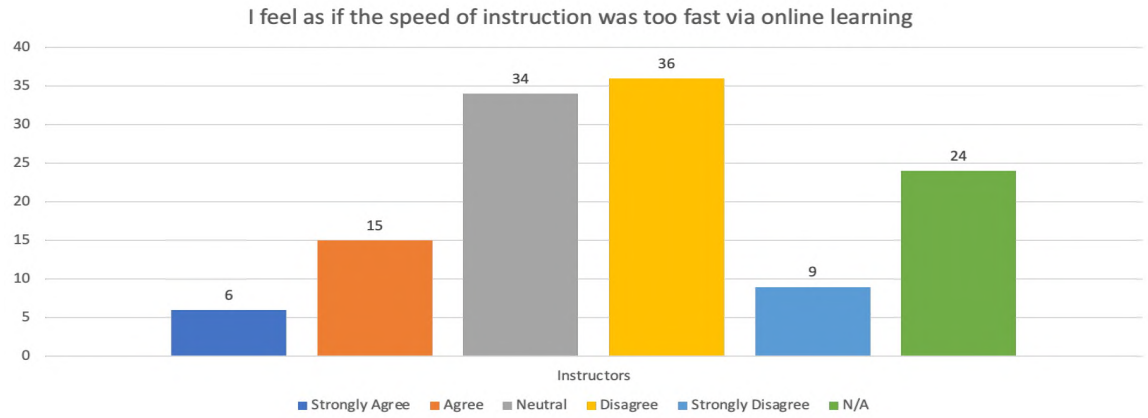
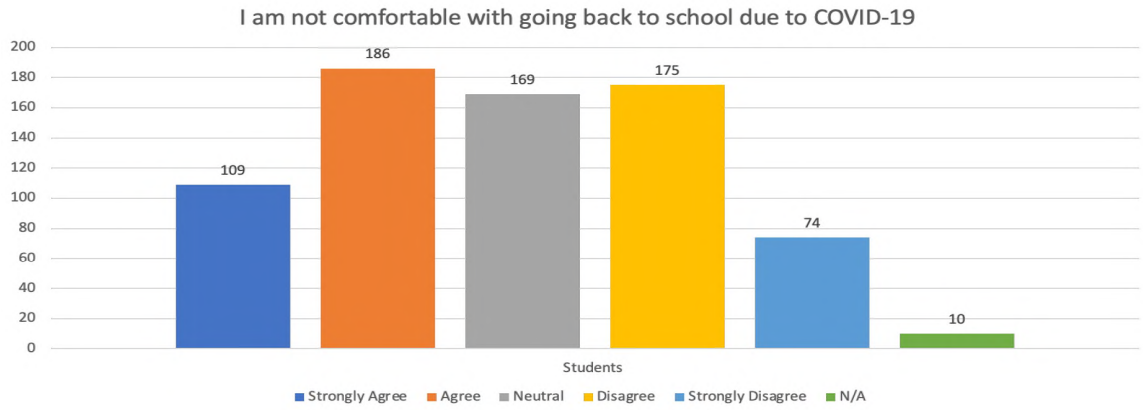


Figure 5 provides the instructor responses to question 2 of the survey: "I feel as if the speed of instruction was too fast via online learning." Six instructors strongly agreed with this question. Fifteen instructors agree with the statement. On the other hand, 34 were neutral. In terms of disagreement, 36 instructors disagreed that the speed of instruction was too fast via online learning, 9 strongly disagreed, and 24 had no opinion.

Figure 6

Comfort with Returning to School: Student Responses



In response to question 3 of the survey, "I am not comfortable with going back to school due to COVID-19", Figure 6 shows 109 students strongly agreed with this question. One hundred eighty-six students agree with the statement. On the other hand, 169 were neutral. In terms of disagreement, 175 students disagreed that they would not be comfortable going back to school, 74 strongly disagreed, and 10 had no opinion.

Figure 7

Comfort with Returning to School: Instructor Responses

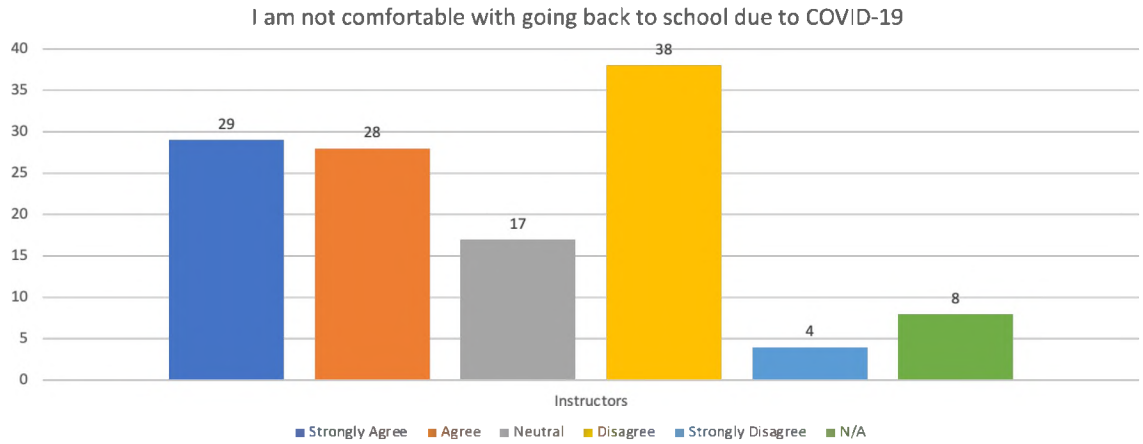


Figure 7 presents instructor responses to question 3 of the survey: "I am not comfortable with going back to school due to COVID-19". Twenty-nine instructors strongly agreed with this question. Twenty-eight instructors agree with the statement. On the other hand, 17 were neutral. In terms of disagreement, 38 instructors disagreed that they would not be comfortable going back to school, 4 strongly disagreed, and 8 had no opinion.

Figure 8

Feeling Depressed/Anxious: Student Responses

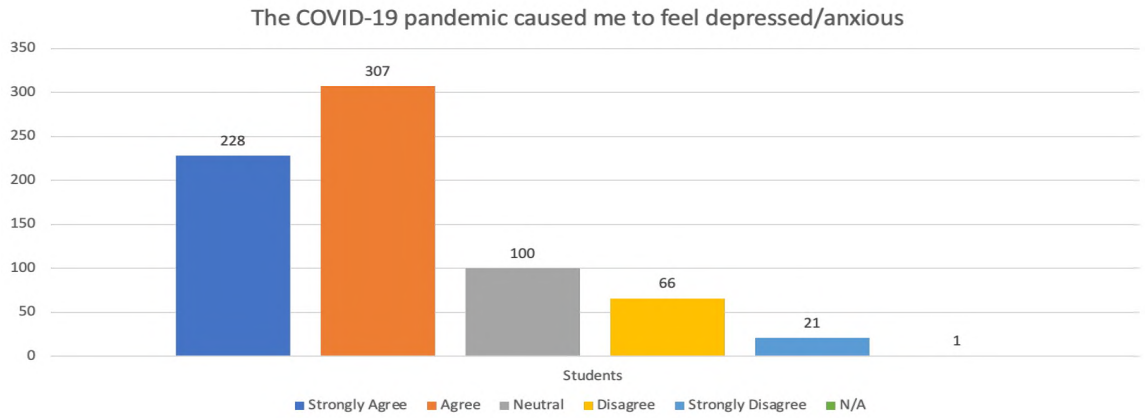


Figure 8 relates to question 4 of the survey "The COVID-19 pandemic caused me to feel depressed/anxious." Two hundred twenty-eight students strongly agreed with this question. Three hundred seven students agree with the statement. On the other hand, 100 were neutral. In terms of disagreement, 66 students disagreed that the pandemic caused them to feel depressed/anxious, 21 strongly disagreed, and 1 had no opinion.

Figure 9

Feeling Depressed/Anxious: Instructor Responses

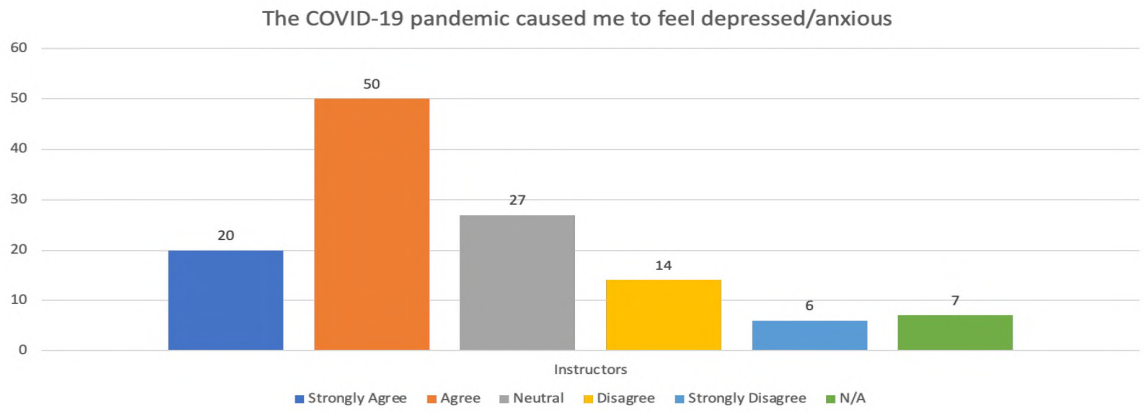


Figure 9 presents a distribution of instructor responses to question 4 of the survey: "The COVID-19 pandemic caused me to feel depressed/anxious". Twenty instructors strongly agreed with this question. Fifty instructors agree with the statement. On the other hand, 27 were neutral. In terms of disagreement, 14 instructors disagreed that the pandemic caused them to feel depressed/anxious, 6 strongly disagreed, and 7 had no opinion.

Figure 10

Feeling Excited to Return to Classroom Learning: Student Responses

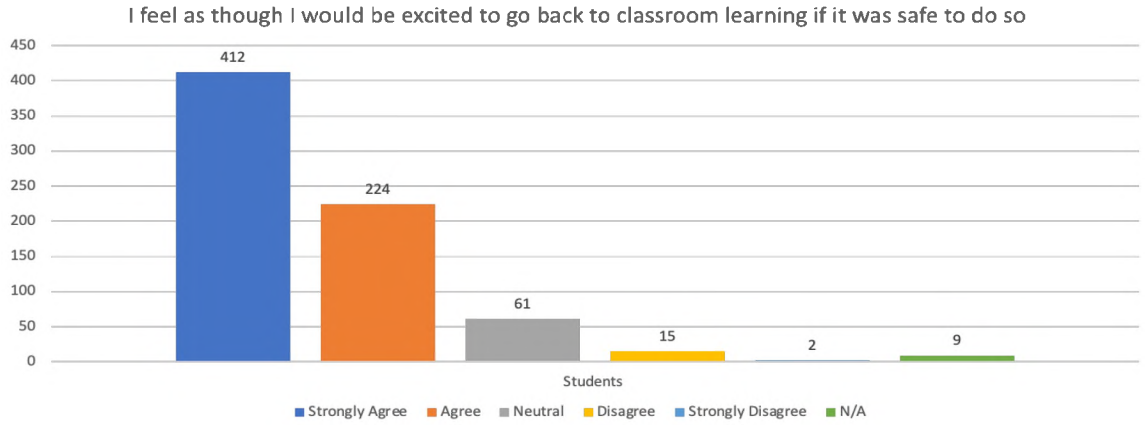


Figure 10 shows students' overwhelming responses to question 5 of the survey: "I feel as though I would be excited to go back to classroom learning if it was safe to do so." Four hundred twelve students strongly agreed with this question. Two hundred twenty-four students agree with the statement. On the other hand, 61 were neutral. In terms of disagreement, 15 students disagreed that they feel as though they would be excited to go back to classroom learning, 2 strongly disagreed, and 9 had no opinion.

Figure 11

Feeling Excited to Return to Classroom Learning: Instructor Responses

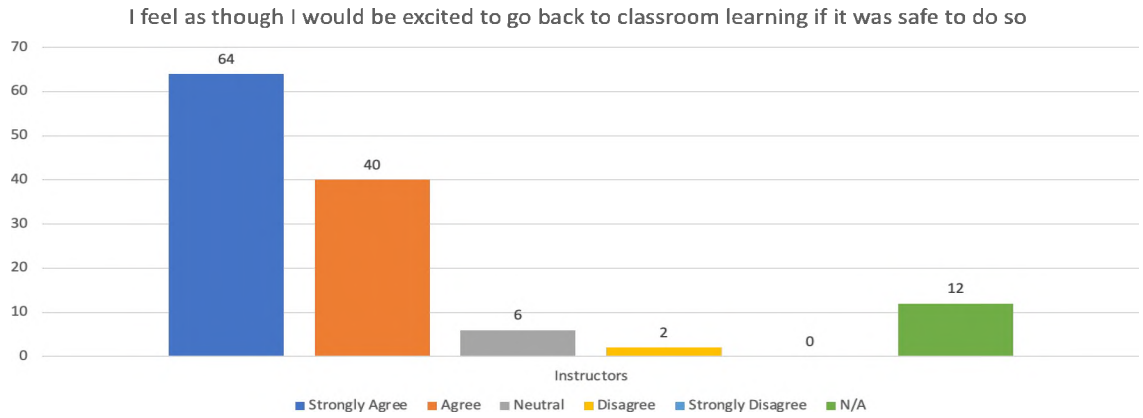
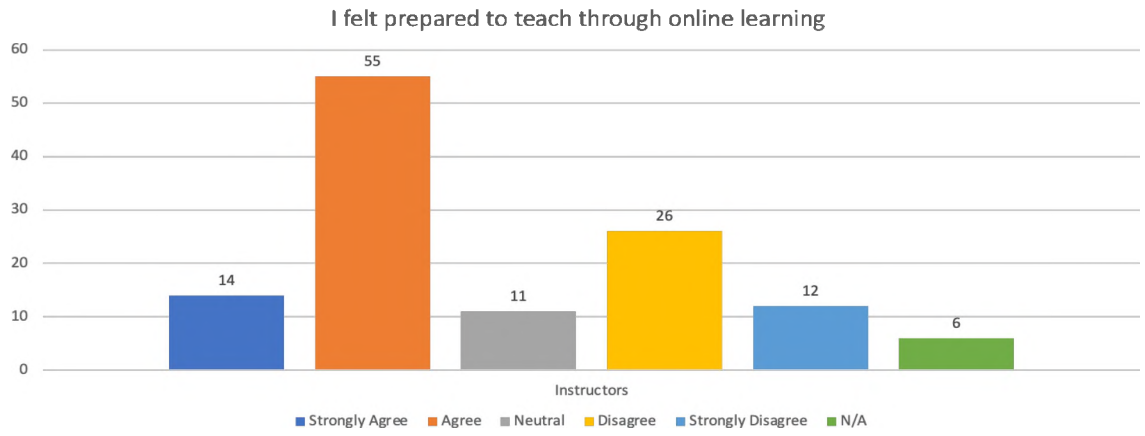


Figure 11 depicts instructors' responses to question 5 of the survey: "I feel as though I would be excited to go back to classroom learning if it was safe to do." Sixty-four instructors strongly agreed with this question. Forty instructors agree with the statement. On the other hand, 6 were neutral. In terms of disagreement, 2 instructors disagreed that they felt as though they would be excited to go back to classroom learning, 0 strongly disagreed, and 12 had no opinion.

Survey Questions for Only Instructors

Figure 12

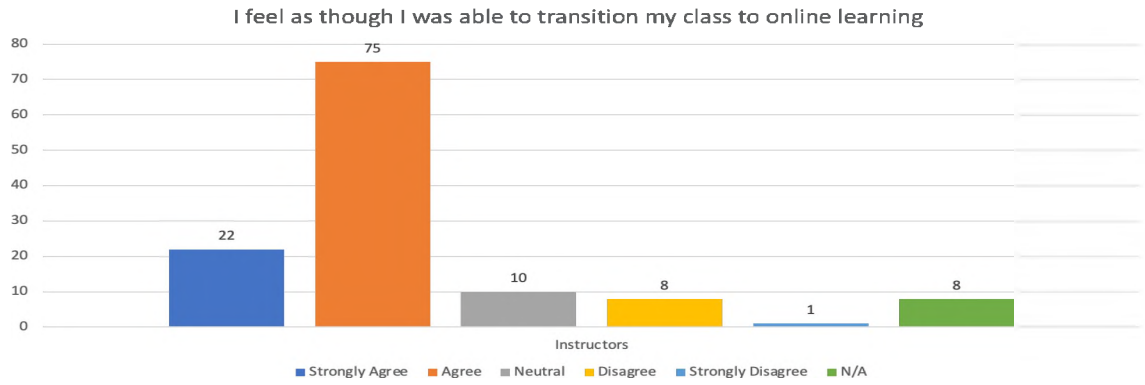
Preparedness to Teach Online



Instructors' responses to survey question 1 in their group of questions: "I felt prepared to teach through online learning," displayed in Figure 12. Fourteen instructors strongly agreed with this question. While 55 instructors agree. On the other hand, 11 were neutral. In terms of disagreement, 26 instructors disagreed that they felt prepared to teach online, 12 strongly disagreed, and 6 had no opinion.

Figure 13

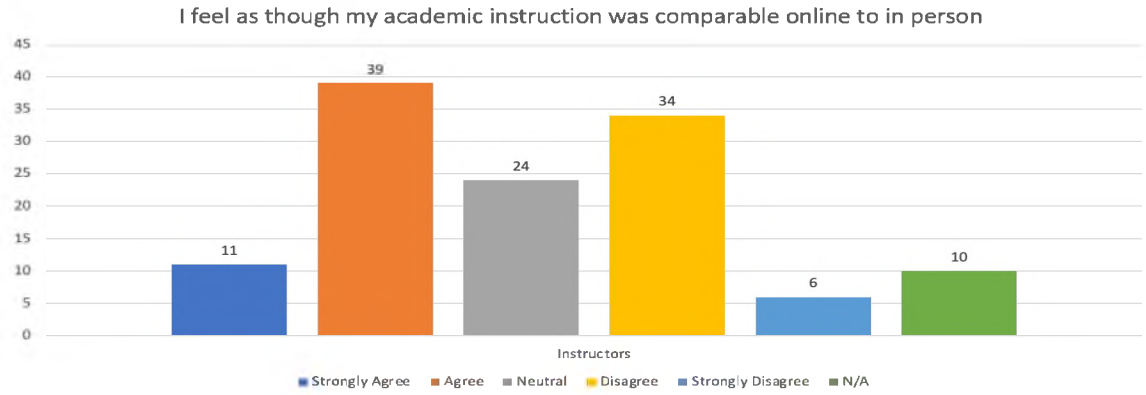
Ability to Transition Class to Online



To the survey question (instructor question 2): "I feel as though I was able to transition my class to online learning." Twenty-two instructors strongly agreed with this question. Seventy-five instructors agree with the statement. On the other hand, 10 were neutral. In terms of disagreement, 8 instructors disagreed that they felt as though they were able to transition their class to online learning, 1 strongly disagreed, and 8 had no opinion (Figure 13)

Figure 14

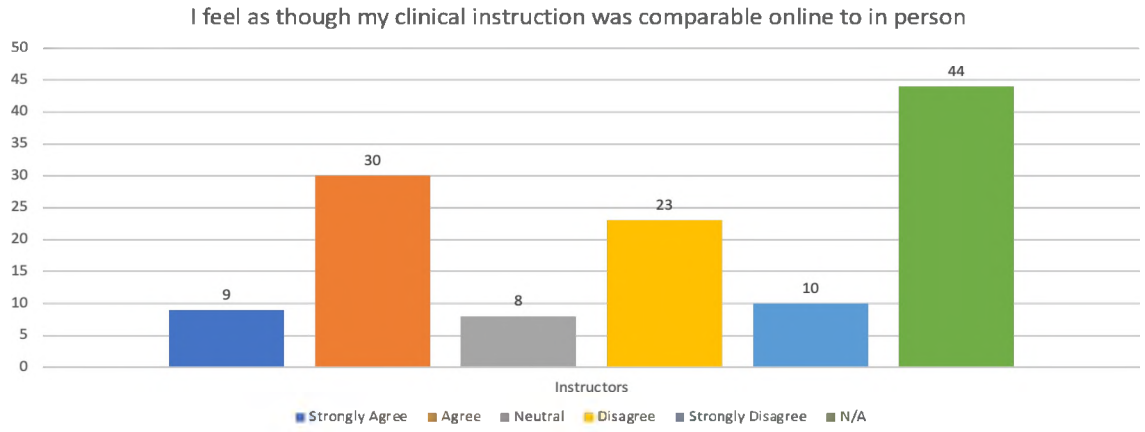
Comparable Academic Instruction



When instructors were asked to respond to the survey question (instructor question 3): "I feel as though my academic instruction was comparable online to in-person." Eleven instructors strongly agreed with this question, while 39 instructors agree with the statement. On the other hand, 24 were neutral. In terms of disagreement, 34 instructors disagreed that they felt as though their academic instruction was comparable, 6 strongly disagreed, and 10 had no opinion.

Figure 15

Comparable Clinical Instruction



To the survey question (instructor question 4): "I feel as though my clinical instruction was comparable online to in-person." Nine instructors strongly agreed with this question. Thirty instructors agree with the statement. On the other hand, 8 were neutral. In terms of disagreement, 23 instructors disagreed that they felt as though their clinical instruction was comparable, 10 strongly disagreed, and 44 had no opinion (Figure 15)

Figure 16

Instructors' Anxiety Level

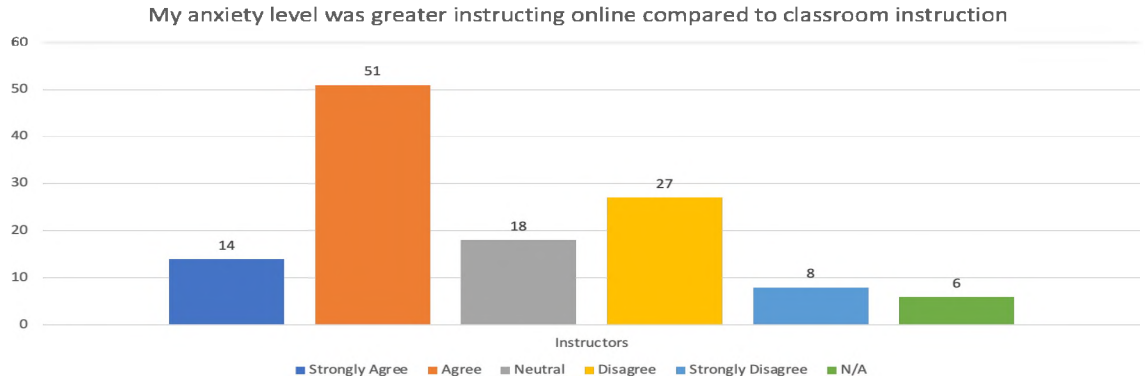
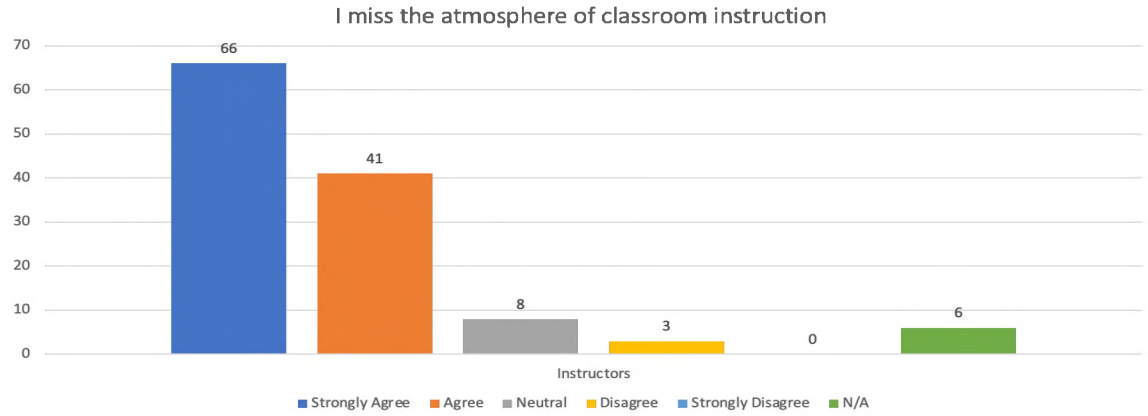


Figure 16 presents instructor responses to their survey question 5: "My anxiety level was greater instructing online compared to classroom instruction." Fourteen instructors strongly agreed with this question. Fifty-one instructors agree with the statement. On the other hand, 18 were neutral. In terms of disagreement, 27 instructors disagreed that they felt more significant anxiety instructing online, 8 strongly disagreed, and 6 had no opinion.

Figure 17

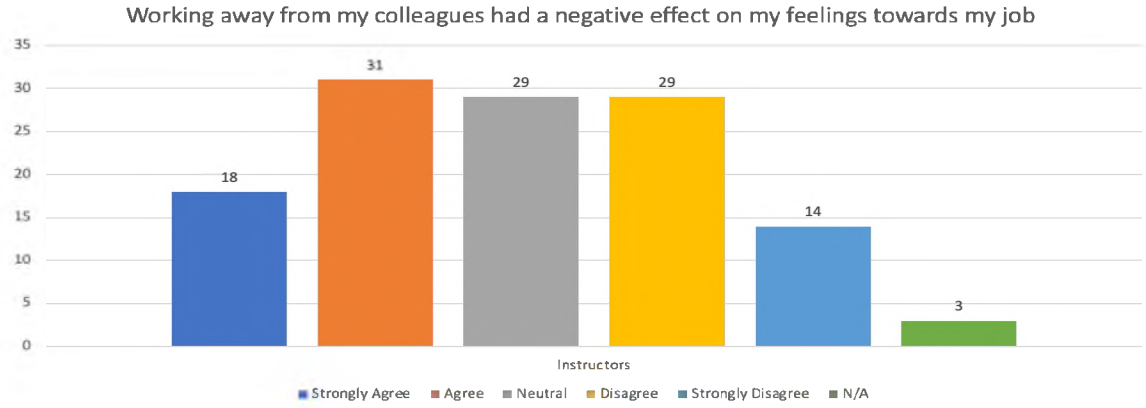
Missing the Classroom Atmosphere



In response to the instructors' survey question 6: "I miss the atmosphere of classroom instruction." Sixty-six instructors strongly agreed with this question. Forty-one instructors agree with the statement. On the other hand, 8 were neutral. In terms of disagreement, 3 instructors disagreed that they miss the classroom atmosphere, 0 strongly disagreed, and 6 had no opinion.

Figure 18

Working Away from Colleagues

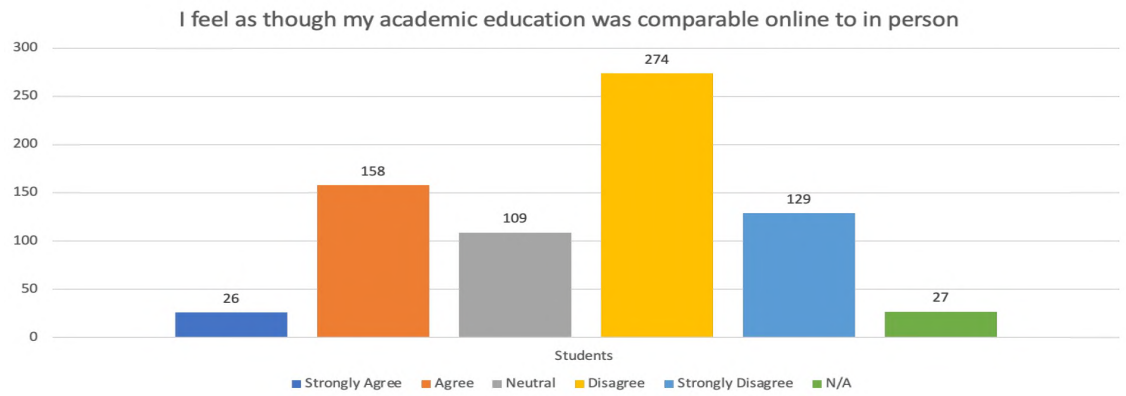


Instructors were asked to rate their agreement to survey question (instructor question 7): "Working away from my colleagues had a negative effect on my feelings towards my job." Eighteen instructors strongly agreed with this question. Thirty-one instructors agree with the statement. On the other hand, 29 were neutral. In terms of disagreement, 29 instructors disagreed that working away from colleagues had a negative effect on their feelings about their job, 14 strongly disagreed, and 3 had no opinion (Figure 18).

Survey Questions for Only Students

Figure 19

Comparable Academic Education



In terms of the comparison between face-to-face instruction and online, student responses to the specific survey question (student question 1): "I feel as though my academic education was comparable online to in-person were as follows: 26 students strongly agreed with this question. One hundred fifty-eight students agree with the statement. On the other hand, 109 were neutral. In terms of disagreement, 274 students disagreed that their academic education was comparable, 129 strongly disagreed, and 27 had no opinion.

Figure 20

Comparable Clinical Education

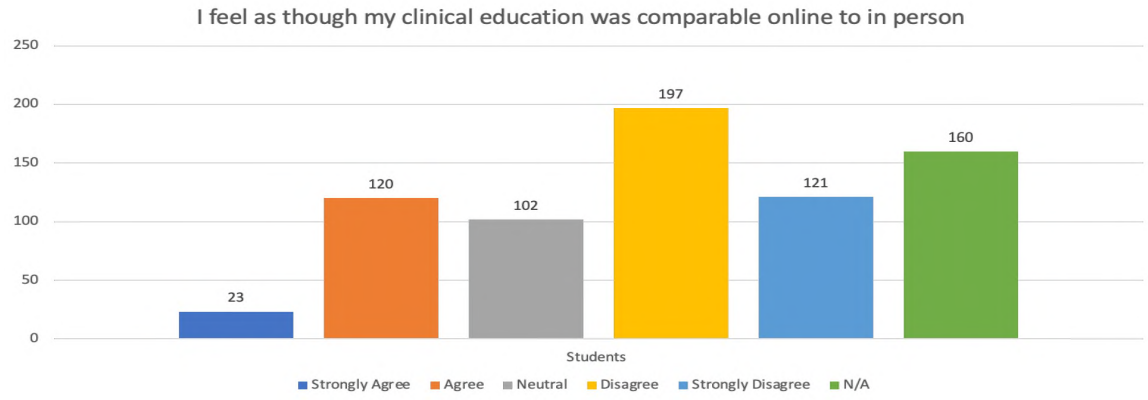
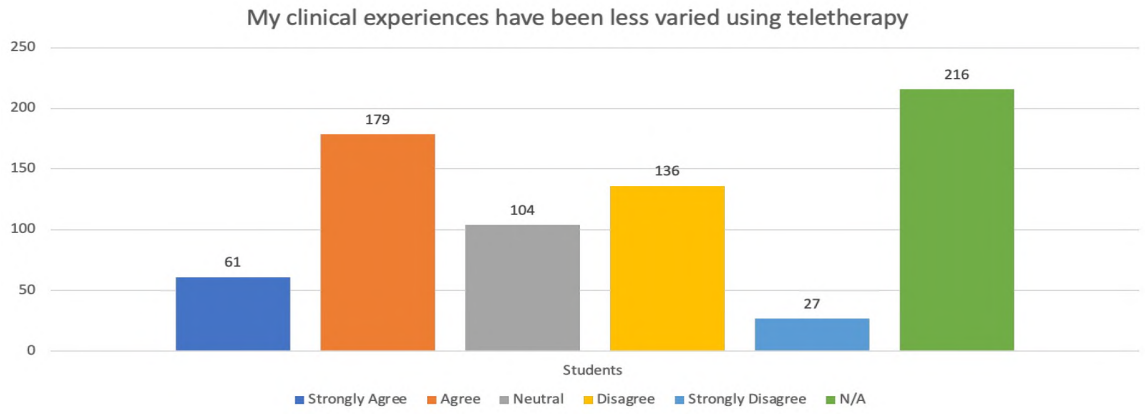


Figure 20 describes student responses to survey question 2 for students: "I feel as though my clinical education was comparable online to in-person." Twenty-three students

strongly agreed with this question. One hundred twenty students agree with the statement. On the other hand, 102 were neutral. In terms of disagreement, 197 students disagreed that their clinical education was comparable, 121 strongly disagreed, and 160 had no opinion.

Figure 21

Variation in Clinical Experiences



In responding to the survey question (student question 3): "My clinical experiences have been less varied using teletherapy," Sixty-one students strongly agreed; 179 students agree with the statement. On the other hand, 104 were neutral. In terms of disagreement, 136 students disagreed that their clinical experiences were less varied, 27 strongly disagreed, and 216 had no opinion (Figure 21).

Figure 22

Students' Anxiety Level

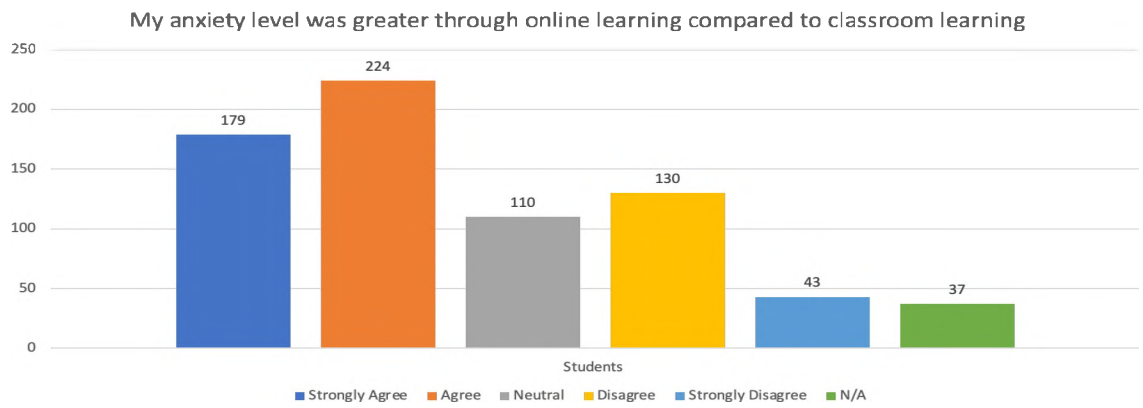


Figure 22 presents student responses to their survey question 4: "My anxiety level was greater through online learning compared to classroom learning." One hundred seventy-nine students strongly agreed with this question. Two hundred twenty-four students agree with the statement. On the other hand, 110 were neutral. In terms of disagreement, 130 students disagreed that their anxiety level was greater through online learning, 43 strongly disagreed, and 37 had no opinion.

Figure 23

Students: Missing the Classroom Atmosphere

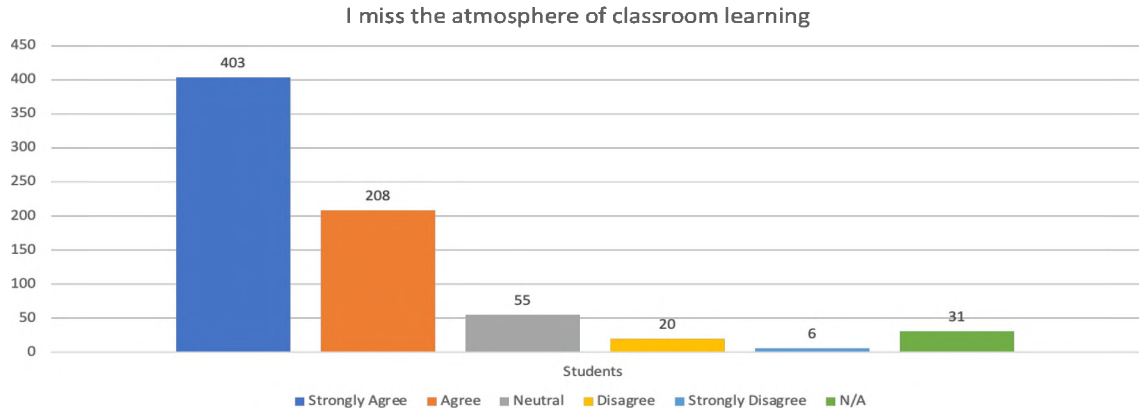


Figure 23 shows student responses to the survey question (student question 5): "I miss the atmosphere of classroom learning." Four hundred three students strongly agreed with this question. Two hundred eight students agree with the statement. On the other

hand, 55 were neutral. In terms of disagreement, 20 students disagreed that they miss the classroom atmosphere, 6 strongly disagreed, and 31 had no opinion.

Figure 24

Studying Away from Classmates

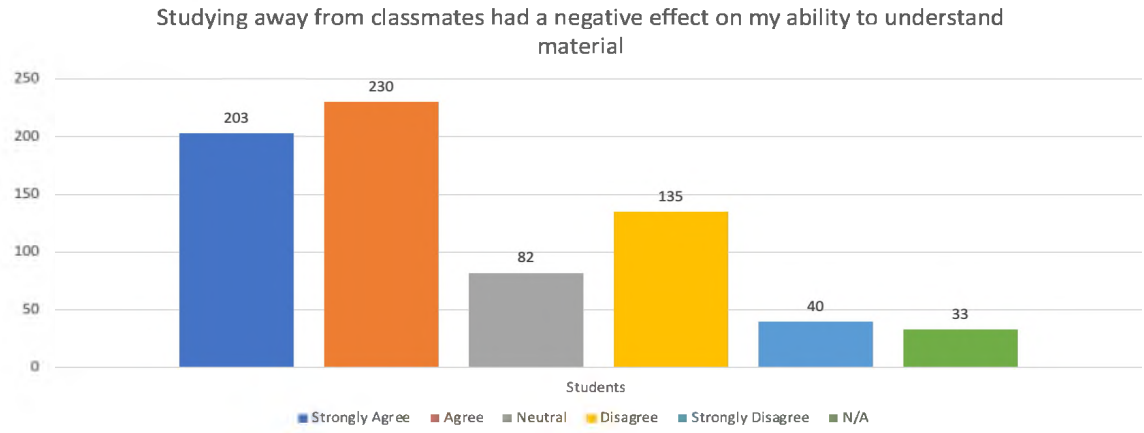


Figure 24 presents student responses to the survey question (student question 6): "Studying away from classmates had a negative effect on my ability to understand material." Two hundred three students strongly agreed with this question. Two hundred thirty students agree with the statement. On the other hand, 82 were neutral. In terms of disagreement, 135 students disagreed that studying away from classmates negatively impacted them, 40 strongly disagreed, and 33 had no opinion.

Figure 25

Technology for Online Learning

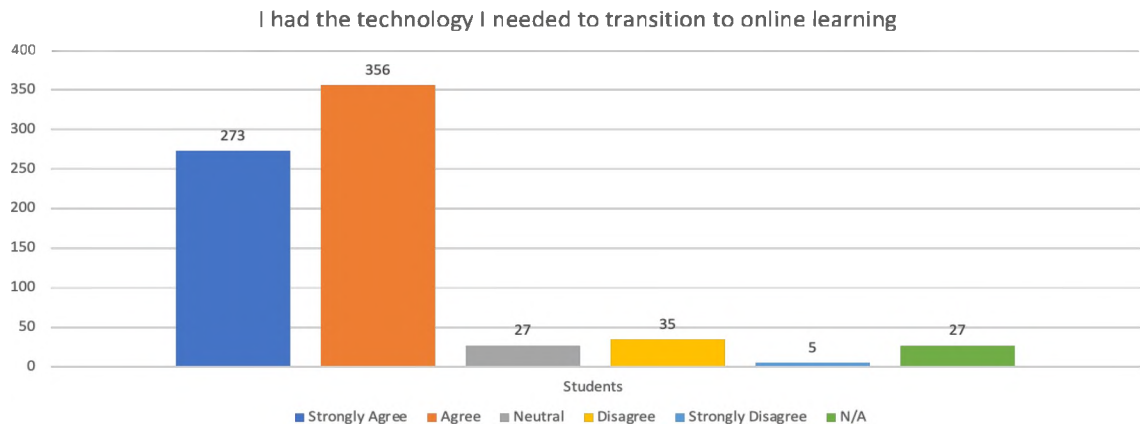


Figure 25 provides student responses to the survey question (student question 7): "I had the technology needed to transition to online learning." Two hundred seventy-three students strongly agreed with this question. Three hundred fifty-six students agree with the statement. On the other hand, 27 were neutral. In terms of disagreement, 35 students disagreed that they had the technology they needed for online learning, 5 strongly disagreed, and 27 had no opinion.

Figure 26

Ease of Using Online Platforms

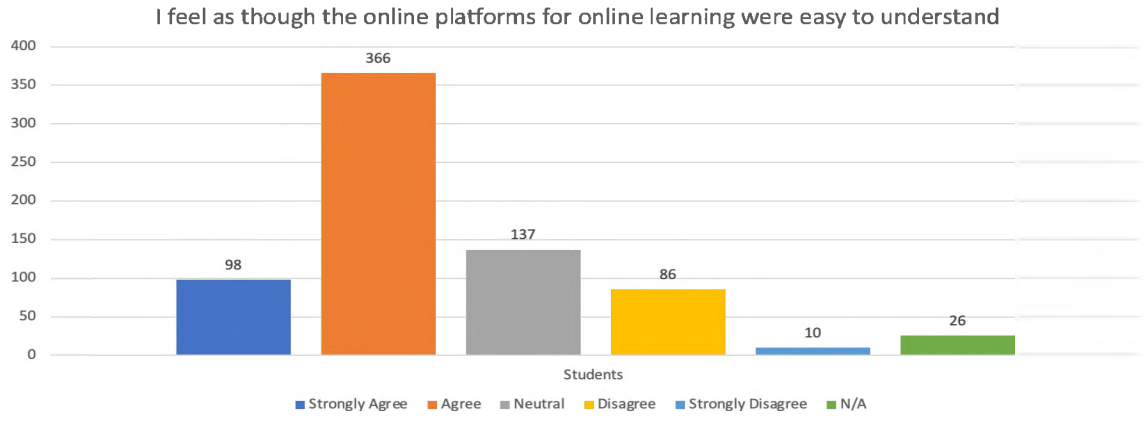


Figure 26 presents student responses to the survey question (student question 8): "I feel as though the online instructions for online learning were easy to understand."

Ninety-eight students strongly agreed with this question. Three hundred sixty-six students agree with the statement. On the other hand, 137 were neutral. In terms of disagreement, 86 students disagreed that the online learning platforms were easy to understand, 10 strongly disagreed, and 26 had no opinion.

CHAPTER IV

DISCUSSION

Teherani et al. (2015) suggest that qualitative research is the systematic inquiry into social phenomena in natural settings, which can include: how people experience aspects of their lives, how individuals and/or groups behave, how organizations function, and how interactions shape relationships. They also suggest the researcher examines why events occur, what happens during those events, and what those events mean to the participants in the study. Since this study examined participants' responses to a social phenomenon, it is considered a qualitative study. Descriptive statistics were most appropriate for data interpretation. Consequently, the data were analyzed in terms of the number and percentage of responses to questions in a particular domain. The research questions were (1) How were participants affected in terms of their emotional state? (2) Did students and instructors miss the socialization of classroom learning? (3) Were students and instructors comfortable with the technology required for FOI? (4) Were students and instructors comfortable with the level of education provided online? (5) Were students and instructors prepared for FOI? The questions correspond to emotionality, socialization, preparedness, comfort level with technology, and comfort level with education. Analysis and discussion of each research question are as follows:

Emotionality

Research Question 1. How were participants affected in terms of their emotional state?

Survey Questions:

- "General" (3) I am not comfortable with going back to school due to COVID-19
- "General" (4) The COVID-19 pandemic caused me to feel depressed/anxious
- "General" (5) I feel as though I would be excited to go back to classroom learning if it was safe to do so
- "Instructor" (5) My anxiety level was greater instructing online compared to classroom instruction
- "Student" (4) My anxiety level was greater though online learning compared to classroom learning

In terms of the emotionality domain, figure 6 presents the student's comfort level with returning to in-person instruction because of COVID-19. Students who responded that they *strongly agree* or *agree* (295/723 or 41%) to this question indicated that they would not be comfortable returning to in-person learning, whereas students who responded *disagree* or *strongly disagree* (249/723 or 34%) would be comfortable returning to school for in-person learning. Also, a number of students responded *neutrally* to this question (169/723 or 23%), indicating that they do not feel strongly that they would or would not be comfortable returning to school. These may be the students who would consider returning if it was safe to do so but would not if they felt it would be a

risk to their health. Figure 7 discusses the instructor's responses to the same question regarding comfort level with returning to in-person instruction due to COVID-19. Instructors who *agree* or *strongly agree* makeup 46% (57/124) of instructor responses. In comparison, 34% (42/124) of instructors *disagree* or *strongly disagree* with this question indicating they would be comfortable going back to in-person instruction. Overall, instructors and students agree with this question.

Figure 8 discusses student responses to the survey question addressing if the pandemic caused depression or anxious feelings. The majority of student respondents (535/723 or 73%) *strongly agreed* or *agreed* with the statement in this question, indicating that they did experience heightened levels of depression or anxiety. Those students who responded *neutrally* with this statement included 13% of respondents. At times, these students may have felt depressed/anxious or felt as though it was not an increased feeling from before COVID-19. The 12% of students who *disagree* with this statement indicated that the COVID-19 pandemic did not cause them to feel depressed or anxious. Figure 9 presents instructor responses to the same survey question regarding feelings of depression or anxiety during the COVID-19 pandemic. Over half of instructor respondents (70/124 or 56%) *strongly agreed* or *agreed* with the statement in this question, indicating that they experienced heightened levels of depression or anxiety. Overall, only 16% of instructors were in disagreement with this statement indicating that the COVID-19 pandemic did not cause the majority of instructors to feel depressed or anxious.

Figure 10 discusses student responses to the survey question regarding their feelings about going back to classroom learning if it becomes safe. The majority of

students *strongly agreed* or *agreed* (636/723 or 88%), with this statement indicating that they would be excited to go back to classroom learning. In comparison to figure 10, figure 11 looks at instructors' feelings about going back to classroom learning if safe to do so. Like student responses, most instructors (104/124 or 84%) agreed with the statement in this question, indicating they would feel excited to return to classroom learning. Overall, students and instructors agree that if it were safe to do so, they would be excited to return to classroom learning.

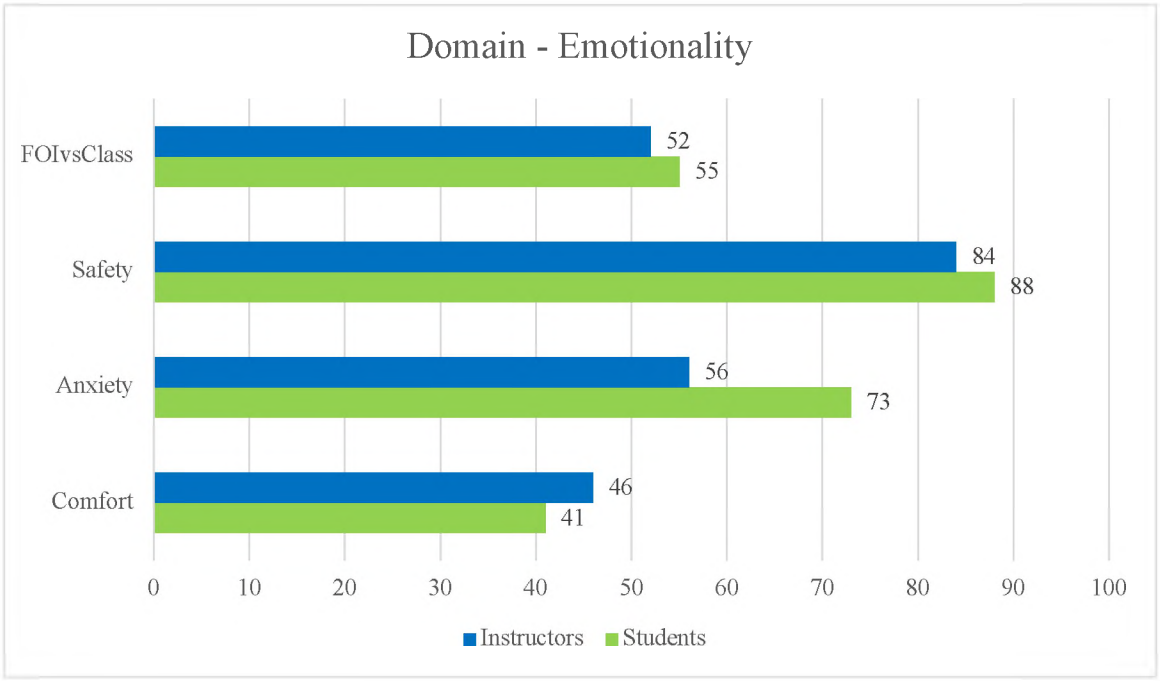
Figure 16 discusses instructor's responses to a survey question on whether they experienced heightened anxiety when instructing online than how they feel teaching in person. Over half (52%) of instructor respondents *agreed* or *strongly agreed* that they experienced a greater anxiety level instructing online. In comparison, only 28% *disagreed* or *strongly disagreed* with this statement indicating they did not feel more significant anxiety teaching online. In contrast, Figure 22 discusses student responses to a similar survey question regarding their anxiety level learning online compared to learning in the classroom. Like instructors, over half of the students (55%) *strongly agreed* or *agreed* with this statement, indicating that they felt heightened anxiety via online learning compared to how they felt learning in the classroom. Only 24% of students *disagreed* or *strongly disagreed* with this statement implying that they did not experience a greater level of anxiety learning online than in the classroom. These students may have had experience taking classes online before FOI making them more confident in online courses.

Deeper Analysis: Emotionality

A deeper analysis of the data in the emotionality domain reflects higher levels of emotional feelings across all participants during the COVID-19 pandemic. Students and instructors both indicated higher levels of anxiety and depression during the pandemic as well as excitement towards returning to in-person learning post-pandemic. More specifically, 73% of students and 56% of instructors were more anxious or depressed, and 88% of students and 84% of instructors would be excited to return to classroom instruction/learning. This data indicates that most students and instructors in higher education felt increased emotional feelings during the pandemic related to FOI and may also indicate that the pandemic caused an increase in emotional feelings in general and other areas of life.

Figure 27

Emotionality



Student and Instructor Agreement: Emotionality

In considering the domain of emotionality, a comparison was made between the students' agreement responses and those of the instructors for the survey questions within the domain of emotionality. This figure aids in discussing how students and instructors felt similarly in the domain of emotionality. These responses were based on the following thematic questions (1) comfort level returning to the classroom, (2) anxiety due to COVID, (3) feeling safe going back to the classroom, and (4) level of anxiety due to FOI. Figure 27 shows that students overall had higher levels of anxiety about receiving FOI compared to instructors. In terms of feeling safe going back to the classroom, an overwhelming majority of students (88%) were in agreement. Instructors also felt safe (84%). Both students and instructors were in close agreement with their comfort and level of safety in returning to the classroom.

Socialization

Research Question 2. Did students and instructors miss the socialization of classroom learning?

Survey Questions:

- "General" (1) I missed the natural socialization of the classroom atmosphere
- "Instructor" (6) I miss the atmosphere of classroom instruction
- "Instructor" (7) Working away from my colleagues had a negative effect on my feelings towards my job
- "Student" (5) I miss the atmosphere of classroom learning

- "Student" (6) Studying away from my classmates had a negative effect on my ability to understand material

As represented in figure 2, most student respondents (645/723 or 89%) either *strongly agree* or *agree* with question 1 of the survey regarding students missing the socialization of the classroom atmosphere. According to the majority response type, one may say that student respondents feel as though they missed the socialization of learning in a classroom setting during the COVID-19 pandemic. In comparison, figure 3 represents instructor responses to the same question indicating that 104/124 (84%) of instructors *strongly agree* or *agree*. Together, most students and instructors who responded to this survey agree with this question. Figure 17 represents the instructor's responses to a similar question about missing the classroom atmosphere. The majority (86%) of instructors miss being in the classroom based on the number of respondents (107/124) who *strongly agree* or *agree* with this statement.

Instructor responses regarding the impact working away from colleagues had on their feelings about their job are displayed in figure 18. Those who responded *strongly agree* or *agree* (49/124 or 39%) feel that working away from colleagues negatively impacted their feelings towards their job. These instructors may thrive in a collaborative environment or enjoy working around other people. On the other hand, those who responded with *disagree* or *strongly disagree* (43/124 or 35%) do not feel that working away from their colleagues negatively impacted their job feelings.

Figure 23 represents students' feelings about missing the atmosphere of learning in a classroom. The majority of student respondents (85%) either *strongly agree* or *agree* that they miss the classroom atmosphere. These students may thrive in a learning

environment that allows them to interact with others and their instructor. Those who responded, indicating that they do not miss the classroom atmosphere (3% of respondents) may feel they do not need to be in a classroom environment to be successful in their studies.

Students' feelings about studying away from their classmates and impacting their ability to understand academic material are displayed in figure 24. Overall, 433/723 (60%) of students *strongly agreed* or *agreed* with this statement, indicating that they feel as though their ability to understand material was impacted by not collaborating with other students. Those who *disagreed* with this statement include 24% of student respondents. These students may feel as though they do not need to study with other students to be successful. When comparing students' feelings about learning in a collaborative classroom setting and instructors' emotions about working in a collaborative environment, the survey results show that students are impacted more by the lack of socialization than instructors are.

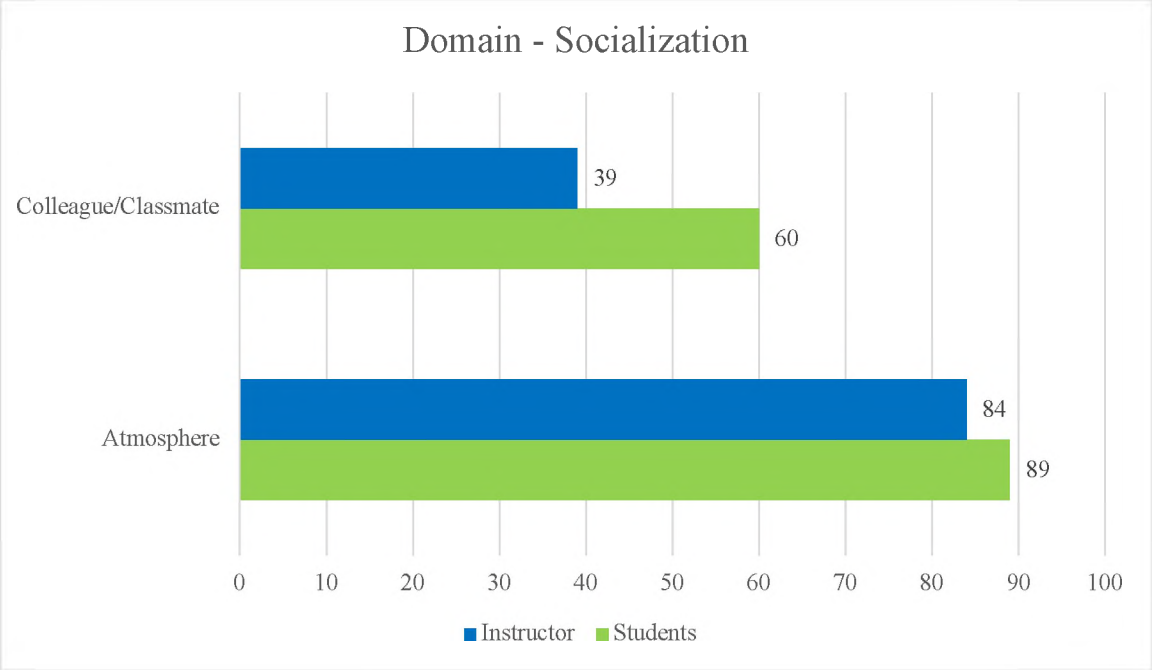
Deeper Analysis: Socialization

As the data in the socialization domain were analyzed more deeply, there were clear indications that participants in this study were affected by the pandemic in this domain. When comparing students and instructors, 89% of student participants and 84% of instructor participants stated that they miss the socialization of the classroom atmosphere. Another area of deeper comparison in the socialization domain involves working/studying around colleagues. Overall, 85% of students stated that they miss learning around other students, whereas only 39% of instructors felt impacted by working away from their colleagues. According to these responses, conclusions may be made

regarding the lack of socialization during FOI and the pandemic: (1) Both students and instructors thrive in a collaborative classroom setting where ideas can be discussed openly and (2) There is a great benefit of socialization and classmate interaction in student success in the classroom, whereas instructors are not as impacted by colleague interactions for success in instruction. This concept of student success with socialization as a factor is confirmed in the article from Baylor University, which stated that there are adverse effects on students' emotions and learning outcomes in online learning settings due to barriers in socialization.

Figure 28

Socialization



Student and Instructor Agreement: Socialization

In considering the domain of socialization, a comparison was made between the students' agreement responses and those of the instructors for the survey questions within the domain of socialization. This figure aids in discussing how students and instructors

felt similarly in the domain of socialization. These were based on the following thematic questions (1) missing the socialization of the classroom atmosphere, and (2) impact on job and education working away from classmates and colleagues during FOI. Figure 28 shows that an overwhelming majority of students (89%) were in agreement that they missed the classroom atmosphere. Instructors were also in agreement to a lesser extent (84%). This figure also shows that more students were impacted by separation from their classmates (60%) compared to instructors who were less impacted working away from their colleagues (39%).

Comfort Level with Technology

Research Question 3. Were students and instructors comfortable with the technology required for FOI?

Survey Questions:

- "Instructor" (3) I feel as though my academic instruction was comparable online to in person
- "Instructor" (4) I feel as though my clinical instruction was comparable online to in person
- "Student" (7) I had the technology I needed to transition to online learning
- "Student" (8) I feel as though the online platforms for online learning were easy to understand

Figure 14 discusses the response types of instructors from the survey question about if their academic instruction is comparable online vs. in person. Those who *agreed* or *strongly agreed* (50/124 or 40%) felt that their online academic instruction was comparable to in-person. In contrast, those who *disagreed* or *strongly disagreed* (40/124

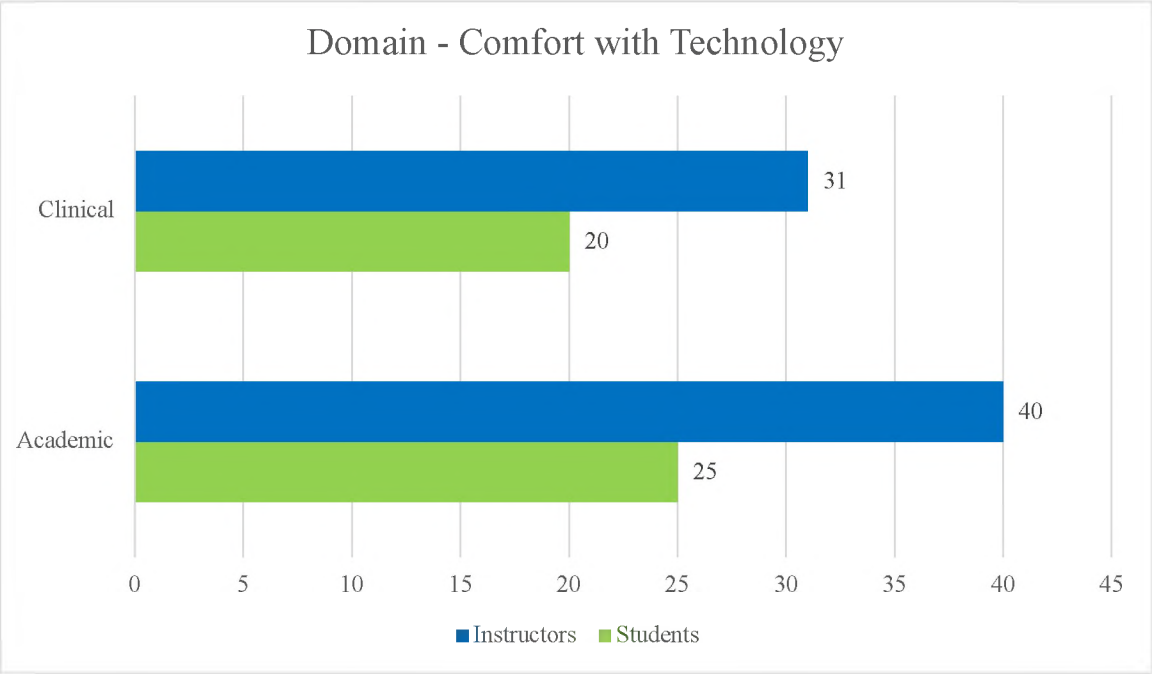
or 32%) did not feel that they could provide comparable instruction online. Those who responded *N/A* were most likely clinical instructors only and did not relate to this question. Similarly, figure 15 displays the response types of instructors regarding feelings about their clinical instruction being comparable online vs. in person. Those who *agreed* or *strongly agreed* (39/124 or 31%) felt that their online clinical instruction was close to in-person. In contrast, those who *disagreed* or *strongly disagreed* (33/124 or 27%) did not feel that they could provide comparable clinical instruction online. There was a notable number of "*N/A*" responses (44/124 or 35%) to this question, which may indicate the instructor respondents who do not provide clinical instruction.

Figure 25 represents survey responses from students about if they felt technologically prepared for online learning. The majority of students (629/723 or 87%) thought they had the technology they needed to transition to online learning. This majority response is not surprising; however, it is known that some students may not have adequate access to technology outside of the university for a plethora of reasons (i.e., WIFI and finances). This student population is represented in the 5% who responded that they *disagree* or *strongly disagree* with this survey question statement.

Figure 26 presents student responses regarding their feelings about the ease of online learning platforms. Most students (464/723 or 64%) *strongly agreed* or *agreed* that the online learning platforms were easy to understand. Those that were in disagreement with this statement responded this way, indicating that they may have struggled to understand the platforms they were required to use during FOI.

Figure 29

Comfort with Technology



Student and Instructor Agreement: Comfort with Technology

Student and instructor responses were compared in the remaining three domains of comfort with technology, comfort with education, and preparedness. This figure aids in discussing how students and instructors feel similarly related to comfort with technology. As observed in figure 29, there is a point of departure in the comparison of students' opinions about their clinical and academic education (comfort level with education domain) and that of the instructors about their clinical and academic instruction (comfort level with technology domain). Only 25% of students agreed that their academic education was comparable, whereas 40% of instructors felt as though they provided equivalent instruction online. The same goes for clinical education. More instructors (31%) than students (20%) felt as though clinical education was equivalent online to in-person.

Comfort Level with Education

Research Question 4. Were students and instructors comfortable with the level of education provided online?

Survey Questions:

- "General" (2) I feel as if the speed of instruction was too fast via online learning
- "Student" (1) I feel as though my academic education was comparable online to in person
- "Student" (2) I feel as though my clinical education was comparable online to in person
- "Student" (3) My clinical experiences have been less varied using teletherapy

Question 2 of the survey analyzes students' and instructors' feelings about online instruction speed secondary to FOI and the COVID-19 pandemic. Figure 4 breaks down only student responses to this question. There were 271/723 (37%) student respondents who agreed that the instruction speed was too fast by stating that they *strongly agree* or *agree* with this question. In comparison, 252/723 (35%) either *disagreed* or *strongly disagreed*, indicating they felt comfortable with online instruction speed. Figure 5 shows the instructor's responses to the same question. Fewer instructors *strongly agreed* or *agreed* with this question (21/124 or 17%) than instructors who *disagreed* or *strongly disagreed* with this question. The results indicate that most instructor respondents thought that the speed of instruction was not an issue. This response could be a result of having

prior experience teaching online. In contrast, the 17% who felt as though online instruction was too fast may not have had previous experience instructing a course online.

Figure 19 represents how students felt about their academic education when comparing their online learning experiences to in-person learning. Over half of student respondents (403/723 or 56%) either *disagreed* or *strongly disagreed* with the statement indicating that they do not feel as though their academic education was comparable. Those who *agree* or *strongly agree* that their education was comparable online to the in-person makeup of 25% of the responses. There is a disparity in student responses to this question and instructor responses to a question regarding the education they provided online during the pandemic being comparable. Students felt that they did not get comparable education even though instructors felt like they offered an equivalent education. This disparity in feeling may result from instructors' confidence in their teaching abilities, and so they may think that they are doing a similar job to in-person instruction.

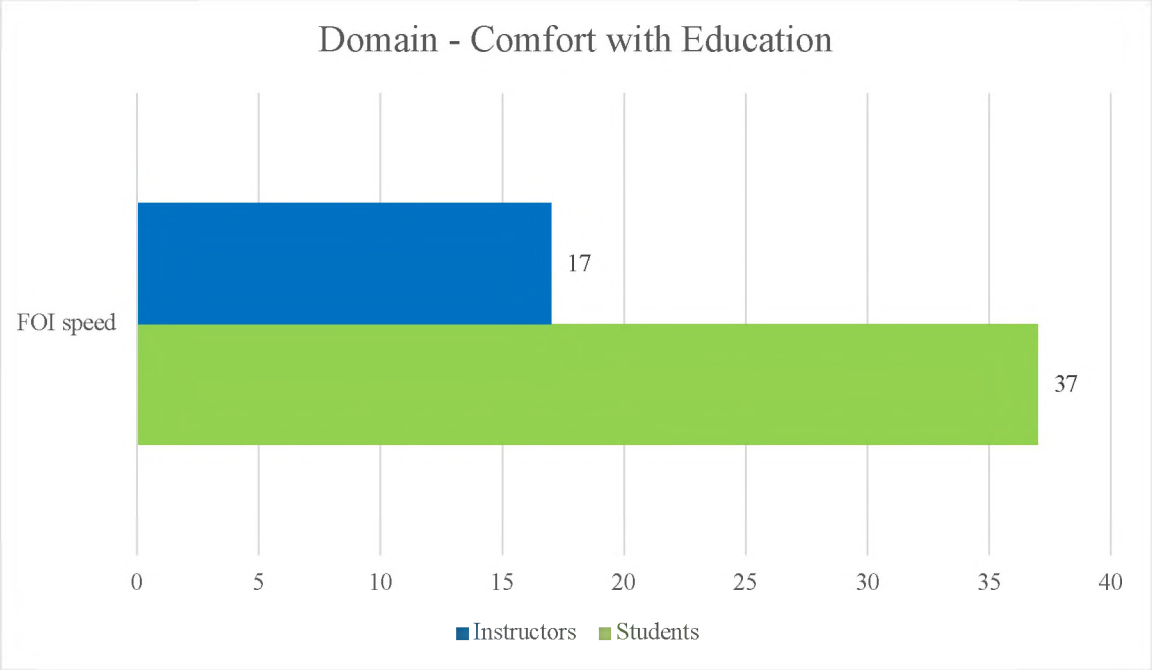
Similarly, figure 20 presents how students felt about their clinical education when comparing their experiences online versus in person. Of student respondents who have had clinical experiences, 43% (318/723) either *disagreed* or *strongly disagreed* with this statement indicating that they do not feel that their clinical education was comparable. Those that *agree* or *strongly agree* that their education was equivalent online to in-person makeup 20% of the responses; the remaining students who responded "*N/A*" maybe those students who have not yet had clinical experiences to formulate an opinion.

Figure 21 presents student responses to the survey question regarding clinical experiences during COVID-19. Those students who responded "*N/A"* make up 30% of

student respondents. These students may not have had clinical experiences at this point in their studies, or they may not have had clinical opportunities because of the pandemic limiting therapy opportunities and resources. Those students who did respond indicating they have had clinical experiences, those who feel as though their experiences were less varied (whether that be patient populations available to treat during the pandemic or being confined to simulated experiences) made up 33%. Those who disagreed with this statement include 23% of the respondents. These students would have responded this way because they think the variation of their clinical opportunities was not impacted.

Figure 30

Comfort with Education



Student and Instructor Agreement: Comfort with Education

Figure 30 compares instructors' and students' feelings within the domain of comfort with education regarding the speed of FOI. This figure aids in discussing how students and instructors feel similarly regarding comfort with education. The figure

shows that more students (37%) felt as though the speed of instruction was too fast during FOI than instructors (17%). In other words, students were uncomfortable with the speed of FOI. Other aspects of this domain, such as students' comfort with the level of education they received during FOI, were addressed in the previous figure (4.3) in order to compare instructor and student responses.

Preparedness

Research Question 5. Were students and instructors prepared for FOI?

Survey Questions:

- "Instructor" (1) I felt prepared to teach though online learning
- "Instructor" (2) I feel as though I was able to transition my class to online learning

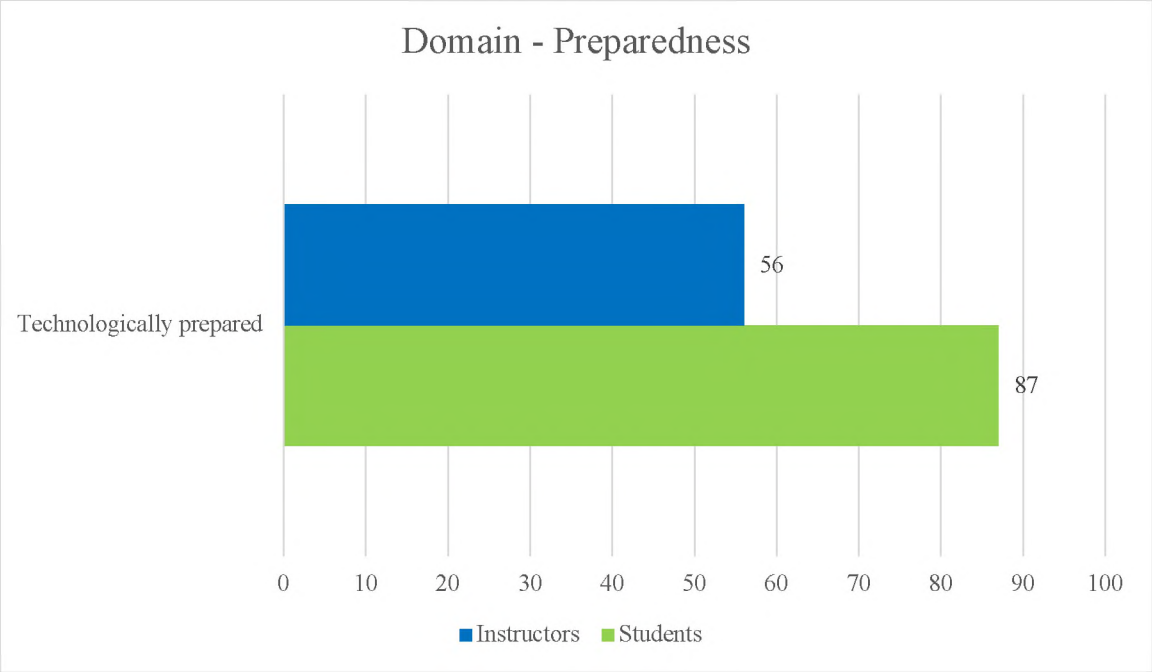
Figure 12 represents instructor responses regarding preparedness feelings when teaching strictly online secondary to COVID-19, forcing a learning environment transition. The figure shows that over half of instructor respondents felt they were prepared to teach online despite the circumstances. The 69/124 (56%) of instructors who *strongly agreed* or *agreed* to feeling prepared to teach online could be representative of a population of instructors with prior experience teaching online classes, whereas the 49/124 (39%) who responded that they *disagree* or *strongly disagree* may not have had previous experience teaching online courses.

As stated, figure 13 presents the instructor's feelings of comfort about transitioning their class to online learning platforms due to FOI. The figure shows that most instructors *strongly agree* or *agree* (97/124 or 78%) to this question. These instructors felt comfortable with their ability to transition their class from in-person to

online. This could be because of their comfort with technology or prior experience teaching classes online. On the other hand, 9/124 (7%) of instructors indicated they *disagreed* or *strongly disagreed* with this statement. These instructors may have felt as though they could not smoothly transition their class to online learning because of feeling uncomfortable with the technology or lack of prior experience teaching online.

Figure 31

Preparedness



Students and Instructors Agreement: Preparedness

Students' and instructors' responses to the domains of preparedness and comfort level with technology were compared. This figure aids in discussing how students and instructors feel similarly in the domain of preparedness. Figure 31 shows that more students (87%) were technologically prepared for FOI than instructors (56%).

Deeper Analysis: Comfort with Technology, Comfort with Education, and Preparedness

Deeper analysis of the data regarding comfort level with technology, comfort level with education, and instructor preparedness support ideas regarding differences in students' feelings about their FOI education experience and instructors' feelings about their level of instruction during this time. The disparity in student and instructor responses is indicated by a higher percentage of instructors agreeing with the survey question regarding their instruction being comparable online to in-person. Also, 78% of instructors indicated in the survey that they felt prepared and comfortable with their ability to transition their class online. However, instructors' confidence in their ability to transition their class online was not recognized by students as over half (56%) did not agree that their academic education was equivalent online.

CHAPTER V

CONCLUSION

This qualitative study surveyed students and instructors in accredited communication sciences and disorders and audiology programs across the United States. The purpose was (1) to examine the effects of forced online instruction from students' and instructors' perspectives and (2) take a closer look at how each participant responded to the COVID-19 pandemic as part of a speech and hearing cohort in terms of emotionality, socialization, preparedness, technology, and education.

It was found that students and instructors felt similarly in terms of emotionality; however, there were disparities in students' and instructors' opinions about the transition to online learning from a comparable education standpoint. Only 25% of students agreed that they received comparable education online compared to in-person, whereas 40% of instructors felt as though they provided equivalent instruction online. Furthermore, students also reported that their clinical education was not comparable online to in-person. On the other hand, instructors believed they provided equivalent instruction. Instructors (31%) felt as though they provided equivalent clinical education online, whereas 20% of students felt as though the clinical education they received was equivalent online to in-person. This disparity may be for several reasons: (1) Instructors

may have felt a personal responsibility to state confidence in their teaching skills online to boost students' morale, (2) instructors could have genuinely felt that while their mode of instruction may have changed, the content of instruction was the same for FOI as it was for in-person. On the other hand, (3) students may have felt that the instructional content was compromised because they were no longer having personal contact with their teachers or classmates. (4) Additionally, anecdotal reports pervasive during the pandemic may have also contributed to the disparity in FOI versus in-person instruction.

Key Takeaways

1. How were participants affected in terms of their emotional state?
    - Students experienced higher levels of anxiety during FOI than instructors did.
    - Students and instructors agreed that if it were safe to do so, they would be excited to return to in-person learning.
2. Did students and instructors miss the socialization of classroom learning?
    - Students were more impacted by studying away from their classmates than instructors were working away from their colleagues.
    - Students and instructors agree that they miss the classroom atmosphere.
3. Were students and instructors comfortable with the technology required for FOI?
    - Instructors indicated they felt as if they provided equivalent education utilizing technological platforms; however, students indicated that the education they received online was not comparable to in-person.

4. Were students and instructors comfortable with the level of education provided online?
    - More students than instructors felt that the speed of online instruction was too fast during FOI, indicating that they were more uncomfortable with the education they received using online platforms.
5. Were students and instructors prepared for FOI?
    - More students were technologically prepared for FOI than instructors were.

Limitations of the Study

Some limitations of this study were discovered in the survey and demographics questions. First, the questions in the demographics section were ambiguous in that instructors answered questions that were meant for students because they had access to all survey questions and may also consider themselves a student. To improve this limitation, the survey's demographics section could have been worded more specifically, requiring the participants to identify as either students or instructors. Alternatively, there could have been two separate surveys sent to participants with instructions indicating: "If you are an academic instructor or clinical instructor you are considered an "instructor" for the purposes of this study. Please complete the "instructor" survey" and "If you are not an academic instructor or clinical instructor you are considered a "student" for this study. Please complete the "student" survey." The second limitation of the survey is the lack of specificity in some questions. This could have been avoided by including more questions or being more specific in the wording of the questions. For example, including more detailed questions regarding the cause of participants' increased levels of

depression/anxiety during the pandemic and FOI could have benefitted the study. Finally, the Qualtrics survey structure allowed all participants to access every survey question even if it did not pertain to them. While there were instructions for proper completion of the survey, the wording may have been ambiguous. Structuring the survey in Qualtrics only to allow participants to see questions that pertained to them according to their demographics or clarifying the directions could have avoided participants answering questions that did not fit their demographic. Generally speaking, even though there were a few limitations in this study, it provided important information such as students' opinions concerning online instruction. It is difficult to say if the transition was successful because in this study, we had a larger number of student responses (723) than instructor responses (124). Perhaps, trying to differentiate students and instructors on the same survey was unsuccessful, and two separate surveys should have been included for more clarity.

Future Research

Using the information from this study, one might question how this information can inform and impact communication sciences and disorders and audiology programs in the future. Future studies may also look at how their programs were affected by FOI. It may be necessary for programs to know how beneficial online instruction is for the SLP and audiology students in their programs. Also, this study found a disparity between students' and instructors' opinions about the level of education during FOI. Future studies should further examine the reasons why a disparity exists between instructors' opinions and that of students regarding online education. Finally, this study found that students had

higher levels of anxiety during FOI. Therefore, future research should study anxiety related to online instruction during a global pandemic.

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APPENDIX A

Consent Form

Dear Participant

We are Dr. Cox and Kiera Byrne, faculty member and graduate student in the Speech and Hearing Program at Cleveland State University. We are gathering information about the Students' and Instructors' perspectives on the effects of COVID-19 on clinical and academic instruction in Speech and Hearing Programs across the nation.

Your participation is voluntary. You may withdraw at any time. We agree to protect your privacy. We will not share your information with anyone outside of this study. You do not have to sign your name to this document. Your responses will in no way identify you. There is no reward for participating in this study. There are no consequences for not participating in this study. Any risks associated with this research do not exceed those of daily living. The survey should take about 15 minutes to complete.

For further information regarding this research, please contact Dr. Cox at (216)687-6909, email: v.cox@csuohio.edu, or
If you have any questions about your rights as a research participant, you may contact the Cleveland State University Institutional Review Board at (216)687-3630.

By checking the box at the end of this statement constitutes your consent to participate in this study [ ]
By checking the box at the end of this statement you certify that you are 18 years or older [ ]

Thank you in advance for your cooperation and support.

APPENDIX B

Survey

Demographics:

1. Are you a classroom instructor for a certified Speech and Hearing program?
   - Yes
   - No
   - N/A
2. Are you a clinical instructor for a certified Speech and Hearing program?
   - Yes
   - No
   - N/A

   Are you a speech language pathology student?
   - Yes
   - No
   - N/A

4. Are you an audiology student?
   - Yes
   - No
   - N/A
5. Are you a first-year graduate student?
   - Yes
   - No
   - N/A
6. Are you a second-year graduate student?
   - Yes
   - No
   - N/A
7. As a student, have you had any clinical experience at this point in your education?
   - Yes
   - No
   - N/A

Instructions:
Some questions will be marked "General" indicating that they are questions for every participant. If you are an instructor, answer the questions under the "Instructor" heading. If you are a student, answer the questions under the "Student" heading.

General:

1. I missed the natural socialization of the classroom atmosphere

- strongly agree
- agree
- neutral
- disagree
- strongly disagree
- n/a

2. I feel as if the speed of instruction was too fast via online learning
- strongly agree
- agree
- neutral
- disagree
- strongly disagree
- n/a

3. I am not comfortable with going back to school due to COVID-19
- strongly agree
- agree
- neutral
- disagree
- strongly disagree
- n/a

4. The COVID-19 pandemic caused me to feel depressed/anxious
- strongly agree
- agree
- neutral
- disagree
- strongly disagree
- n/a

5. I feel as though I would be excited to go back to classroom learning if it was safe to do so
- strongly agree
- agree
- neutral
- disagree
- strongly disagree
- n/a

Instructor: If you are a student skip this section.

1. I felt prepared to teach through online learning
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

2. I feel as though I was able to transition my class to online learning
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

3. I feel as though my academic instruction was comparable online to in person
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

4. I feel as though my clinical instruction was comparable online to in person
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

5. My anxiety level was greater instructing online compared to classroom instruction
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

6. I miss the atmosphere of classroom instruction
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

7. Working away from my colleagues had a negative effect on my feelings towards my job
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

Student: If you are an instructor skip this section.

1. I feel as though my academic education was comparable online to in person
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

2. I feel as though my clinical education was comparable online to in person
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

3. My clinical experiences have been less varied using teletherapy
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

4. My anxiety level was greater through online learning compared to classroom learning
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

5. I miss the atmosphere of classroom learning
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

6. Studying away from classmates had a negative effect on my ability to understand material
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

7. I had the technology I needed to transition to online learning
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

8. I feel as though the online platforms for online learning were easy to understand
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree
   - n/a

APPENDIX C

Letter to Program Director

Dear Program Director,

My name is Kiera Byrne I am a graduate student in the Speech and Hearing Program at Cleveland State University. I am completing a master's thesis on the effects of COVID-19 on clinical and academic instruction in Communication Sciences and Hearing Programs across the nation from both the students and instructor's perspective. I am inviting you to share the attached link of the Qualtrics survey with the students and instructors in your program.

I thank you for your participation in this project.

http://csumarketing.az1.qualtrics.com/jfe/form/SV_9KBdEsDDYThjSx7

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