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EVALUATING SPEECH-LANGUAGE PATHOLOGISTS' TRANSFER OF  
CONTINUING EDUCATION LEARNING OUTCOMES TO THEIR PRACTICE  
SETTINGS

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Bachelor of Sciences in Speech-Language Pathology

University of Toledo

May 2018

Submitted in partial fulfillment of requirements for the degree  
MASTER OF ARTS in SPEECH PATHOLOGY and AUDIOLOGY

at the

CLEVELAND STATE UNIVERSITY

May 2020

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We hereby approve this thesis for

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Student's Date of Defense: 05/01/2020

## DEDICATION

In dedication to my family, whose relentless love and encouragement supported me in the fulfillment of my academic pursuits.

EVALUATING SPEECH-LANGUAGE PATHOLOGISTS' TRANSFER OF  
CONTINUING EDUCATION LEARNING OUTCOMES TO THEIR PRACTICE  
SETTINGS

ELIZABETH GRABER

**ABSTRACT**

Speech-language pathologists' continuing education courses employ two different mediums of instruction (live, in-person versus remote) to effectively produce learning outcomes, such as knowledge, skills, and attitudes. This research aimed to (1) obtain data about speech-language pathologists' perceptions of their motivation, the costs, the interactivity, and the quality of continuing education courses for the mediums of live, in-person continuing education courses and for remote continuing education courses; (2) determine whether speech-language pathologists express a preference based on (a) motivation, costs, interactivity, and quality, and on (b) medium of continuing education courses (live, in-person versus remote), and (3) ascertain if speech-language pathologists report a transfer of the learning outcomes taught in continuing education courses to their practice settings.

This study surveyed 425 licensed and/or certified speech-language pathologists who had previously attended one or more continuing education experiences in the last five years related to speech-language pathology content. The design of the survey instrument enabled the comparison of continuing education course mediums across the six constructs of motivation, costs, interactivity, quality, preferred medium, and transfer of learning. Final analysis revealed that speech-language pathologists' motivation to attend continuing education was more so for the medium of remote instruction. Data

analysis established that, based on speech-language pathologists' perceptions of the costs to attend and the interactivity of continuing education, live, in-person courses are the preferred medium. As for the quality of continuing education courses, the data did not establish a preference among speech-language pathologists for one medium of continuing education (live, in-person versus remote). The preferred medium of instruction as reported by speech-language pathologists is live, in-person courses. Speech-language pathologists reported that their transfer of learning outcomes taught at continuing education courses to their practice settings is more so for live, in-person continuing education courses.

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## CHAPTER I

### INTRODUCTION

Continuing education is intended to enable health professionals to keep their knowledge and skills up to date, with the goals of helping health professionals provide the best possible care, improve patient outcomes, and protect patient safety (Institute of Medicine Committee on Planning a Continuing Health Professional Education Institute, 2010). Bynum, Irwin, and Cohen (2010, p. 776) stated that “the purpose of continuing education for health professionals is to encourage change in clinical practice performance and improve patient care.” The United States’ continuing education system has based itself upon credit hour completion requirements, which vary by state boards and health specialty. State boards have determined the number of continuing education credits required for profession-specific licensure; variations in continuing education regulations have led to inconsistent learning and the potential for discrepancies within the efforts to achieve high levels of competence and practice for every health professional. The Institute of Medicine Committee on Planning a Continuing Health Professional Education

Institute (2010, p. 5) suggested improving the continuing education system by mandating outcome requirements given that the current regulatory conditions “are not conducive to teaching and maintaining these core competencies aimed at providing quality care.” The Institute of Medicine (2003) recommended that all clinicians possess five core competencies, which include being able to provide patient-centered care, work in interprofessional teams, employ evidence-based practices, apply quality improvement, and utilize informatics.

Recently, researchers have been assessing various continuing education courses to determine the effectiveness of learning outcomes as related to transfer of learning to practice settings (Berndt, Murray, Kennedy, Stanley, & Gilbert-Hunt, 2017; Cook & West, 2013; Mazmanian, Davis, & Galbraith, 2009). Some of these assessments compared courses based upon the medium of instruction. *Medium* as defined as a method or way of expressing ideas and information. Mediums of expression relate to course designs and mechanisms for course delivery. Research has focused on two mediums for course delivery, those being live, in-person learning versus remote instruction that is presented through digital or online means (Cook, Levinson, Garside, Dupras, Erwin, & Montori, 2008; Fordis, King, Ballantyne, Jones, Schneider, Spann, Greenberg, & Greisinger, 2005; Ifediora, 2019; Jacob, Duggan, Allen, Erwin, Aisaka, Yang, & Brownson, 2018; Milanese, Grimmer-Somers, Souvlis, Innes-Walker, & Chipchase, 2014; Richmond, Copsey, Hall, Davies, & Lamb, 2017; Ryan, Lyon, Kumar, Bell, Barnet, & Shaw, 2007).

Researchers have commonly held the precept that by modifying the design of the continuing education course, one will potentially improve outcomes and generate

additional benefits for allied health professionals (Berndt et al., 2017). Importantly, past researchers' first consideration was whether the designs and approaches utilized in the mediums of instruction have an impact on the learners' transfer of learning outcomes to their practice settings, or whether other factors are also affecting the transfer of learning (Ifediora, 2019; Richmond et al., 2017). Several factors were identified that affect learning transfer, including learners' characteristics, professional backgrounds, and motivations, program design and delivery, and organizational strategies used during the continuing education courses (Caffarella, Daffron, & Daffron, 2013). Relatedly, Berndt et al. (2017) reported a second consideration of whether, regardless of course design and medium of instruction, learners have transferred their learning experiences in order to improve professional performance and patient care.

The current study examined the relationship between continuing education course mediums and transfer of learning among practitioners in one allied health care profession, that being speech-language pathology, and explored the surveyed speech-language pathologists' reports of transfer of continuing education learning outcomes to their practice settings. The researcher found limited background research pertaining to allied health professionals, and notably for speech-language pathologists, on the current state of transfer of learning outcomes (i.e., knowledge, skills, and attitudes) to their respective practice settings.

### **1.1 Statement of the Problem**

Several studies explored the designs of the learning activities and teaching approaches used in the two mediums of instruction, live, in-person and remote, to determine whether both provide meaningful learning experiences and learning outcomes

(Milanese et al., 2014; Schoonheim, Heyden, & Wiecha, 2014; Wozniak, Ellaway, & Jong, 2018). Schoonheim et al. (2014) explored an alternative approach for healthcare instruction, virtual computer-based worlds that integrate lecture and interactive experiences for learners. Digital technologies, such as virtual worlds, contributed to effective learning experiences by providing simulated learning experiences in a safe and collaborative learning environment. Wozniak et al. (2018) reported limitations of virtual world technologies that are consistent with those mentioned by Schoonheim et al. (2014), which involve the cost to create and maintain virtual worlds as well as challenges with authenticity and transfer to real world practice. Milanese et al. (2014, p. 91) reported that “education in any form should: be flexible in construction and delivery so as to address individual learning styles and learning requirements; assess learning summatively; provide feedback; engage participants individually and in peer-groups; be entertaining and informative; be structured in readily-consumed and completed learning sessions.”

Other studies researched the effective use of the mediums of live, in-person teaching for continuing education versus remote instruction in medical and allied health professions (Cook et al., 2008; Fordis et al., 2005; Ifediora, 2019; Jacob et al., 2018; Richmond et al., 2017; Ryan et al., 2007). Cook et al., (2008), Fordis et al., (2005), Ifediora, (2019), and Ryan et al., (2007) addressed the effectiveness of remote continuing education courses on the learning outcomes of health care professionals, which included the development of knowledge, skills, and attitudes for professional practice. Richmond et al. (2017) conducted systematic reviews of the training methods for licensed health care professionals based on the outcomes of knowledge acquisition, practical skills, clinical behavior, self-efficacy, and satisfaction. Jacob et al. (2018) analyzed public

health professionals' skill gaps across various training approaches to examine the effectiveness of various training methods (i.e., in-person or distance learning). Although Jacob et al. (2018) compared the delivery methods for their effective reduction of skill gaps, the researchers did not examine public health professionals' application of learnings. Furthermore, insight into health professionals' application of continuing education learning outcomes is limited.

Research on allied health professionals' transfer of learning outcomes to practice settings is limited, specifically, to (1) the identification of the factors that facilitate or impede the transfer of these aforementioned learning outcomes, (2) the health professionals' perspectives on their learning experiences at past continuing education courses, and (3) health professionals' transfer of learning outcomes (knowledge, skills, and attitudes) to practice settings (Bynum et al., 2010; Jacob et al., 2018; Ryan et al., 2007). The present study addresses the problem of lack of information on speech-language pathologists' transfer continuing education learning outcomes to their practice settings and, specifically if the mediums of live, in-person or remote instruction have an effect on transfer of continuing education learning outcomes to practice settings.

## **1.2 Purpose of the Study**

Kirwan (2009) provided insight into the measurement of learning transfer, which includes gathering an evaluation of the learner immediately after the training to sometimes up to a few years later to determine if a learner's performance has changed based on the application of learning outcomes. Fordis et al. (2005), Ifediora (2019), Jacob et al. (2018), Ryan et al. (2007), and Stephenson, Wang, Szostek, Bonnes, Ratelle, Mahapatra, Mandrekar, Beckman, and Wittich (2016) all conducted studies concerning

the relationship between mediums of instruction and learning outcome measures that relied on participants' self-evaluations and tests. Their participants included physicians and public health practitioners. The scores gathered were dependent upon the participant's development of knowledge, skills, and attitudes for professional practice. These researchers examined the growth that participants attained in knowledge, skills, attitudes, and improved activity by the end of the continuing education course. Yet, the results acquired from each of these studies did not reflect learners' application of learning outcomes to their practice settings with respect to the mediums of the continuing education course utilized. The results did not provide information about whether the medium affected transfer of learning.

Other researchers suggested that mediums (i.e., live, in-person or remote instruction) utilized to educate health professionals were not related to learning outcomes (Milanese et al., 2014; Ryan et al., 2007). For instance, Ryan et al. (2007) found that the quality and teaching design of continuing education courses contribute to effective learning, regardless of the education medium employed. Milanese et al. (2014, p. 92), however, reported that "there is no 'one size fits all' approach to optimizing the learning outcomes, no matter what the teaching and learning environment." Furthermore, Merriam and Leahy (2002) discovered that learners bring certain characteristics that can affect the transfer of learning outcomes.

Moore (2009, p. 13) stated that "the transfer of new knowledge and skills into practice is a complex undertaking that may be affected positively or negatively by a cluster of factors." Moore (2009) stated that Caffarella (2002) identified six factors that influence the transfer of learning into practice, which included participants, design and



execution, content, changes required to apply learning, organizational content, and community and societal forces. As highlighted by Moore (2009), there are limited forms of assessment for continuing education planners to use to measure competence, performance, and impact on patient healthcare levels. These limited forms of assessment included observation methods and self-report data methods.

The purpose of this exploratory study was to further investigate the relationship between mediums and transfer of learning outcomes by speech-language pathologists by administering a survey to speech-language pathologists. This study compared the mediums (live, in-person instruction versus remote instruction) to survey respondents' perceptions of their transfer of learning outcomes, meaning the speech-language pathologists' reportedly experienced transfer of knowledge, skills, and attitudes from continuing education courses to their practice settings.

The research questions were:

1. What data were found among speech-language pathologists' perceptions of motivation, costs, interactivity, and the quality of continuing education courses for the mediums of live, in-person continuing education courses and/or for remote continuing education courses?
2. Were preferences found among the speech-language pathologists' perspectives on their past learning experiences based on
  - (A) four of the six constructs under study (motivation, costs, interactivity, and quality)?
  - (B) the medium of continuing education courses (live, in-person versus remote)?

3. (A) Did speech-language pathologists report transfer of learning outcomes (knowledge, skills, and attitudes) taught in continuing education courses to speech-language pathology practice settings?  
(B) Were there differences in speech-language pathologists' subjective report of transfer of learning outcomes related to knowledge, skills, and attitudes?  
(C) Were there differences in speech-language pathologists' subjective reports of transfer of learning outcomes related to the medium of instruction?

### ***1.2.1 Rationale for Research Questions***

The research questions were based on suggestions given in the current literature. Ryan et al. (2007) advised future researchers to identify factors that facilitate or impede the transfer of knowledge, skills, and attitudes into the work setting. The first research question pertained to speech-language pathologists' reports on specific factors including, motivation, cost, perceptions of interactivity, and perceptions of the quality of continuing education courses, specifically live, in-person and remote. This question served to identify trends within respondents' reports in relation to the medium of the continuing education course for speech-language pathologists. Bynum et al. (2010) recommended the assessment of health professionals' perceptions related to the expectations of continuing education programs. Similarly, Jacob et al. (2018) mentioned that examination of learners' experiences with computers or other web-based trainings may contribute to the effectiveness of course delivery methods.

The second research question regarded the presence of preferences found among speech-language pathologists based on their past learning experiences within certain mediums of continuing education courses (live, in-person or remote). The researcher

sought to examine speech-language pathologists' perspectives on their past learning experiences in order to determine whether a preference exists for the medium for continuing education courses.

The third research questions concerning speech-language pathologists' transfer of continuing education course learning outcomes to practice settings. Subcomponent questions were posed to determine whether speech-language pathologists' transfer of learning outcomes (knowledge, skills, and attitudes) from continuing education courses varied based on the medium of courses attended.

Non-directional hypotheses were most appropriate for this exploratory study as limited prior data exist to guide the formation of directional hypotheses. The non-directional hypotheses under study were:

1. Respondents reported data pertaining to perceptions of motivation, costs, interactivity, and the quality of continuing education courses for the mediums of live, in-person continuing education courses and/or for remote continuing education courses.
2. There was not a difference in the speech-language pathologists' motivation for attending live, in-person continuing education courses or for remote continuing education courses.
3. There was not a difference in the speech-language pathologists' reports regarding costs for attending live, in-person continuing education courses or for remote continuing education courses.

4. There was not a difference in the speech-language pathologists' reports of the interactivity of live, in-person continuing education courses or for remote continuing education courses.
5. There was not a difference in the speech-language pathologists' perceptions of the quality of the live, in-person continuing education courses or for remote continuing education courses.
6. There was not a difference in speech-language pathologists' reports on preferences for the medium of continuing education courses (live, in-person versus remote).
7. The learning outcomes (knowledge, skills, attitudes) taught in continuing education courses transferred to the practice settings of speech-language pathologists.
8. There was not a difference in the speech-language pathologists' transfer of learning outcomes in relation to the medium of the continuing education.

In summary, the researcher hypothesized that this study would determine that learning outcomes taught in continuing education courses yield a transfer to the speech-language pathologists' practice settings. Hypothesizing that there was not a difference in the transfer of learning outcomes based on the instructional medium for continuing education courses was prudent in that there is no supporting literature to suggest that one medium is preferable to the other in promoting transfer of learning.

In this study, the transfer of learning outcomes measured were based on the responses of participants to survey questions that revealed their self-reported comparisons of the two mediums of continuing education. The purpose was to identify any potential

trends within respondents' reports of factors that facilitated as well as impeded the speech-language pathologists' transfer of knowledge, skills, and attitudes to their practice settings; those factors included motivation, cost, perceptions of interactivity, and perceptions of the quality of continuing education courses for speech-language pathologists.

### **1.3 Explanation of Terms**

*Media* is defined by the Merriam-Webster Dictionary (2019) as “a channel or system of communication, information, or entertainment.” The dictionary definition of the term *media* could not serve in the present study as the plural form of *medium*. Instead, the Collins English Dictionary (2019) definition of *mediums* considers the term as an acceptable plural form when used in context as “a way or means of expressing your ideas or of communicating with people.” In this study, the researcher used the term *medium* as a plural noun.

Rohwer (2017, p. 14) stated that Cook (2005) defined *instructional method* as “teaching techniques that support learning processes.” For this study, the researcher used Cook's definition. The researcher considered several *instructional methods* when constructing survey questions and reviewed *instructional methods* utilized for each medium of continuing education.

*Continued professional development* is defined by the Health and Care Professions Council (2018) as “a range of learning activities through which health and care professionals maintain and develop throughout their career to ensure that they retain their capacity to practice safely, effectively and legally within their evolving scope of practice.” In this study, the researcher utilized the Health and Care Professions Council's

definition of *continued professional development* and *continuing education* in reference to speech-language pathologists' continuation of training and qualification for certification.

Car, Carlstedt-Duke, Car, Posadzki, Whiting, Zary, Atun, Majeed, and Campbell (2019) defined *digital education* as “the act of teaching and learning by means of digital technologies.” The present researcher devised a definition for *remote instruction* based on the Car et al. (2019) definition of the term *digital education*. The present researcher defined the term *remote instruction* as any form of instruction that requires technological access.

Car et al. (2019) defined *traditional education* as “the act of any teaching and learning based on nondigital educational material or in-person human interaction.” Car's definition for traditional education influenced the present researcher's definition of *live, in-person instruction*. In this study, the researcher characterized *live, in-person instruction* as a presentation given by a live instructor.

According to the Merriam-Webster Dictionary (2019), the term *allied health* is a noun that means “a broad field of health-care professions made up of specially trained individuals who are typically licensed or certified.” For the purpose of this study, *allied health* professionals were defined as speech-language pathologists, nutritionists, occupational therapists, physical therapists, social workers, psychologists, licensed practical nurses, and pharmacists.

Broad (1997, p. 2) defined *transfer of learning* as “the effective and continuing application by learner — to their performance of jobs or other individual, organizational, or community responsibilities — of knowledge and skills gained in learning activities.”

*Transfer of learning* outcomes were under examination throughout this study and this investigator utilized Broad's (1997) definition to provide context to the term.

The term *skill transfer* is defined by the Business Dictionary (2019) as “competencies in performance of a particular job which can be used in the performance of another job.” In this study, the definition provided by the Business Dictionary for the term *skill transfer* has been referred to as *transfer of learning outcomes* to describe speech-language pathologists' transfer of knowledge, skills, and attitudes acquired at continuing education courses to their practice settings.

#### **1.4 Significance of the Study**

This pilot study has theoretical significance in that research has not yet been conducted to determine whether speech-language pathologists' transfer of learning outcomes into practice settings differs based on the medium of the continuing education course and/or whether other factors affect this transfer. Nor has there been significant research on speech-language pathologists' perspectives on their learning experiences regarding the mediums currently offered for continuing education.

Also, the transfer of learning outcomes research to date has not carefully considered the relationship of speech-language pathologists' transfer of learning and subsequent patient care. Transfer of learning outcomes (knowledge, skills, attitudes) to practice has been the desired result of professionals' completion of continuing education courses; as such, the identification of factors that facilitate or impede the transfer of learning outcomes is important. There is one currently available example of how an author sought to gain insight into the perspectives of speech-language pathologists regarding their learning experiences at continuing education courses. Hutchins (2019),

an author associated with the *ASHA Leader Live*, informally sought the opinions of speech-language pathologists who attended ASHA's 2019 Convention. Hutchins (2019) gathered interviewees' insights into their convention learning experiences. Speech-language pathologists shared their new knowledge, skills, and attitudes with Hutchins and claimed that they would apply those learning outcomes to their practice settings; however, Hutchins did not follow up to confirm whether speech-language pathologists did transfer learning outcomes to their practice settings. *The ASHA Leader Live* is an online publication of the American Speech-Language Hearing Association and serves to promote the purposes of the organization and inform and energize its members. Hutchins was scanning the conference attendees to document the subjective perceptions of the benefit of conference attendance, which might include transfer of learning outcomes to practice.

The present study has practical significance in that the results provided data on the current state of speech-language pathologists' transfer of learning outcomes (i.e., knowledge, skills, and attitudes) to their respective practice settings. Speech-language pathologists' perspectives on continuing education courses attended over the past five years were examined to determine whether preferences existed across the mediums (live, in-person and remote instruction). Previous studies examined learning outcomes measures and the mediums of the continuing education courses for medical professionals, such as physicians and public health practitioners (Fordis et al., 2005; Ifediora, 2019; Jacob et al., 2018; Ryan et al., 2007; Stephenson et al., 2016). These prior studies did not provide data on the transfer of medical professionals' learning outcomes to their respective work settings.



## CHAPTER II

### LITERATURE REVIEW

The research questions stated in Chapter 1 suggest a need to explore the transfer of speech-language pathologists' continuing education learning outcomes to their practice within the field of speech-language pathology. The purpose of Chapter 2 is to first review the overall comparison between the continuing education mediums offered for health professionals. The researcher considers the instructional designs of continuing education courses as well as specific instructional factors (instructional techniques, learning and enabling activities, reflection, and multifactorial instruction) that may influence the transfer of learning outcomes to practice settings. Chapter 2 discusses the importance of the learners' experiences and motivations for completing continuing education courses, regardless of a learner's preferred medium of instruction.

Then, the researcher presents the National Educational Technology Standards for Global Learning in the Digital Age to provide context on learners' growth via remote instruction. In addition, Chapter 2 explores technological advancements, including innovations that foster networking and interactive delivery methods offered within remote instruction.

The researcher addresses the continuing education requirements for speech-language pathologists to outline the stringency of the American Speech Language Hearing Associations' mandates. Lastly, Chapter 2 provides insight into the application of learning outcomes to practice settings, through examination of two framework models and a documented account of skill transfer within the field of speech-language pathology.

### **2.1 Comparisons of Continuing Education Mediums for Health Professionals**

Ryan et al. (2007) deemed live, in-person and remote mediums as equally effective in offering quality learning experiences and learning outcomes for continuing medical education. When these researchers designed two workshops that differed in medium, they based each workshop primarily on the Situated Learning Theory framework. Ryan et al. (2007, p. e251) stated that the Situated Learning Theory “emphasizes authentic learning within a community of practice, facilitated by an expert practitioner and supported by interaction and collaborative knowledge construction.” These researchers found that if continuing education courses are based on sound educational principles then quality learning experiences and outcomes emerge, regardless of the medium of the continuing education course. Similarly, Carney (2000), Hartzell (2007), Mann, Gordon, and MacLeod (2007), Pinney, Mehta, Pratt, Sarwark, Campion, Blakemore, and Black (2007), Pololio, Clay, Lipkin, Hewson, Kaplan, and Frankel (2001) found that many of the most effective continuing education methods possess a theoretical basis in adult education. Several theories of learning that influenced the shaping of adult education include the following: lifelong learning, theories of motivation, self-directed learning, reflection, and experiential learning (Institute of Medicine Committee on Planning a Continuing Health Professional Education Institute,

2010). A description of each is located below in Table 2.1. Although Ryan et al.’s findings suggested that the design of continuing education activities and courses be guided by theoretical insights into how learning occurs and what makes the application of new knowledge more likely, continuing education providers do not consistently base their methods on theoretical perspectives (Olson, Tooman, & Leist, 2005).

**Table 2.1**  
*Overview of Select Theories of Learning*

|                        |  |
|------------------------|--|
| Lifelong learning      | An approach to learning whereby health professionals continually engage in learning for personal goals                           |
| Theories of motivation | A body of theories (e.g., discrepancy analysis, proficiency theory) explaining intrinsic motivations for engaging in learning    |
| Self-directed learning | An approach to learning whereby the structure, planning, implementation, and evaluation of learning are initiated by the learner |
| Reflection             | A learning tool in which an individual evaluates how experiences can guide action  |
| Experiential learning  | An approach to learning whereby a health professional’s experiences are seen as an educational resource                          |

*Note.* Reprinted from “Redesigning Continuing Education in the Health Professions,” by Institute of Medicine (US) Committee on Planning a Continuing Health Professional Education Institute, 2010, Washington (DC): National Academies Press (US); 2, p. 42.

### 2.1.1 Presentation Elements

In addition to the instructional design of continuing education courses, the presentation elements incorporated into such courses can affect learners’ development and application of learning outcomes. The presentation elements include (1) engagement and communication opportunities with peers, (2) flexibility of how learning occurs, (3) opportunities for repetition of information and the use of practice exercises, and (4) adequate support offered from instructors (Milanese et al., 2014). These researchers found that all elements are critical for any continuing education presentation; nevertheless, each medium differs in the amount to which continuing education planners

integrate elements that facilitate quality learning experiences. Historically, live, in-person continuing education courses incorporated these presentation elements. Remote instruction enables learners to engage with peers through innovative means, learn content at their discretion, and receive supports from instructors. Presenters, however, struggle with providing active learning opportunities as needed to strengthen the learners' skillsets.

### **2.1.2 Attendees' Learning Experiences within Continuing Education Courses**

Another study that compared the effectiveness of continuing education courses with respect to the medium of the course for doctors who participated in the courses reported differences between mediums regarding the learning experiences (Ifediora, 2019). Ifediora found that the face-to-face modality provided learners with feedback and communication advantages, while online sessions allowed more flexibility for participants. Other researchers discovered similar findings regarding remote instruction as providing flexible access to learning content and for allowing learners to progress at their own pace (Car et al., 2019; Svinicki & McKeachie, 2011). Moreover, Stephenson et al. (2016, p. 260) reported that "creative and interactive in-class sessions provide interaction with curricular content and accommodated various learning styles." These researchers have noted that it has been advantageous when continuing education planners adopted more advanced, interactive, discussion-based curricula into their courses. These curricula enhance higher-level learning for attendees. Due to technological advancements, the continuing education planners then increased the integration of interactive features into remote instruction courses.

In summary, the studies presented in this section highlighted ways in which learners acquire varying benefits from the medium of the continuing education course. Literature explored the instructional design that each medium may be based upon as well as the presentation elements that each medium may or may not incorporate into a continuing education course.

## **2.2 Instructional Factors of Continuing Education Courses**

Several researchers suggested the instructional factors of continuing education that may influence or inhibit the transfer of learning outcomes into health professionals' practices. Some of these instructional factors included (1) the participants' varying motivations for engaging in continuing education, (2) the varying learning experiences of participants, (3) the educational content provided, the use of active learning during instructional activities, and (4) the quality of the instructors (Caffarella, Daffron, & Daffron, 2013; Fordis et al., 2005; Gitonga, 2007). In the upcoming paragraphs, the present researcher delves further into a few of the instructional factors proposed to impact continuing education courses: motivation, instructional design and instructional techniques, learning and enabling activities, reflection, and multifactorial instruction.

### **2.2.1 Motivation**

First, this researcher considered sources of adult learners' motivations when assessing transfer of health professionals' continuing education outcomes to their practice settings. The Institute of Medicine Committee on Planning a Continuing Health Professional Education Institute (2010) suggested that participants' motivation may come from an external source, such as from a continuing education requirement, or from an internal source, like the participant's desire to learn certain information or curiosity about

the subject matter. An example of an externally motivated participant includes one who selects a course based on its perceived value (cost and convenience) rather than on the content and clinical benefits to the individual. On the other hand, participants who are internally motivated assessed their own learning needs and are typically purposeful and reactive to their learning. Two researchers, Svinicki and McKeachie (2011), identified a distinct advantage of remote instruction: opportunity for participants to learn collaboratively in different geographic locations, which one may consider as valuable to an externally motivated participant. These researchers perceived remote continuing education course attendees' access to demographically diverse peers as convenient to attendees' learning initiatives through collaboration. Although externally motivated learners acquired an opportunity for collaborative learning in a convenient manner, they may not engage with others relative to the content discussed at remote continuing education courses. Other analysts, such as Car et al. (2019), presented that remote instruction has the potential advantage to increase learner motivation and enjoyment of learning. As highlighted by Wozniak et al. (2018), learners need to be strategic and purposeful to obtain a desirable learning experience, despite whether the continuing education course employs technology. A marked disadvantage of remote instruction included learners' self-discipline to sustain motivation as concerns arise that those with poor study habits might fall behind (Lawn, Zhi, & Morello, 2017). Some researchers suggested that future studies should strive to understand how health professionals' motivation to participate in continuing education are associated with learning outcomes (Berndt et al., 2017, Wozniak et al., 2018).

### **2.2.2 Instructional Design and Instructional Techniques**

Learning experiences of participants may vary, stemming from the instructional design and the instructional techniques used in the continuing education course. Mazmanian, Davis, and Galbraith (2009) suggested that continuing education courses provide participants with multiple exposures to content and multiple instructional techniques. These authors noted an improvement in clinical outcomes when physicians received multiple instructional techniques in comparison to single instructional techniques. Over time, new continuing education methods have encouraged self-directed learning for participants. For example, Wittich et al. (2016) found that the use of mobile phone applications and multiple media integrated into live, in-person continuing education courses may engage all learners and genders. The features of the mobile device conference applications included the ability to download all presentation slides, take notes, and add highlights; search functions; social networking and texting with other attendees; and access to presenters' information. Mobile applications enhanced live, in-person conferences due to the advantage of learners personalizing their learning experience (Car et al, 2019).

### **2.2.3 Learning and Enabling Activities**

In order to further solidify the learners' understanding of the concepts presented at continuing education courses, a variety of learning or enabling activities may be offered. The enabling activities outlined by Moore, Green, and Gallis (2009) include (1) having interactivity during the presentation, (2) utilization of demonstrations or case histories to assist learners in developing an understanding of how to perform clinical tasks, (3) practice in acquiring skills through simulations, and (4) providing ongoing feedback to the learners.

#### **2.2.4 Reflection**

Another instructional activity that has facilitated learning is reflection. Pilcher and Bradley (2013) stated that Willis (2006) promoted higher order thinking using the strategy of reflection on one's experiences from his or her practice. Reflection approaches have aimed to heighten health professionals' awareness of their assumptions or biases, in order that they may recognize in what ways these precepts influence how their thinking and action occur. Furthermore, teaching has received advisement to be firmly rooted in the learners' experiences. The self-reflection method has been an essential principle in health professionals' continuing education courses, as it redirected the purpose of continuing education to include reflection on their practices. Providers of continuing education were encouraged to offer a mechanism for learner assessment (e.g., a formal exam, pre- and posttests, or a clinical practicum) in which learners can apply the acquired skills and knowledge covered during the course (American Speech-Language Hearing Association, n.d.).

#### **2.2.5 Multifactorial Instruction**

Cook and West (2013) asserted that patient outcomes should not be the only focus of attention for continuing education courses. Instead, they urged that multifactorial training should facilitate a proper balance between learner-centered and patient-centered effects. These researchers proposed that health professionals should advance their clinical performance through training that addresses the participants' satisfaction, knowledge, skills, attitudes, and behaviors in practice. These outcomes then generated effects on the patients' quality of care. Cook and Beckman (2010) mentioned a potential disadvantage of multifactorial instruction, in that it could result in limited generalizability to practice



settings, given that each activity may or may not contribute to change. In all, Cook and Beckman (2010) advised learners to determine which instructional factors of continuing education courses impact performance in their respective practice settings.

### **2.3 Advancement of Remote Instruction as a Medium for Continuing Education**

Historically, continuing education in the health professions primarily offered live, in-person courses. Kues, Davis, Colburn, Silver, and Umuhoza (2009, p. 21) conducted a survey in 2008 of continuing medical education providers and found an “increasing diversity” of modalities offered beyond the traditional, didactic conferences, courses, and lectures. Technological advancements over the years have paved the way for remote instruction for continuing education courses. Berg (2003) asserted that B.F. Skinner was one of the first behavioral psychologists to consider the use of computers for educational purposes; of note, computer-assisted instruction was first used in the 1950s and was supported by specific adult learning theories, including self-directed learning, interactivity, and clinical simulation (Berndt et al., 2017; Curran, Matthews, Fleet, Simmons, Gustafson, & Wetsch, 2017; Lawn et al., 2017; Pilcher & Bradley, 2013; Wozniak et al., 2018; Zaghab, Maldonado, Whitehead, Bartlett & de Bittner, 2015). For instance, the connectivism theory of learning and self-directed learning theory may have provided potential frameworks for the adoption of digital, social, and mobile technologies for continuing education (Curran et al., 2017). Curran et al. (2017) mentioned that Siemens (2015) described the importance of the connections between specialized information sets that enable people to learn beyond their current states of knowing.

#### **2.3.1 International Society for Technology in Education**

The International Society for Technology in Education (ISTE) outlined the National Educational Technology Standards for Global Learning in the Digital Age (ISTE, 2011). The standards stated that learners were to actualize several higher-order thinking skills, such as the ability to (1) demonstrate creativity and innovation, (2) communicate and collaborate, (3) conduct research and use information, (4) think critically, (5) solve problems, (6) make decisions, and (7) use technology effectively and productively (ISTE, 2011). Although academia adopted these standards, health care would benefit as well since “research regarding learning with the benefit of technology is still in its infancy, especially as it relates to workplace learning and, in particular, in the healthcare setting,” as described by Pilcher and Bradley (2013, p. 135).

### **2.3.2 Innovations that Foster Networking within Remote Instruction**

Higher order thinking, as achieved in live, in-person learning experiences, has been potentially attained as a result of interactivity among participants during the learning process, along with their participating in problem-solving activities, their applying new content to previous knowledge, and the stimulation of multiple senses (Pilcher & Bradley, 2013). These factors may or may not have been present in remote continuing education courses. Distance education has attempted to address the networking component through new innovations. For instance, Schoonheim et al. (2014) researched the potential of virtual world communities as environments for distance continuing education. The virtual world settings accommodated distance learners on various levels, such as enabling individuals to review content when needed, personalizing the learning experiences to ascertain one’s own learning needs and performance style, and providing supports via social networking. The proposed virtual world modality addressed one of the

disadvantages of remote instruction, in that it reduced learner isolation and addressed peer interaction (Lawn et al., 2017). Similarly, Curran et al. (2017, p. 202) found that the use of digital, social, and mobile technologies in health professional education can allow “innovative teaching/learning methods, foster greater connectedness and professional networking, and improve information access.”

### **2.3.3 Interactive Delivery Methods of Remote Instruction**

Aside from the innovative means of networking, remote instruction differs from live, in-person instruction based on its interactive methods of delivering content. Two content delivery methods utilized in remote instruction include synchronous or asynchronous ways of sharing content. Rohwer et al. (2017, p. 14) defined synchronous delivery as “real time, instructor-led learning, where all learners receive information simultaneously by logging onto virtual classrooms, like internet chat forums or teleconferencing.” Asynchronous delivery of content received the following definition: “the transmission and receipt of information occurs at different time points as it enables learners to participate in a learning activity at any time of day, from any desired location” (Rohwer et al., 2017, p. 14).

There is some research on the advantages and disadvantages of synchronous and asynchronous instruction. For instance, Zaghab, Manlondonado, Whitehead, and Bittner (2015) proposed the asynchronous Learner Stewardship Cycle (LSC) as an innovative approach to provide engaging practice-oriented online educational programs. This asynchronous continuing education approach suggested that the adaptive technological capabilities of the online program, such as measuring point-in-time learner data for each intervention, improved learner outcomes. Similarly, Rohwer et al. (2017, p. 14)

referenced Ruiz, Mintzer, and Leipzig (2006) and Welsh, Wanberg, Brown, and Simmering (2003) by stating that, “asynchronous communication enables learners to participate in the learning activity at any time of day, from any desired location.”

On the other hand, a disadvantage noted by Lawn et al. (2017) was the lack of immediate support from instructors when questions or problems arose within an asynchronous context. These features addressed the learners’ acquisition of knowledge outcomes but did not consider the learner’s application of the learning outcomes to their practice settings.

In summary, the effectiveness of the instructional features employed for remote means of continuing education courses remain under investigation, specifically in terms of their impact on practice (Berndt et al., 2017; Car et al., 2019).

#### **2.4 Continuing Education for Speech-Language Pathologists**

This section of the literature review presents information from the national organizational and credentialing body for speech-pathologists and audiologists, the American Speech-Language Hearing Association (ASHA), to highlight its continuing education requirements, its discussion of the mediums offered for continuing education courses, and the accreditation stringency for continuing education providers. The American Speech Language Hearing Association (ASHA) Code of Ethics (2016, p. 6) sets forth fundamental principles of conduct for speech language pathologists, such as “individuals shall enhance and refine their professional competence and expertise through engagement in lifelong learning applicable to their professional activities and skills.”

Mandates from ASHA require speech-language pathologists to complete 30 certification maintenance hours of ASHA approved continuing professional development

courses within each three-year certification maintenance cycle to fulfill certification renewal requirements (ASHA, n.d.). ASHA (n.d.) specified that each continuing maintenance hour is considered 60 minutes spent in a professional development activity as a learner and participant; furthermore, ASHA equates three continuing education units (CEUs) as 30 continuing maintenance hours. Certificate holders maintain their certification in speech-language pathology through documentation of their participation in continuing professional development courses. State licensure boards establish requirements that vary by state and which may or may not be equivalent to the ASHA standards (ASHA, n.d.).

As outlined by ASHA (n.d., p. 8), the mission encompasses “empowering and supporting speech-language pathologists through advancing science, setting standards, fostering excellence in professional practice, and advocating for members and those they serve.” One way in which ASHA made efforts to guide speech-language pathologists was through the establishment of new standards for professional development. For the 2020 standards renewal, ASHA adopted new professional development requirements for all licensed speech-language pathologists, which include completion of a minimum of one continuing maintenance hour in ethics during every three-year maintenance cycle (ASHA, n.d.). Also, ASHA recently mandated that all clinical supervisors and clinical fellowship mentors who provide clinical instruction to students for purposes of earning ASHA certification must complete at least two continuing maintenance hours of professional development in supervision. Both professional development requirements became effective on January 1, 2020.

Continuing education courses offered through ASHA can range from traditional workshops, seminars, and conventions to audio or video conferences (ASHA, n.d.). Online continuing education companies, such as [speechpathology.com](http://speechpathology.com), Super Duper Publications, Professional Development Resources, Northern Speech Services, Passy-Muir Incorporated, and Relias, LLC received approval by the Continuing Education Board of the American Speech-Language Hearing Association based on these companies meeting the standards of the ASHA Continuing Education Board. Similarly, live, in-person continuing education courses, such as those given by Ampcare LLC, S.E.C. Medical Speech Pathology Consulting and Training, and TalkTools received approval from ASHA's Continuing Education Board.

These ASHA approved continuing education providers are obligated to uphold the mandatory requirements for ongoing approval status. "ASHA is committed to providing quality CE [continuing education] experiences for its members and certificate holders by maintaining a system of ongoing review of organizations offering continuing professional education for speech-language pathologists" as stated by ASHA (n.d.). These requirements are:

- Requirement 1: Organization
- Requirement 2: Responsibility and Control
- Requirement 3: Transparency in Course Planning, Delivery, and Marketing
- Requirement 4: System for Offering and Verifying Continuing Education
- Requirement 5: Needs Identification
- Requirement 6: Learning Outcomes
- Requirement 7: Planning and Instructional Personnel

- Requirement 8: Learning Environment and Support
- Requirement 9: Content and Methodology
- Requirement 10: Requirements for Satisfactory Completion
- Requirement 11: Assessment of Learning Outcomes
- Requirement 12: Program Evaluation

ASHA’s disclaimer regarding ASHA approval of continuing education providers is that approval does not imply endorsement of course content, specific products, or clinical procedures. ASHA (n.d.) stated that, “it is your responsibility to contact the continuing education provider to verify specific information about a course.” The online company [speechpathology.com](http://speechpathology.com) regularly vets their content by employing a distinguished advisory board to provide topic-specific content and curriculum development ([speechpathology.com](http://speechpathology.com), n.d.). Speech-language pathologists and other industry-leading experts create the online courses offered on [speechpathology.com](http://speechpathology.com). As for the other companies offering continuing education courses, limited information is displayed online to explain how providers create and vet their content.

### **2.5 Transfer of Learning**

Gitonga (2007, p. 5) stated that “transfer of learning entails making meaning of learning experiences for personal and professional development.” Baldwin and Ford’s (1988) conceptual model provided a theoretical framework to examine the transfer of learning in the context of continuing medical education. The model explained a system that consisted of training inputs, including the sequence of training materials, along with an infusion of learning principles. Other factors included the trainees’ characteristics

(e.g., their abilities and personality factors) and the work-environment factors, such as peer support and constraints to perform learned behavior on the job.

### **2.5.1 Transfer of Training and Adult Learning Approach**

In comparison to Baldwin and Ford's model, the Transfer of Training and Adult Learning (TOTAL) approach allowed researchers to examine transfer forces, such as the individual trainee, supervisor, training personnel, coworker, and administrator, that affected social workers' transfer throughout all phases of a training workshop (Curry, Caplan, & Knuppel, 1994). For instance, the interaction of the total number and strength of the transfer forces, and whether they are positive or negative, determined the extent of transfer over time. Curry et al. (1994, p. 11) determined that three possible outcomes exist: "positive transfer--learning in the training situation results in better job performance, negative transfer--learning in the training situation results in poorer job performance, and zero transfer--learning in the training situation has no effect on job performance." Curry et al. (1994) based their insight on measuring results from Kirkpatrick (1975), developer of a four-level approach to evaluating training. In Level I, evaluation focused upon participants' reactions, such as a rating that trainees complete at the end of training. Level II emphasized the amount of learning that occurred, which is determined through pre- and post-testing. Level III highlighted the extent that behavioral changes transferred to the work situations. Level IV evaluated the amount of impact on the clients or the results of training and transfer. Comparably, Gitonga (2007) suggested that continuing medical education outcomes included changes in physicians' behaviors, improvements in patient care, or enhanced organizational processes. Baldwin (1988) suggested that different transfer curves, reflecting the extent of transfer over time, exist.



Furthermore, Curry et al. (1994, p. 12) asserted that “the number and strength of positive transfer forces and barriers in the different stages of the TOTAL model may produce different types of transfer curves.”

### **2.5.2 Methods of Examining Transfer**

Curry et al. (1994, p. 11) presented that although the impact of training is difficult to gauge, efforts should be made to examine a variety of indicators and events used in needs assessments such as turnover, critical incidents, accreditation reviews, and exit interviews.” Several researchers obtained data via self-report methods (e.g., interview questions, surveys) from their participants, who included health care workers, allied health practitioners, and other professionals, in order to document the learners’ application of outcomes, such as knowledge, skills, and attitudes, to their practice settings (Berndt et al., 2017; Daffron, Moore, & Chicovksy, 2015; Daffron, North, & Doran, J., 2007).

For instance, Berndt et al. (2017) conducted a systematic review of studies pertaining to continuing professional development of rural allied health professionals to evaluate participants’ knowledge. The main method of data collection used was through course evaluations and a pre- and post-test evaluation of self-reported knowledge change. Berndt et al. (2017) found knowledge gains as a primary outcome from the programs regardless of medium of delivery (live, in-person or remote instruction). In addition, three studies reported practice changes following the educational intervention based on the self-reported changes in knowledge or confidence. Berndt et al. (2017) clarified that “it cannot be assumed that there were resultant changes in practice.” Rural allied health

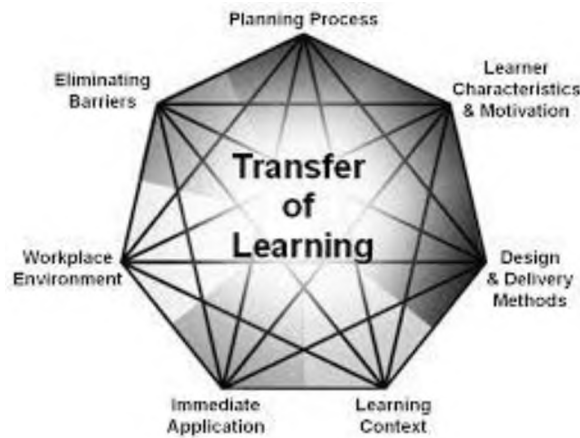
professionals acquired knowledge from their continuing professional development courses, as found in Berndt et al. (2017) systematic review.

Daffron et al. (2015) conducted a study on health care workers (nurses, medical assistants, administrators) to examine situations in which transfer of learning was or was not taking place among groups of professionals in their practice settings. After the health care workers completed a continuing education program, the researchers sent interview questions by mail approximately 60 days later, using a blind response-management system. The interview questions were based on the work of transfer of learning researchers and authors Broad (1997), Caffarella (2002), Merriam and Leahy (2005), and others.

Daffron et al. (2015) designed their instrumentation to measure the seven variables of the “Successful Transfer of Learning” model, which included: (1) the planning process, (2) learner characteristics and motivation, (3) design and delivery methods, (4) learning context, (5) immediate application, (6) workplace environment, and (7) eliminating barriers. The Successful Transfer of Learning model is located below in Figure 2.1.

**Figure 2.1**

*Successful Transfer of Learning Model*



*Note.* Reprinted from “Successful transfer of learning,” Daffron et al. (2015).

Regarding the planning process, respondents felt that their needs were represented and met even though they did not contribute to class preparation. Some of the participants reported that their motivation to attend the class was to improve their communication skills. These healthcare workers felt that if they improved their communication skills with their co-workers, then patients and families would also benefit. Participants expressed a variety of answers when asked what made the program positive. Daffron et al. (2015, p. 55) reported that “many stated that the instructor was very good and enjoyed his engaging way of teaching.” Additionally, many respondents commented on the structure of the course, which included lecture, small group discussions, and role-playing. The health care workers indicated that their preferred learning methods included visual, auditory, interactive, and repetitive. Most remarked that they learn through different combinations of delivery styles and mentioned that the learning environment was very important to prepare for optimal learning. Health care workers reported that they were able to use a mixture of new skills taught in the class.

Some participants recorded that practicing skills learned in class helped participants deal more effectively with difficult co-workers. Several of the respondents admitted that they were not expected to share what they learned with other colleagues and staff. Regardless of not having this expectation, a majority of the respondents chose to share some key points pertaining to the class workbook with staff. Most of the health care workers revealed that the hierarchy of management and political culture intervened in the transfer process. Also, they declared that being busy and forgetting some of what they learned was a frequent barrier to implementation. All 161 respondents reported that they had a positive learning experience in acquiring new ideas and skills, as well as reported using some of the information presented in the communication skills workshop on the job over the past 60 days.

Likewise, Daffron et al. (2007) directed a study to determine how training and working environments, attitudes, and experiences influenced transfer of learning for groups of professionals in their training settings. Law professors, software company professionals, state court judges, and appellate state attorneys received interviews to assess the variables present when learning was transferred. The researchers categorized the interview questions into four groups: the program-planning process, the delivery of the program, the post-program phase, and suggestions to help with transfer of learning to practice. These researchers structured their interview questions based on studies conducted by Merriam and Leahy. Daffron et al. (2007, p. 22) indicated that “some variables strongly influence successful transfer: involvement in the pre-program planning process and self-motivation to participate, use of a variety of delivery approaches and involvement of the trainee in the learning process, and immediate application of post-

training experiences with organizational support for the transfer of learning.” Although the Daffron et al. (2007) study spanned different professional groups, the data collected suggests that all professionals have a context for learning.

Daffron et al. (2007) stated that Awonyi, Griego, and Morgan (2002) estimated that only 10% of the skills and knowledge gained from training and education programs was transferred into practice by trainees who worked in community-based organizations, community development corporations, financial institutions, and government agencies. Since there is limited research on transfer for the healthcare sector, specifically speech-language pathology, the statistic mentioned by Awonyi et al. (2002) serves to highlight trends on transfer of learning.

Therefore, future investigators need to concentrate their attentions on the factors that hinder or help transfer of any learning outcomes to practice. By further identifying the factors that affect transfer of learning outcomes, researchers may detect how the transfer of learning to practice occurs for speech-language pathologists.

### **2.5.3 Result Dip Phenomenon**

The “result dip,” a phenomenon proposed by Rackham (1979), occurs shortly after learning a new skill. Initial decrease in performance results is based on workers’ attempts at implementing a newly acquired skill. Furthermore, Rackham (1979) recommended that workers receive coaching to provide support at this critical time, in order to prevent regression of workers’ behavior to the pre-training level. Curry et al. (1994) suggested that trainers measure satisfaction, transfer, and perceived client impact at varying times after workers’ training in order to obtain an approximation of the transfer curve. These training concepts corresponding to the TOTAL approach but dealt with not

only the participation of the trainee but also the role of the trainer to facilitate transfer and client impact.

#### **2.5.4 Speech-Language Pathology Skill Transfer Training**

Although the American Speech-Language Hearing Association (2004) asserted that certification in speech-language pathology is necessary, meeting certification requirements might not sufficiently qualify an individual to conduct specific clinical procedures (i.e., video endoscopy) or to use proprietary commercial procedures and materials (i.e., Lee Silverman Voice Treatment, Passy-Muir valve placement). Education and trainings offered for speech-language pathologists for these sorts of skills may be obtained through a variety of mediums: accredited didactic training programs, mentoring, supervised clinical experiences, continuing education experiences, and video reviews, among other processes for learning. Speech-language pathologists develop their knowledge and skills by attending one or more of the trainings mentioned. For instance, Dean (2013) described a training that Gaylord Hospital respiratory therapists and speech-language pathologists attended to develop and improve their performance providing Passy-Muir valve placement. Their training included a live Passy-Muir webinar, ventilator application competency checkoffs at bedside, on-site visits by clinical specialists from Passy-Muir Inc., and a trip to Madonna Rehabilitation Hospital for two days of observation and learning. Attendees demonstrated skill transfer at bedside to validate the learners' competency applying a Passy-Muir valve. Dean (2013) reported that the Gaylord staff noticed positive trends in outcomes once the approach was utilized on site. The trends, as stated by Dean (2013, p. 7), were that “ventilator association

pneumonia rates decreased from 4.1 to 2.0, weaning rates increased from 64% to 70%, and decannulation increased from 50% to 80%.”

As the 2013 Vice President of clinical education at Passy Muir Incorporated, Kobak (2013, p. 2), stated, “it will be critical that employers and academic institution training professionals who work with tracheotomy and ventilator patients provide opportunities to engage in interprofessional education.” Kobak (2013) valued Speed and Harding’s (2012) research findings that the implementation of multidisciplinary tracheostomy teams resulted in increased use of Passy-Muir valves, as well as early decannulation, decreased length of stay, improved patient outcomes, and significantly reduced costs associated with tracheostomy care. Overall, several factors impacted Gaylord Hospital’s speech-language pathologists’ and respiratory therapists’ skill transfer to their practice setting, such as the multiple education opportunities provided, interprofessional education initiatives, and employer support.

In summary, in this section the present researcher examined an array of reports of professionals’ transfer of learning within the context of continuing professional development. Several of the models’ theoretical frameworks discussed influenced the construction of the survey questions for this study. Lastly, the present researcher illustrated the importance of trainers’ and employers’ support of speech-language pathologists’ skill transfer throughout their attendance at continuing education courses in speech-language pathology.

## **2.6 Summary of the Literature**

In section 2.1, the researcher compared and contrasted continuing education course mediums (live, in-person and remote instruction) based on their instructional

design, incorporation of presentation elements, and varying benefits as recorded through the learning experiences of healthcare professionals. Section 2.2 inspected the instructional factors common to continuing education courses, specifically motivation, instructional design and techniques, learning and enabling activities, reflection, and multifactorial instruction. Within section 2.3 the researcher reported on improvements in technology that advanced remote instruction for continuing education in regard to enabling networking and interactive delivery methods.

Section 2.4 dealt with ASHA's requirements for speech-language pathologists to maintain their certification, how continuing education courses in speech-language pathology are certified by ASHA, and accreditation requirements for providers of continuing education in speech-language pathology. In section 2.5, the researcher considered a variety of variables that impact professionals' transfer of learning outcomes to their practice settings. Some of those variables explored include employer support, learner characteristics, immediate application, and work environment. An example of speech-language pathologists' skill transfer was featured in section 2.5.4 to highlight variables that affected those learners' transfer of learning outcomes to their practice settings.



## CHAPTER III

### METHODOLOGY

This chapter will cover the design and methods utilized for the study. Chapter 3 reviews previous research designs utilized when studying transfer of learning outcomes across a variety of educational settings. This chapter explains the employment of an online survey instrument for this study. In addition, the researcher reviews the six constructs under study, which include (1) motivation, (2) preferences, (3) costs, (4) interactivity, (5) quality, and (6) transfer of learning outcomes. Section 3.1 introduces the instrumentation, which encompassed 67 questions spanning across the six constructs. The researcher provides clarification on the items of the survey and groups them to their corresponding construct(s).

Also, the researcher outlines the methods of participant recruitment as well as the criteria for participation in this study. Chapter 3 then discusses the informed consent document in order to access the survey. Lastly, the researcher describes how the data were collected to explore the six constructs under examination in this study.

#### **3.1 Research Design and Constructs Under Study**

In order to devise the methods to be used in the current study, it was important for this researcher to review how past researchers have examined transfer of learning outcomes in prior studies of various kinds of educational settings. This researcher determined that participants' perceptions would need to be obtained in order to validate the current status of speech-language pathologists' transfer of learning outcomes to their practice settings.

### **3.1.1 Study Design**

The research design used for this study was to employ an online survey instrument comprised of questions related to speech-language pathologists' perceptions of their past continuing education experiences and their transfer of the courses' learning outcomes to their practice settings. The online survey provided a chance for speech-language pathologists to reflect upon their attendance at previous continuing education courses as well as to identify factors that affected the speech-language pathologists' transfer of learning outcomes to their practice settings. Online distribution allows surveys to be offered to a wide audience of potential participants.

The following examples of study designs, as identified by this researcher's review of prior studies, influenced the construction of the items for the survey used in this study.

The first influential example was related to how Stephenson et al. (2016) gathered attendees' perceptions of a model that employed flipped continuing medical education classroom courses. Stephenson et al. (2016, p. 256) referred to the Khanova, Roth, and Rodgers (2015), Lage, Platt, and Treglia (2000), Moffett (2015), as well as Prober and Khan (2013) definitions of flipped classrooms, whereby "information is delivered before class in print or electronic formats, and class time is reserved for discussing the material and applying it to relevant clinical scenarios." Stephenson et al. (2016) distributed a survey instrument that consisted of eight items structured on 5-point Likert scales. Stephenson et al. (2016) assessed learners' perceptions of in-class applications and perceptions of pre-class activities. The instrument measured the participants' perceptions of which components of continuing education courses were most effective for obtaining learning outcomes.

Other researchers provided other design examples. One cross-sectional validation study explored participants' attitudes toward using a conference mobile device application (an "app") (Wittich, Wang, Fiala, Mauck, Mandrekar, Ratelle, & Beckman, 2016). These researchers determined associations between participants' characteristics and their attitudes toward continuing medical education apps with conference app usage. The survey instrument consisted of 10 items scored using a five-point scale regarding the educational value, appeal, and usability of mobile device applications during a traditional, live, continuing medical education course.

From reading the Stephenson et al. (2016) study and the Wittich et al. (2016) study, this researcher determined that Likert-scale responses would be appropriate to use in the present study.

### **3.1.2 Construction of Survey Items**

Daffron and North's (2011) "Successful Transfer of Learning Model" provided a basis for the six constructs under review for this study. Their model represented seven variables: (1) the planning process, (2) learner characteristics and motivation, (3) design and delivery methods, (4) learning context, (5) immediate application, (6) workplace environment, and (7) eliminating barriers. The present researcher selected six constructs, which included (1) motivation, (2) preferences, (3) costs, (4) interactivity, (5) quality, and (6) transfer of learning outcomes. The follow information explains each of the constructs as they appear in the research questions and hypotheses.

First, this study's survey questions measured speech-language pathologists' motivation for attending past continuing education courses to find data pertaining to their perceptions of live, in-person continuing education courses and/or remote instruction. In Daffron et al (2015, p. 60) study, the researchers found that "learner's motivation to participate in a program is very clear to all stakeholders, and the characteristics and mind-set of individual learners to meet expectations for learning before the training programs are set." The present researcher hypothesized that respondents reported data pertaining to their perception of motivation for attending continuing education courses (live and/or remote instruction).

Second, the survey questions the examined the costs of past continuing education courses for speech-language pathologists to find data pertaining to their perceptions of live, in-person continuing education courses and/or remote instruction. This factor also provided insight into whether the learners' employers financially cover the costs of attending continuing education courses. The present researcher hypothesized that

respondents reported data pertaining to their reports on the costs to attend continuing education courses (live and/or remote instruction).

Third, survey questions pertaining to the interactivity of continuing education courses considered the involvement of the trainee and learner in the learning process as well as the activities presented throughout the continuing education courses. The researcher reviewed speech-language pathologists' reports of the interactivity of past continuing education courses to find data pertaining to their perceptions of live, in-person continuing education courses and/or remote instruction. The researcher hypothesized that respondents reported data pertaining to their reports on the interactivity of continuing education courses (live and/or remote instruction).

Fourth, quality of continuing education courses suggested that content offered practical resources and involved clinically relevant information for learners. Analysis of speech-language pathologists' reports of the quality of past continuing education courses to find data pertaining to their perceptions of live, in-person continuing education courses and/or remote instruction. The researcher hypothesized that respondents reported data pertaining to their reports on the interactivity of continuing education courses (live and/or remote instruction).

Fifth, the researcher considered the preferred learning context for speech-language pathologists. The questions about preferences served to determine whether there was a difference in speech-language pathologists' reports on (a) four constructs under study: motivation, costs, interactivity, and quality of the continuing education courses, (b) mediums of continuing education courses (live, in-person versus remote instruction). The researcher hypothesized that there was not a difference in speech-language pathologists

reports regarding their motivations to attend, reports on costs to attend, reports on interactivity, and perceptions of the quality of the continuing education courses (live, in-person or remote courses). The researcher also hypothesized that there was not a difference in speech-language pathologists' reports on preferences for medium of continuing education courses (live, in-person versus remote instruction).

Sixth, the researcher examined speech-language pathologists' transfer of learning outcomes to practice settings. The study sought to ascertain (1) reported transfer of learning outcomes to practice settings, (2) if there were differences in reports of transfer of learning outcomes related to knowledge, attitudes, and skills, and (3) if there were differences in reports of transfer of learning outcomes related to medium of instruction. The researcher hypothesized that (1) speech-language pathologists transferred learning outcomes to practice settings, (2) there would not be a difference in speech-language pathologists' transfer of learning outcomes in relation to knowledge, skills, and attitudes, and (3) that there would not be a difference in speech-language pathologists' transfer of learning outcomes in relation to medium of instruction.

In summary, the six above factors influenced the construction of the survey items used in this study.

**3.1.2.1 Motivation.** Daffron et al. (2015, p. 54) stated that "the greater the motivation (self-motivation, self-efficacy, and expectations set by management), the more likely transfer occurs." In one study, the shift from "expert-led teaching to use-lead learning" appeared to have been intrinsically motivating and offered a stronger learning stimulus (Rohwer, Motaze, Rehfuess, & Young, 2017, p.16). Given this information, participants' self-perceptions of their motivation to seek continuing education appeared to

warrant further investigation, in order to examine the role motivation plays on speech-language pathologists' transfer of learning outcomes to their practice settings.

Items pertaining to motivation considered participants' intrinsic and extrinsic factors for completing continuing education courses. Learners' autonomy appeared to be motivational and contributed to learning outcomes, as larger effects were shown in studies where the learners self-selected their trainings, as opposed to completing assigned trainings (Jacob et al., 2018).

**3.1.2.2 Preferences.** Participants' preferences for a specific medium may have influenced the learners' perspectives on the trainings or the courses offered for continuing education. The questions posed in the present survey consider the value and appeal of both mediums of continuing education (live, in-person and remote) to highlight trends in participants' perspectives.

**3.1.2.3 Costs.** With the exception of Berndt et al. (2017), research has not appeared to have explored the financial motives of participants in continuing education. Studies did not appear to have considered the costs and the funding needed to attend courses, which was generally either self-funded, employer funded, or a combination of both. Therefore, this researcher explored participants' costs for attending continuing education courses and considered the enabling and motivational factors that costs may have on participation in continuing education. The present study posed questions related to how attendees finance their continuing education experiences.

**3.1.2.4 Interactivity.** "The ways in which continuing education is delivered can affect learning outcomes, so effective continuing education activities have the following features: interactivity, use multiple methods of learning, simulate the clinical setting, and

incorporate needs assessments in order to meet the needs of health professionals” (Institute of Medicine Committee on Planning a Continuing Health Professional Education Institute, 2010, p. 46). Items included in the present survey regarding the interactivity of past continuing education courses require participants to reflect on the courses’ activities.

**3.1.2.5 Quality.** Aside from the continuing education course design, Daffron et al (2015) recommended that the content or educational materials prepared for learners include clinical scenarios, case studies, and practical resources that increase the incidence of learning transfer. The researcher created items pertaining to quality of past continuing education courses, which dealt with the complexity of the content, relevancy of the content, and instructional resources used.

**3.1.2.6 Transfer of Learning Outcomes.** Questions in the present study relate to transfer of learning outcomes to practice settings. The researcher generated the questions in order to determine whether speech-language pathologists transfer learning outcomes (knowledge, skills, attitudes) to practice settings.

Another important consideration was the learners’ commitment to be attentive to how course material could later transfer and apply to practice. Gitonga (2007, p. 1) noted that “transfer is highly dependent upon the willingness of the learner to attend to information being presented, recognize the need of the learning, and be committed to using the information beyond the initial learning session.” as outlined by. The present researcher measured transfer of learning outcomes via survey questions about the participants’ self-report of their applications of knowledge, skills, and attitudes to their practice settings.



## 3.2 Procedures

### 3.2.1 Instrumentation

The researcher designed survey items to address the factors that affect how learning outcomes transfer to practice settings. Sixty-seven survey questions were designed to compare the mediums of live, in-person versus remote continuing education opportunities. The 67 questions were designed to address six constructs pertaining to learners' transfer of learning outcomes as gleaned from reviewing Caffarella and Daffron (2013), Daffron et al. (2015), Gitonga (2007), and The Institute of Medicine Committee on Planning a Continuing Health Professional Education Institute (2010): (1) motivation, (2) preferences, (3) costs, (4) interactivity, (5) quality, and (6) transfer of learning outcomes. The researcher created a construct chart to show that each question illustrates at least one of the six constructs. A question may correspond with more than one construct. The researcher limited analyses per survey item to one construct. The construct chart is located in Appendix A.

**3.2.1.1 Motivation.** The researcher generated 32 items pertaining to motivation based on the information presented by Caffarella and Daffron (2013), The Institute of Medicine Committee on Planning a Continuing Health Professional Education Institute (2010), and Daffron (2013), who discussed the varying motivations of adult learners. These 32 items were items 5 to 15, 17 to 19, 27, 34 to 46, 48 to 50, and 58. Two survey items, numbers 27 and 58, probed reflectivity, conceived as a component of motivation, as noted by Gitonga (2007) and The Institute of Medicine Committee on Planning a Continuing Health Professional Education Institute (2010). Gitonga (2007) mentioned

that individuals tend to change their behaviors based on reflective practice, which in turn affects one's motivation to change.

**3.2.1.2 Preferences.** The researcher considered medium preferences for continuing education by generating seven survey questions regarding the potential benefits and appeal of each medium, as outlined by Curran et al. (2017) and Milanese et al. (2014). These seven survey items were question items 2 to 3, 12 to 13, 39, and 66 to 67.

**3.2.1.3 Costs.** Berndt et al. (2017) suggested including the cost factors for participation in continuing education courses. Moreover, the 10 items pertaining to the construct of cost may determine if participants offer opinions on continuing education that is self-funded versus employer funded. Those 10 survey items included numbers 14 to 18 and 45 to 49.

**3.2.1.4 Interactivity.** Interactivity is the key to promoting higher order thinking during learning processes (Pilcher & Bradley, 2013). In order to investigate the participants' engagement with the interactive components of the continuing education courses, 12 items address speech-language pathologists' perspectives on activities incorporated into presentations (e.g., case studies, role-playing, simulations, and problem-based learning activities). The 12 survey items were 9 to 10, 20 to 22, 25, 38, 40, 51 to 53, and 56. Moore, Green, and Gallis (2009, p. 9) stated that Caffarella and Daffron (2013) urged planners to "focus on the clinically relevant information that is necessary to help participants develop skills associated with achieving desired results."

**3.2.1.5 Quality.** Bennett, Davis, Easterling, Friedmann, Green, Koeppen, Mazmanian, and Waxman (2000) proposed that the content and learning resources

selected for continuing education courses are imperative to improving learners' professional lives and patient outcomes. The researcher created 13 survey questions targeting the quality of continuing education courses with consideration of courses' content complexity, the courses' relevancy, and instructional resources used. Those survey items were 10, 12, 16, 22 to 24, 26, 39, 47, 53 to 55, and 57.

**3.2.1.6 Transfer of Learning Outcomes.** The researcher assessed speech-language pathologists' transfer of learning outcomes to their practice settings through the consideration of respondents' reports of their application of knowledge, skills, and attitudes taught at continuing education courses. As similarly conducted by Daffron et al. (2015) on the application of learning outcomes to practice settings, the present researcher did not consider workplace environmental factors or barriers to learners' transfer of continuing education course learning outcomes. The survey items were 27 to 33, 58 to 65, and 67.

### **3.2.2 Survey Construction**

The present researcher created multiple drafts of survey questions that covered these various constructs and how they apply to the two mediums for continuing education courses. The researcher edited questions for clarity and reduced the number of items in order to have consideration for the completion time for survey participants. Editing reduced redundancy across the questions and eliminated some extraneous factors deemed unnecessary. Revisions of survey questions ensured that all the questions address the six constructs of motivation, preference, cost, interactivity, quality, and transfer of learning, and that identical questions were posed with respect to each medium.

The investigator created an account on the SurveyMonkey platform to format and create the template for the survey instrument. The following settings were enabled on Survey Monkey: respondents are anonymous, only allow the survey to be taken once on the same device, do not show results to respondents, and exclude personal information (i.e., names, email addresses, and internet protocol addresses) from the survey results. Participants completed one survey, with Survey Monkey set to block more than one response submitted by a device (any computer, iPad, cellular phone, etc.). All items inquired about the participants' continuing education experiences. There were 67 survey questions; six were multiple-choice questions, and 61 were 6-point Likert scale items. The researcher estimated the time to complete the survey was 10 minutes, and the Survey Monkey software provided the same time estimate. The survey instrument is located in Appendix B.

### **3.2.3 Participants**

The Institutional Review Board (IRB) at Cleveland State University serves to protect the rights and welfare of humans participating in research activities. An IRB has the authority to approve or disapprove research when reviewing the research protocol and related materials to ensure compliance with federal regulations. The investigator applied for project approval by the Sponsored Programs and Research Services via Cayuse IRB on November 13, 2019. The submission included a completed application, a recruitment statement (Appendix C), the survey instrument (Appendix B), the participant informed consent form (Appendix F), the social media posting list (Appendix D), and the American Speech Hearing Association Communities list (Appendix D). In the course of the review of this thesis by the committee, the researcher sent an amendment to Cayuse

IRB to request modifications for the previously approved protocol. The researchers requested three changes to the survey instrument: the addition of two demographic question and rewording of the survey instructions to include the qualifier that participants would base their responses on continuing education completed in the past five years. The thesis committee recommended these survey revisions as a means to obtain more clarity and specificity for the data collected for this study.

### **3.2.4 Methods of Recruitment**

The investigator created the recruitment statement. Participants received notification of the study via email and social media postings. There were two main methods of recruitment initiatives:

(1) Social media postings. The researcher posted the surveys electronically to 41 social media groups, webpages, and platforms. The social media sites included: Twitter, Instagram, Pinterest, and Facebook. Each social media posting required unique alterations. For instance, the mobile application of Instagram required a picture and comment to post. A shortened link to the recruitment statement alleviated character limitation concerns and increased user accessibility. The researcher used an image from Redbubble for the post and brief details on accessing the shortened link to the recruitment statement (see Appendix E). Instagram groups tagged into the post are in Appendix D. Since Twitter imposes character limitations on all posts, the researcher copied the shortened link to the recruitment statement into the post and provided a succinct description of the study in the post. Pinterest also presented challenges in that the social media platform did not allow the researcher to provide the shortened link in the post. Therefore, only an image (see Appendix E) and directions were in those postings. The

researcher provided the shortened link in a comment on the original post and sent postings out to the designated boards. The researcher screenshot these social media platform recruitment posts and grouped them together in Appendix E.

In addition, the investigator posted the recruitment notices to the American Speech Hearing Association Communities list. A full list of the sites is found in Appendix D. The researcher posted the recruitment notice to the 41 social media groups, webpages, and platforms on February 2, 2020.

(2) Direct emails. The researcher obtained the Cleveland State University Speech and Hearing Program's email distribution lists, which included 86 email addresses for program graduates, program field placement supervisors, and employers of program alumni. The researcher sent out recruitment notices to all 86 email addresses on January 12, 2020. Only 79 individuals received the recruitment notices, as seven email addresses were unsuccessfully delivered due to the email addresses not existing any longer. The researcher received a response from an email recipient regarding a typo in the recruitment notice and fixed it accordingly. On February 2, 2020, the researcher resubmitted recruitment notices to these email addresses.

The researchers encouraged recipients of recruitment notices to email, post, or otherwise send the recruitment notice to other speech-language pathologists to enact a snowball sampling approach. Twitter, Instagram, Pinterest, and Facebook respondents did not repost or retweet the recruitment statement. The researchers received notice from one recipient on the ASHA communities list that this recipient sent the recruitment to two other email distribution lists with which she was affiliated.

### **3.2.5 Criteria for Participation**

The investigator established the inclusionary criteria to reflect speech-language pathologists' length of work experience and opportunities to transfer continuing education learning outcomes to their professional practice and announced this in the recruiting notice. The targeted population was individuals who possess the ASHA Certificate of Clinical Competence, which is a nationally recognized professional credential, and/or state licensure in speech-language pathology. Participants targeted were practicing speech-language pathologists who reside in the United States, including retired or non-working speech-language pathologists if they maintained their licensure and/or certification at the time of participation. All respondents were to have been practicing in the field for at least five years. The researcher excluded students and recent graduates completing their Clinical Fellowship Year from the study, as they have had limited exposure to continuing education courses for speech-language pathology and limited experience practicing in the field of speech-language pathology. The recruitment notice is located in Appendix C.

### **3.2.6 Documentation of Informed Consent.**

The investigator created an informed consent document for participants to complete prior to taking the survey. The informed consent document granted participants access to the survey instrument via an embedded hyperlink activated when the participant voluntarily agreed to complete the survey. There was no set number of participants for inclusion in the study, as the methods of recruitment relied upon the interest of the targeted population.

## **3.3 Data Collection**

The researcher collected data on the six constructs pertaining to learners' transfer of learning outcomes. The instrument was released on January 12, 2020 and remained active until March 10, 2020. The online survey tool yielded a de-identified data set of anonymous responses. Survey Monkey tabulated the number of respondents who completed the survey. Survey Monkey's analyses yielded a quantitative report of the data, which the researcher reported as the frequency of responses for each item on the survey. Since the construct chart (Appendix A) guided the design of the instrumentation, the data points gathered for specific constructs revealed answers to the research questions under examination.

As Chapter 4 will detail, when the data were obtained, the researcher created and utilized a data collection chart (Appendix G) to display the numerical input for each survey question. The data collection chart guided data collection to address each of the research questions. The researcher manually transferred over the number of responses collected for each of the survey questions and Likert scale items to the data collection chart.



## CHAPTER IV

### RESULTS

In this chapter, the researcher reports the results of the survey and the analyses of the data. The survey provided speech-language pathologists' perspectives on continuing education courses completed in the past five years. The survey questions and responses answered the research questions stated in Chapter 1. The six constructs under study in these research questions were (1) motivation, (2) costs, (3) interactivity, (4) quality, (5) preferences, and (6) transfer of learning outcomes.

The research questions were:

1. What data were found among speech-language pathologists' perceptions of motivation, costs, interactivity, and the quality of continuing education courses for the mediums of live, in-person continuing education courses and/or for remote continuing education courses?
2. Were preferences found among the speech-language pathologists' perspectives on their past learning experiences based on (A) four of the six constructs under study (motivation, costs, interactivity, quality)

(B) the medium of continuing education courses (live, in-person versus remote)?

3. (A) Did speech-language pathologists report transfer of learning outcomes (knowledge, skills, and attitudes) taught in continuing education courses to speech-language pathology practice settings?

(B) Were there differences in speech-language pathologists' subjective report of transfer of learning outcomes related to (1) knowledge, (2) skills, and (3) attitudes?

(C) Were there differences in speech-language pathologists' subjective reports of transfer of learning outcomes related to the medium of instruction?

The data gathered to address the above research questions required the review of six constructs introduced throughout survey items (question numbers 5 to 67). Each item illustrated at least one, if not more than one, of the six constructs: (1) motivation, (2) costs, (3) interactivity, (4) quality, (5) preferences, and (6) transfer of learning outcomes. The researcher compared respondents' responses pertaining to continuing education mediums employed and the six constructs under examination.

The hypotheses under study were:

(1) Respondents reported data pertaining to perceptions of motivation, costs, interactivity, and the quality of continuing education courses for the mediums of live, in-person continuing education courses and/or for remote continuing education courses.

- (2) There was not a difference in the speech-language pathologists' motivations for attending live, in-person continuing education courses or for remote continuing education courses.
- (3) There was not a difference in the speech-language pathologists' reports regarding costs for attending live, in-person continuing education courses or for remote continuing education courses.
- (4) There was not a difference in the speech-language pathologists' reports of the interactivity of live, in-person continuing education courses or for remote continuing education courses.
- (5) There was not a difference in the speech-language pathologists' perceptions of the quality of live, in-person continuing education courses or for remote continuing education courses.
- (6) There was not a difference in the speech-language pathologists' preferences for a medium of continuing education courses (live, in-person versus remote).
- (7) Speech-language pathologists reported a transfer of learning outcomes (knowledge, skills, and attitudes) taught in continuing education courses to speech-language pathology practice settings.
- (8) There was not a difference in speech-language pathologists' reports on transfer of learning outcomes related to knowledge, skills, and attitudes.
- (9) There was not a difference in speech-language pathologists' reports on transfer of learning outcomes related to the medium of continuing education courses (live, in-person versus remote).

Chapter 4 is structured to provide:

- (1) Responses to the research questions. The researcher presented the key findings to address the research questions in section 4.1.
- (2) Hypotheses testing. The researcher provided key findings to test the hypotheses in section 4.2.
- (3) The researcher detailed results for each of the survey items in section 4.3.

#### **4.1. Responses to Research Questions**

The construction of the survey items served to address each of the three research questions. The survey is found in Appendix B.

##### **4.1.1 Research Question 1**

Responses gathered for research question #1 required the review of several sets of items. The researcher assessed responses to motivation construct items 5 to 15, 17 to 19, 27, 34 to 46, 48 to 50, and 58. Next, the researcher examined speech-language pathologists' reports on costs, as included survey items 14 to 18 and 45 to 49. The researcher addressed the interactivity of continuing education courses through survey items 9 to 10, 20 to 22, 25, 38, 40, 51 to 53, and 56. Then, the researcher evaluated the quality of continuing education courses through data obtained on items 10, 12, 16, 22 to 24, 26, 39, 47, 53 to 55, and 57. The researcher reviewed these sets of data in order to obtain data on speech-language pathologists' perceptions of these four constructs: (1) motivation, (2) costs, (3) interactivity, and (4) quality of the continuing education courses for the mediums of live, in-person instruction and/or for remote instruction. Appendix A, the Construct Chart, shows each construct and the question numbers that assessed these constructs.

**4.1.1.1 Response to research question 1.** Items 7, 10, 12, 16, 18, 20 to 27, 34, 36, 39, 42 to 43, 47, 49, and 51 to 58 yielded the key findings to address research question 1. These results are:

(1) Respondents reported data pertaining to their perceptions of motivation, costs, interactivity, and the quality of continuing education courses for the mediums of live, in-person continuing education courses and/or for remote continuing education courses. The survey was a suitable tool for data collection.

#### **4.1.2 Research Question 2**

Data obtained for research question #2 entailed the examination of a few details. Research question #3 has two parts, A and B. First, the researcher assessed the demographic representation of the sample (survey items 3 and 4). Certain demographic characteristics, such as the number of years that participants had been practicing as speech-language pathologists, contributed to an understanding of the amount of exposure that participants received in past continuing education courses. The amount of experience that a participant has had in attending continuing education courses presumably affects his or her development of a preference in medium. The researcher reviewed responses to motivation, costs, interactivity, and quality construct items 5, 9, 18, 20, 22 to 24, 26, 34, 38, 49, 51, 53 to 55, and 57. These survey items assisted in answering part A of research question 2, which sought to find preferences based on the four constructs under examination: motivation, costs, interactivity, and quality. Additionally, responses to survey items 12 to 13, 39, and 66 to 67 identified the characteristics of the two mediums of continuing education courses that contributed to participants' preferences for a specific medium.

**4.1.2.1 Response to research question 2.** Items 5, 9, 18, 20, 22 to 24, 26, 34, 38, 49, 51, 53 to 55, and 57, 66 and 67 yielded the key findings to address research question

2. These results are:

Part A:

- (1) Speech-language pathologists' reports on preferences differed based on their motivations to attend continuing education courses (live, in-person or remote).
- (2) Speech-language pathologists' reports on preferences differed based on the costs to attend continuing education courses (live, in-person or remote).
- (3) Speech-language pathologists' reports on preferences differed based on the interactivity of the continuing education courses (live, in-person or remote).
- (4) Speech-language pathologists' reports on preferences did not differ based on the quality of the continuing education courses (live, in-person or remote).

Part B:

- (1) Speech-language pathologists' reports on preferences for continuing education courses showed a difference based on the medium employed for continuing education courses.

### **4.1.3 Research Question 3**

Research question #3 has three parts, A, B, and C, and together these parts addressed a plethora of information obtained from the survey. Survey items 28 to 30 and 59 to 61 addressed part A and part B of research question #3 by providing information on speech-language pathologists' transfer of learning outcomes to practice settings. The researcher utilized the same survey items to answer part B of research question #3, pertaining to whether differences existed amongst the three learning outcomes

(knowledge, skills, and attitudes). Furthermore, items 27 to 33, 58 to 65, and 67 derived information related to the two contrasting mediums for continuing education courses (live, in-person versus remote) and assessed whether differences existed between the mediums. The researcher reported the contrasting information to provide insight into part C of research question #3, “Were there differences in speech-language pathologists’ subjective reports of transfer of learning outcomes related to the medium of instruction (live, in-person versus remote)?”

**4.1.3.1 Response to research question 3.** Items 27 to 33, 58 to 64, and 67 yielded the key findings to address research question 3. These results are:

Part A:

(1) Speech-language pathologists reported a transfer of learning outcomes taught at continuing education courses to their practice settings.

Part B:

(1) Speech-language pathologists’ reports on transfer of learning outcomes taught at continuing education courses differed in relation to knowledge, skills, and attitudes applied to their practice settings.

Part C:

(1) Speech-language pathologists’ reports on transfer of learning outcomes at continuing education courses differed in relation to the medium employed at the continuing education course.

## **4.2 Hypotheses Testing**

The key findings to test the hypotheses are derived from items 5, 7, 9, 10, 12, 16, 18, 20 to 27, 34, 36, 38 to 39, 42 to 43, 47, 49, 51 to 64, 66 and 67. These results are:

Hypothesis 1: The researcher accepted hypothesis 1 because data yielded from items 7, 10, 12, 16, 18, 20 to 27, 34, 36, 39, 42 to 43, 47, 49, 51 to 58 indicated respondents' perceptions of motivation, costs, interactivity, and quality of continuing education courses (live, in-person and/or remote). The survey was a suitable tool for data collection.

Hypothesis 2: The researcher rejected hypothesis 2 because data yielded from items 5 and 34 indicated differences in speech-language pathologists' reports on their motivation to attend live or remote continuing education courses.

Hypothesis 3: The researcher rejected hypothesis 3 because data yielded from items 18 and 49 indicated differences in speech-language pathologists' reports regarding the costs to attend live or remote continuing education courses.

Hypothesis 4: The researcher rejected hypothesis 4 because data yielded from items 9, 20, 22, 38, 51, and 53 indicated differences in speech-language pathologists' reports regarding the interactivity of live or remote continuing education courses.

Hypothesis 5: The researcher accepted hypothesis 5 because data yielded from items 23 to 24, 26, 54 to 55, and 57 indicated that there was not a difference in speech-language pathologists' reports regarding the quality of live or remote continuing education courses.

Hypothesis 6: The researcher rejected hypothesis 6 because data yielded from items 66 and 67 indicated differences in speech-language pathologists' reports regarding preferences for a medium of continuing education courses.



Hypothesis 7: The researcher accepted hypothesis 7 because data yielded from items 28 to 30 and 59 to 61 indicated that speech-language pathologists' reported transfer of learning outcomes from continuing education courses to their practice settings.

Hypothesis 8: The researcher rejected hypothesis 8 because data yielded from items 28 to 30 and 59 to 61 indicated differences in speech-language pathologists' reports on transfer of learning outcomes related to knowledge, skills, and attitudes.

Hypothesis 9: The researcher rejected hypothesis 9 because data yielded from items 27 to 33, 58 to 65, and 67 indicated differences in speech-language pathologists' reports on transfer of learning outcomes related to medium of continuing education courses (live, in-person versus remote).

### **4.3 Survey Results**

The survey appears in Appendix B. Overall, the survey obtained responses from 425 speech-language pathologists. The researcher sent survey recruitment notices to 86 speech-language pathologists' email addresses, posted the notice to 41 social media groups and/or pages, and posted the notice to 14 American Speech Hearing Association community lists. Because the number of persons reading these posts cannot be determined, the response rate for the survey cannot be determined.

The survey consisted of 67 items, which provided information on speech-language pathologists' perspectives on six constructs pertaining to continuing education courses completed in the past five years. With 67 responses possible for each of the 425 participants, this survey had the potential to yield 28,475 data points.

To determine the results of the survey, the researcher grouped the 67 questions into seven categories for analysis. Category 1: Items 1 to 4 provided demographic

information. Category 2: Items related to the construct of motivation included items 5 to 15, 17 to 19, 27, 34 to 46, 48 to 50, and 58. Category 3: Survey items 14 to 18 and 45 to 49 pertained to the costs of attending continuing education courses. Category 4: This set dealt with respondents' reports of the interactivity of continuing education courses, through items 9 to 10, 20 to 22, 25, 38, 40, 51 to 53, and 56. Category 5: Items 10, 12, 16, 22 to 24, 26, 39, 47, 53 to 55, and 57 rendered data on the quality of the courses. Category 6: This set consisted of responses to survey items 3 to 4, 12 to 13, 39, and 66 to 67, to provide information on speech-language pathologists' preferences as to the medium of instruction. Category 7: Items 27 to 33, 58 to 65, and 67 pertained to speech-language pathologists' subjective reports of their transfer of learning.

Data analyses noted the number of responses obtained per item. The total number of responses gathered varied per survey item, as some respondents sometimes did not provide responses to all of the survey items. As such, for every item, data are reported as the number of responses obtained for the response choice, given as the numerator, over the total number of responses obtained for the item, given as the denominator. The maximum possible denominator per item was 425.

Survey items were constructed to yield discrete responses for perceptions regarding live, in-person instruction versus remote instruction. The questions were constructed in parallel so that each medium could be explored individually, but the parallel items probed the same information across the conditions of live, in-person instruction versus remote instruction. However, to complete the data analyses, beyond analyzing the responses for each individual item, additional analyses required that the responses for the parallel items for both mediums of instruction needed to be aggregated

to explore the construct in full. The researcher aggregated responses for the parallel survey items that covered the same content and construct. The researcher thus obtained the total number of responses to two of the parallel survey items for live, in person courses and for remote courses. When two items were aggregated, the denominator reflecting the possible number of responses was 850.

#### **4.3.1 Items 2 to 4: Demographic Information**

Survey items 2 to 4 provided demographic data on the participants. The key findings from items 2 to 4 are: (1) item 2 revealed that 238/316 respondents (75.32%) received ASHA communities postings to access the link for the survey; (2) item 3 revealed that respondents were most representative of the employment setting or therapy populations of university (82/317, 25.8%), public schools K-12 (81/317, 25.55%), and private practice, for profit (28/317, 8.83%); and (3) item 4 revealed that a majority of the respondents (293/316, 92.71%) represented speech-language pathologists that have been practicing in the field for more than six years.

**4.3.1.1 Detailed Results for Items 2 to 4: Demographic Information.** The data are found in tabular form in Table 4.1: Frequency of Responses for Items 2 to 4. Item 2 asked speech-language pathologists how they received the link to the survey. The 316 responses were: ASHA communities posting (238), an email from a person I know (53), social media site posting (15), saw a reposting or retweeting (0), and other (10). Item 3 inquired about participants' current employment setting or therapy population. The survey instructed that only one location was to be selected. This item yielded 317 responses that dispersed into the following locations: (14) in hospital (adult acute care, inpatient), (18) in hospital (adult acute care, outpatient), (0) in hospital (pediatric acute

care, inpatient), (5) in hospital (pediatric acute care, outpatient), (12) in rehabilitation center (inpatient and/or outpatient), (6) in home care, (11) in a skilled nursing facility, (0) in long term care facility, (4) in developmental disabilities (e.g., county board, school or treatment center, workshop, residential facility, etc.), (81) in public school K-12, (2) in private school K-12, (13) in preschool (ages 3-6), (16) in early intervention, (4) in community speech and hearing center, (3) in private practice, non-profit, (28) in private practice, for profit, (82) in university, (5) in other SLP practice setting or population, (1) in employed outside of the field of SLP, and (12) were not employed. Then survey item 4 probed for the number of years that participants have been practicing within the field of speech-language pathology. The 316 responses were: 1-2 years (5), 3-5 years (18), 6-10 years (39), 11-15 years (36), 16-20 years (36), 21-25 years (49), 26-30 years (44), and 31 years or more (89).

**Table 4.1**

*Frequency of Responses for Items 2 to 4*

| Survey Items                                    | Number of Responses |
|---|---------------------|
| 2a. Received an ASHA Communities posting        | 238                 |
| 2b. Received an email from a person I know      | 53                  |
| 2c. Saw a social media posting                  | 15                  |
| 2d. Saw a reposting or retweeting               | 0                   |
| 2e. Other                                       | 10                  |
| 3a. Hospital (adult acute care, inpatient)      | 14                  |
| 3b. Hospital (adult acute care, outpatient)     | 18                  |
| 3c. Hospital (pediatric acute care, inpatient)  | 0                   |
| 3d. Hospital (pediatric acute care, outpatient) | 5                   |

|  |    |
|--|----|
| 3e. Rehabilitation center (inpatient and/or outpatient)  | 12 |
| 3f. Home care  | 6  |
| 3g. Skilled nursing facility   | 11 |
| 3h. Long term care facility  | 0  |
| 3i. Developmental disabilities (e.g., county board, school or treatment center, workshop, or residential facility, etc.) | 4  |
| 3j. Public school K-12   | 81 |
| 3k. Private school K-12  | 2  |
| 3l. Preschool (3-6)  | 13 |
| 3m. Early intervention (ages birth-3)  | 16 |
| 3n. Community speech and hearing center  | 4  |
| 3o. Private practice, non-profit   | 3  |
| 3p. Private practice, for profit   | 28 |
| 3q. University   | 82 |
| 3r. Other SLP practice setting or population   | 5  |
| 3s. Employed outside of the field of SLP   | 1  |
| 3t. Not employed   | 12 |
| 4a. 1-2 years  | 5  |
| 4b. 3-5 years  | 18 |
| 4c. 6-10 years   | 39 |
| 4d. 11-15 years  | 36 |
| 4e. 16-20 years  | 36 |
| 4f. 21-25 years  | 49 |
| 4g. 26-30 years  | 44 |
| 4h. 31 years or more   | 89 |

*Note.* Responses to survey items regarding demographic information.

### **4.3.2 Items 5 to 15, 17 to 19, 27, 34 to 46, 48 to 50, and 58: Motivation for Continuing Education**

The next set of items dealt with participants' varying opinions on motivations for attending continuing education courses in the past five years. This subset of questions asked speech-language pathologists to select one response using the Likert scale presented. The data are found in tabular form in Table 4.2, Frequency of Responses to Items 5 to 15, 17 to 19, 27, 34 to 46, 48 to 50, and 58.

Survey items 5 to 15, 17 to 19, 27, 34 to 46, 48 to 50, and 58 provided information on participants' perceptions of motivations for attending live and/or remote continuing education courses. The key findings from items 7, 12, 18, 27, 34, 36, 39, 42 to 43, 49, and 58 are:

- (1) Responses to items 7 and 56 that are aggregated for both mediums of instruction showed that for both mediums of live and remote instruction (327/624, 54.5%) personal interests “always” motivates attending continuing education courses
- (2) In items 12 and 39 that are aggregated for both mediums of instruction, respondents reported (260/624, 41.6%) that, for both mediums of continuing education, the best speakers are “sometimes” on the programs for live, in-person and remote courses
- (3) In response to items 27 and 58 that are aggregated for both mediums of instruction, participants agreed (302/622, 48.55%) that because they self-reflect following the completion of both mediums of continuing education courses (live, in-person and remote instruction), they transfer learning

- (4) For remote instruction, in item 34 most respondents (146/312, 46.79%) reported that they strongly agreed that ASHA Certificate of Clinical Competence and/or state licensure and/or teacher licensure renewal requirements motivate them to attend remote courses
- (5) For remote instruction, in item 42 respondents strongly agreed (124/312,39.74%) that they enjoy continuing education that they can access from work or at home by completing remote courses
- (6) For remote instruction, as gathered from item 43, 132/312, 42.3% of respondents stated that they “always” like that they can determine the pace at which they finish remote courses
- (7) In items 18 and 49, respondents indicated differences between mediums in their employers’ provision of professional time compensation for attending continuing education (“always” for live, in-person courses: 96/313, 30.67%; and “never” for remote courses: 89/312, 28.53%).

**4.3.2.1 Detailed Results for Items 5 to 15, 17 to 19, 27, 34 to 46, 48 to 50, and 58: Motivation for Continuing Education.** Items 5 and 34 probed whether ASHA Certificate of Clinical Competence, otherwise known as the CCC, and/or state licensure and/or teacher licensure renewal requirements motivate speech-language pathologists to attend live, in-person and/or remote continuing education courses. Of the 313 responses received for item 5, regarding credential renewal as motivation for live, in-person continuing education courses, (97) selected strongly agree or always; (112) selected agree or most of the time; (66) selected neutral or sometimes; (25) selected disagree or some of the time; (7) selected strongly disagree or never; and (6) selected not applicable or I have

not experienced this. Item 34 received 312 responses for remote courses, in which (146) selected strongly agree or always; (95) selected agree or most of the time; (44) selected neutral or sometimes; (12) selected disagree or some of the time; (7) selected strongly disagree or never; and (8) selected not applicable or I have not experienced this.

Items 6 and 35 inquired whether employer requirements motivate speech-language pathologists to attend live as well as remote continuing education courses. There were 313 responses received for item 6, live courses, which were selected as follows: strongly agree or always (27); agree or most of the time (51); neutral or sometimes (94); disagree or some of the time (59); strongly disagree or never (48); and not applicable or I have not experienced this (34). There were 312 responses received for item 35, remote courses, which were selected as follows: strongly agree or always (43); agree or most of the time (66); neutral or sometimes (85); disagree or some of the time (37); strongly disagree or never (45); and not applicable or I have not experienced this (36).

Items 7 and 36 asked whether personal interests motivate speech-language pathologists to attend live as well as remote continuing education courses. The 312 responses for item 7, live courses, were represented across the scale as follows: (180) selected strongly agree or always; (100) selected agree or most of the time; (19) selected neutral or sometimes; (6) selected disagree or some of the time; (4) selected strongly disagree or never; and (3) selected not applicable or I have not experienced this. The 312 responses for item 36, remote courses, were represented across the scale as follows: (147) selected strongly agree or always; (109) selected agree or most of the time; (36) selected



neutral or sometimes; (9) selected disagree or some of the time; (4) selected strongly disagree or never; and (7) selected not applicable or I have not experienced this.

Survey items 8 and 37 posited that other reasons motivate speech-language pathologists to attend live as well as remote continuing education courses. There were 308 responses for item 8, live courses, which were selected as follows: strongly agree or always (40); agree or most of the time (86); neutral or sometimes (111); disagree or some of the time (16); strongly disagree or never (15); and not applicable or I have not experienced this (40). Of the 308 responses for item 37, remote courses, respondents selected as follows: strongly agree or always (49); agree or most of the time (96); neutral or sometimes (90); disagree or some of the time (19); strongly disagree or never (12); and not applicable or I have not experienced this (42).

Items 9 and 38 posed that speech-language pathologists enjoy networking at continuing education courses. Live courses, item 9, received 313 responses represented across the scale as follows: (109) selected strongly agree or always; (107) selected agree or most of the time; (67) selected neutral or sometimes; (24) selected disagree or some of the time; (3) selected strongly disagree or never; and (3) selected not applicable or I have not experienced this. Remote courses, item 38, received 312 responses represented across the scale as follows: (16) selected strongly agree or always; (19) selected agree or most of the time; (72) selected neutral or sometimes; (66) selected disagree or some of the time; (81) selected strongly disagree or never; and (58) selected not applicable or I have not experienced this.

The researcher proposed in item 10 that live, in-person courses facilitate a classroom learning environment with other attendees, which is not provided with remote

courses. There were 312 responses, which were selected as follows: strongly agree or always (120); agree or most of the time (100); neutral or sometimes (62); disagree or some of the time (20); strongly disagree or never (7); and not applicable or I have not experienced this (3).

Item 11 asked whether speech-language pathologists enjoy having time away from their workplace by attending live, in-person courses. Of the 312 responses, (117) selected strongly agree or always; (106) selected agree or most of the time; (49) selected neutral or sometimes; (23) selected disagree or some of the time; (10) selected strongly disagree or never; and (7) selected not applicable or I have not experienced this.

Items 12 and 39 asked about where the best speakers are on continuing education programs. Live courses, item 12, received 312 responses, represented across the scale as follows: (26) selected strongly agree or always; (73) selected agree or most of the time; (110) selected neutral or sometimes; (68) selected disagree or some of the time; (29) selected strongly disagree or never; and (6) selected not applicable or I have not experienced this. Remote courses, item 39, received 312 responses represented across the scale as follows: (13) selected strongly agree or always; (57) selected agree or most of the time; (150) selected neutral or sometimes; (53) selected disagree or some of the time; (19) selected strongly disagree or never; and (20) selected not applicable or I have not experienced this.

In item 13, the researcher addressed speech-language pathologists' preferences for live, in-person courses based on their convenient geographic locations. There were 312 responses, which were selected as follows: strongly agree or always (42); agree or most

of the time (74); neutral or sometimes (97); disagree or some of the time (65); strongly disagree or never (31); and not applicable or I have not experienced this (3).

Item 40 asked whether attendees gain as much from web chats and webinars as they do from attendance at a live conference. The 313 responses were selected as follows: strongly agree or always (38); agree or most of the time (69); neutral or sometimes (89); disagree or some of the time (71); strongly disagree or never (30); and not applicable or I have not experienced this (16).

Item 41 proposed that attendees enjoy remote continuing education as it does not require traveling. This item yielded 312 responses, which were dispersed across the scale as follows: strongly agree or always (87); agree or most of the time (111); neutral or sometimes (69); disagree or some of the time (28); strongly disagree or never (9); and not applicable or I have not experienced this (8).

In item 42, the researcher proposed that attendees enjoy remote continuing education that can be accessed from work or at home. The researcher received 312 responses across the scale as follows: strongly agree or always (124); agree or most of the time (100); neutral or sometimes (69); disagree or some of the time (28); strongly disagree or never (9); and not applicable or I have not experienced this (8).

Item 43 dealt with whether attendees like to determine the pace at which they complete remote continuing education courses. This item yielded 312 responses, represented across the scale as follows: strongly agree or always (132); agree or most of the time (115); neutral or sometimes (43); disagree or some of the time (11); strongly disagree or never (3); and not applicable or I have not experienced this (8).

In item 44 the researcher asked whether attendees are less distracted when completing remote continuing education courses. The 312 responses revealed strongly agree or always (49); agree or most of the time (46); neutral or sometimes (88); disagree or some of the time (81); strongly disagree or never (38); and not applicable or I have not experienced this (10).

The researcher asked in items 14 and 45 whether speech-language pathologists' employers cover the expenses related to attending continuing education courses. Live courses, item 14, received 312 responses, represented across the scale as follows: (36) selected strongly agree or always; (76) selected agree or most of the time; (64) selected neutral or sometimes; (46) selected disagree or some of the time; (69) selected strongly disagree or never; and (21) selected not applicable or I have not experienced this. Remote courses, item 45, received 312 responses, represented across the scale as follows: (44) selected strongly agree or always; (53) selected agree or most of the time; (56) selected neutral or sometimes; (40) selected disagree or some of the time; (77) selected strongly disagree or never; and (42) selected not applicable or I have not experienced this.

Items 15 and 46 asked whether speech-language pathologists cover the expenses related to attending continuing education courses. Live courses, item 15, yielded 311 responses, which were selected as follows: strongly agree or always (95); agree or most of the time (85); neutral or sometimes (66); disagree or some of the time (26); strongly disagree or never (28); and not applicable or I have not experienced this (11). Item 46, remote courses, yielded 313 responses, which were selected as follows: strongly agree or always (113); agree or most of the time (83); neutral or sometimes (60); disagree or some

of the time (20); strongly disagree or never (21); and not applicable or I have not experienced this (16).

The researcher asked in items 17 and 48 whether speech-language pathologists do not attend continuing education with any personal expenses involved. There were 309 responses for item 17, live courses, which were selected as follows: strongly agree or always (10); agree or most of the time (30); neutral or sometimes (44); disagree or some of the time (75); strongly disagree or never (105); and not applicable or I have not experienced this (45). Remote courses, item 48, received 310 responses, which were selected as follows: strongly agree or always (20); agree or most of the time (28); neutral or sometimes (30); disagree or some of the time (85); strongly disagree or never (102); and not applicable or I have not experienced this (45).

Items 18 and 49 inquired whether speech-language pathologists' employers provide professional time compensation in the form of paid professional time off or compensatory time for attending continuing education. The 313 responses to item 18, live courses, were represented across the scale as follows: (96) selected strongly agree or always; (61) selected agree or most of the time; (42) selected neutral or sometimes; (24) selected disagree or some of the time; (62) selected strongly disagree or never; and (28) selected not applicable or I have not experienced this. The 312 responses received for item 49, remote courses, were represented across the scale as follows: (43) selected strongly agree or always; (44) selected agree or most of the time; (34) selected neutral or sometimes; (47) selected disagree or some of the time; (89) selected strongly disagree or never; and (55) selected not applicable or I have not experienced this.

In items 19 and 50, the researcher asked whether speech-language pathologists lose work productivity when they attend continuing education courses. Item 19 yielded 312 responses for live, in-person courses, which were selected as follows: strongly agree or always (50); agree or most of the time (71); neutral or sometimes (63); disagree or some of the time (40); strongly disagree or never (51); and not applicable or I have not experienced this (37). The 311 responses gathered for item 50, remote courses, spread across the scale as follows: strongly agree or always (15); agree or most of the time (34); neutral or sometimes (60); disagree or some of the time (53); strongly disagree or never (108); and not applicable or I have not experienced this (41).

The researcher asked whether speech-language pathologists transfer learning due to self-reflection on their knowledge and/or skill set following the completion of continuing education courses in items 27 and 58. The live courses, item 27, yielded 311 responses, which were selected as follows: strongly agree or always (127); agree or most of the time (149); neutral or sometimes (28); disagree or some of the time (3); strongly disagree or never (1); and not applicable or I have not experienced this (3). Remote courses, item 58, yielded 311 responses, which were selected as follows: strongly agree or always (96); agree or most of the time (153); neutral or sometimes (47); disagree or some of the time (6); strongly disagree or never (3); and not applicable or I have not experienced this (6).

**Table 4.2***Frequency of Responses for Items 5 to 15, 17 to 19, 27, 34 to 46, 48 to 50, and 58*

| Survey Items | Number of Responses across the Likert Scale |                           |                      |                       |                            |   |
|--------------|---|---------------------------|----------------------|-----------------------|----------------------------|---|
|              | Strongly agree OR Always                    | Agree OR Most of the Time | Neutral OR Sometimes | Disagree OR Not Often | Strongly disagree OR Never | Not Applicable OR I have not experienced this |
| 5            | 97  | 112                       | 66                   | 25                    | 7                          | 6   |
| 34           | 146   | 95                        | 44                   | 12                    | 7                          | 8   |
| 6            | 27  | 51                        | 94                   | 59                    | 48                         | 34  |
| 35           | 43  | 66                        | 85                   | 37                    | 45                         | 36  |
| 7            | 180   | 100                       | 19                   | 6                     | 4                          | 3   |
| 36           | 147   | 109                       | 36                   | 9                     | 4                          | 7   |
| 8            | 40  | 86                        | 111                  | 16                    | 15                         | 40  |
| 37           | 49  | 96                        | 90                   | 19                    | 12                         | 42  |
| 9            | 109   | 107                       | 67                   | 24                    | 3                          | 3   |
| 38           | 16  | 19                        | 72                   | 66                    | 81                         | 58  |
| 10           | 120   | 100                       | 62                   | 20                    | 7                          | 3   |
| 11           | 117   | 106                       | 49                   | 23                    | 10                         | 7   |
| 12           | 26  | 73                        | 110                  | 68                    | 29                         | 6   |
| 39           | 13  | 57                        | 150                  | 53                    | 19                         | 20  |
| 13           | 42  | 74                        | 97                   | 65                    | 31                         | 3   |
| 14           | 36  | 76                        | 64                   | 46                    | 69                         | 21  |
| 45           | 44  | 53                        | 56                   | 40                    | 77                         | 42  |
| 15           | 95  | 85                        | 66                   | 26                    | 28                         | 11  |

|    |     |     |    |    |     |    |
|----|-----|-----|----|----|-----|----|
| 46 | 113 | 83  | 60 | 20 | 21  | 16 |
| 17 | 10  | 30  | 44 | 75 | 105 | 45 |
| 48 | 20  | 28  | 30 | 85 | 102 | 45 |
| 18 | 96  | 61  | 42 | 24 | 62  | 28 |
| 49 | 43  | 44  | 34 | 47 | 89  | 55 |
| 19 | 50  | 71  | 63 | 40 | 51  | 37 |
| 50 | 15  | 34  | 60 | 53 | 108 | 41 |
| 40 | 38  | 69  | 89 | 71 | 30  | 16 |
| 41 | 87  | 111 | 69 | 28 | 9   | 8  |
| 42 | 124 | 100 | 56 | 19 | 6   | 7  |
| 43 | 132 | 115 | 43 | 11 | 3   | 8  |
| 44 | 49  | 46  | 88 | 81 | 38  | 10 |
| 27 | 127 | 149 | 28 | 3  | 1   | 3  |
| 58 | 96  | 153 | 47 | 6  | 3   | 6  |

*Note.* Responses to survey items regarding motivation for continuing education courses.

#### **4.3.3 Items 14 to 18 and 45 to 49: Cost of Continuing Education**

Survey items 14 to 18 and 45 to 49 examined the respondents' financial expenses for attending continuing education courses in the past five years. This subset of items asked that speech-language pathologists select a response from the Likert scale provided. The data are found in tabular form in Table 4.3, Frequency of Responses for Items 14 to 18 and 45 to 49.

Survey items 14 to 18 and 45 to 49 provided information on participants' perceptions of costs for attending live and/ or remote continuing education courses. The key findings from items 16, 18, 47, and 49 are:



- (1) When responses are aggregated for both mediums of instruction, responses to items 16 and 47 shown that for both mediums of live and remote instruction (262/624, 41.98%) indicated that “most of the time” the amount of money spent on continuing education is worth what respondents pay for it
- (2) Differentiating the two mediums, (2) items 18 and 49 yielded contrasting responses from respondents, with item 18 yielding (96/313, 30.67%) that their employers “always” provide time compensation for their attendance to live, in-person courses and item 49 yielding (89/312, 28.53%) that their employers “never” provide time compensation for their attendance to remote courses.

**4.3.3.1 Detailed Results for Items 14 to 18 and 45 to 49: Costs for Continuing Education.** The researcher asked in items 14 and 45 whether speech-language pathologists’ employers cover the expenses related to attending continuing education courses. The 312 responses to item 14, for live courses, were represented across the scale as follows: (36) selected strongly agree or always; (76) selected agree or most of the time; (64) selected neutral or sometimes; (46) selected disagree or some of the time; (69) selected strongly disagree or never; and (21) selected not applicable or I have not experienced this. The 312 responses for item 45, remote courses, were represented across the scale as follows: (44) selected strongly agree or always; (53) selected agree or most of the time; (56) selected neutral or sometimes; (40) selected disagree or some of the time; (77) selected strongly disagree or never; and (42) selected not applicable or I have not experienced this.

Items 15 and 46 asked whether speech-language pathologists cover the expenses related to attending continuing education courses. Live courses, item 15, yielded 311

responses, which were selected as follows: strongly agree or always (95); agree or most of the time (85); neutral or sometimes (66); disagree or some of the time (26); strongly disagree or never (28); and not applicable or I have not experienced this (11). Item 46, remote courses, yielded 313 responses, which were selected as follows: strongly agree or always (113); agree or most of the time (83); neutral or sometimes (60); disagree or some of the time (20); strongly disagree or never (21); and not applicable or I have not experienced this (16).

In items 16 and 47, the researcher asked whether speech-language pathologists feel as though the amount of money that they spend on attending continuing education courses is worth what they pay for them. Of the 312 responses received for item 16, live courses, (34) selected strongly agree or always; (129) selected agree or most of the time; (91) selected neutral or sometimes; (33) selected disagree or some of the time; (14) selected strongly disagree or never; and (11) selected not applicable or I have not experienced this. Of the 312 responses received for item 47, remote courses, (60) selected strongly agree or always; (133) selected agree or most of the time; (79) selected neutral or sometimes; (17) selected disagree or some of the time; (3) selected strongly disagree or never; and (20) selected not applicable or I have not experienced this.

The researcher inquired in items 17 and 48 whether speech-language pathologists do not attend continuing education with any personal expenses involved. There were 309 responses for item 17, live courses, which were selected as follows: strongly agree or always (10); agree or most of the time (30); neutral or sometimes (44); disagree or some of the time (75); strongly disagree or never (105); and not applicable or I have not experienced this (45). Remote courses, item 48, received 310 responses, which were

selected as follows: strongly agree or always (20); agree or most of the time (28); neutral or sometimes (30); disagree or some of the time (85); strongly disagree or never (102); and not applicable or I have not experienced this (45).

Items 18 and 49 asked whether speech-language pathologists' employers provide professional time compensation in the form of paid professional time off or comp time for attending continuing education. The 313 responses to item 18 were gathered on live courses, which were represented across the scale as follows: (96) selected strongly agree or always; (61) selected agree or most of the time; (42) selected neutral or sometimes; (24) selected disagree or some of the time; (62) selected strongly disagree or never; and (28) selected not applicable or I have not experienced this. The 312 responses to item 49 were gathered on remote courses, which were represented across the scale as follows: (43) selected strongly agree or always; (44) selected agree or most of the time; (34) selected neutral or sometimes; (47) selected disagree or some of the time; (89) selected strongly disagree or never; and (55) selected not applicable or I have not experienced this.

**Table 4.3***Frequency of Responses for Items 14 to 18 and 45 to 49*

| Survey Items | Number of Responses across the Likert Scale |                           |                      |                       |                            |   |
|--------------|---|---------------------------|----------------------|-----------------------|----------------------------|---|
|              | Strongly agree OR Always                    | Agree OR Most of the Time | Neutral OR Sometimes | Disagree OR Not Often | Strongly disagree OR Never | Not Applicable OR I have not experienced this |
| 14           | 36  | 76                        | 64                   | 46                    | 69                         | 21  |
| 45           | 44  | 53                        | 56                   | 40                    | 77                         | 42  |
| 15           | 95  | 85                        | 66                   | 26                    | 28                         | 11  |
| 46           | 113   | 83                        | 60                   | 20                    | 21                         | 16  |
| 16           | 34  | 129                       | 91                   | 33                    | 14                         | 11  |
| 47           | 60  | 133                       | 79                   | 17                    | 3                          | 20  |
| 17           | 10  | 30                        | 44                   | 75                    | 105                        | 45  |
| 48           | 20  | 28                        | 30                   | 85                    | 102                        | 45  |
| 18           | 96  | 61                        | 42                   | 24                    | 62                         | 28  |
| 49           | 43  | 44                        | 34                   | 47                    | 89                         | 55  |

*Note.* Responses to survey items regarding cost of continuing education.

#### **4.3.4 Items 9 to 10, 20 to 22, 25, 38, 40, 51 to 53, and 56: Interactivity of Continuing Education**

To address the construct of interactivity, the researcher gave participants a continuum of answer choices using a Likert scale in response to survey items on the interactive components of continuing education for the past five years. Data displayed in tabular form in Table 4.4, Frequency of Responses to Items 9 to 10, 20 to 22, 25, 38, 40, 51 to 53, and 56.

Survey items 9 to 10, 20 to 22, 25, 38, 40, 51 to 53, and 56 provided information on participants' perceptions of the interactivity of live and/ or remote continuing education courses. The key findings from items 10, 20 to 22, 25, 51 to 53, and 56 are:

- (1) When responses are aggregated for both mediums of instruction, items 21 and 52 revealed that for both mediums of continuing education (live and remote) respondents agreed (271/623, 43.49%) that presenter demonstrations are given at courses
- (2) Items 25 and 56 yielded responses (389/624, 62.33%) for both mediums of continuing education (live and remote) that respondents complete surveys given out at the conclusion of courses.
- (3) Differentiating the two mediums, respondents indicated in item 10 that live courses “always” facilitate a classroom learning environment (120/312, 38.46%)
- (4) Items 20 and 51 yielded differences in responses regarding the incorporation of activities into presentations at continuing education courses (“most of the time” for live, in-person: 140/312, 44.87% and “sometimes” for remote: 124/311, 39.87%)
- (5) Responses to items 22 and 53 showed that “most of the time” respondents reported (132/311, 42.44%) experiencing interactive learning at live courses. For remote courses, respondents stated that “sometimes” they experience interactive learning (103/309, 33.33%).

**4.3.4.1 Detailed Results for Items 9 to 10, 20 to 22, 25, 38, 40, 51 to 53, and 56: Interactivity of Continuing Education.** Items 9 and 38 asked whether speech-

language pathologists enjoy networking at continuing education courses. Live courses, item 9, received 313 responses represented across the scale as follows: (109) selected strongly agree or always; (107) selected agree or most of the time; (67) selected neutral or sometimes; (24) selected disagree or some of the time; (3) selected strongly disagree or never; and (3) selected not applicable or I have not experienced this. Remote courses, item 38, received 312 responses represented across the scale as follows: (16) selected strongly agree or always; (19) selected agree or most of the time; (72) selected neutral or sometimes; (66) selected disagree or some of the time; (81) selected strongly disagree or never; and (58) selected not applicable or I have not experienced this.

The researcher proposed in item 10 that live, in-person courses facilitate a classroom learning environment with other attendees, which is not offered with remote courses. There were 312 responses, which were selected as follows: strongly agree or always (120); agree or most of the time (100); neutral or sometimes (62); disagree or some of the time (20); strongly disagree or never (7); and not applicable or I have not experienced this (3).

The researcher asked in item 40 whether attendees gain as much from web chats and webinars as from attending a live conference. The 313 responses were spread as follows: strongly agree or always (38); agree or most of the time (69); neutral or sometimes (89); disagree or some of the time (71); strongly disagree or never (30); and not applicable or I have not experienced this (16).

Items 20 and 51 addressed whether activities are incorporated into presentation given at continuing education courses. There were 312 responses for live courses, item 20, which were selected as follows: strongly agree or always (40); agree or most of the

time (140); neutral or sometimes (100); disagree or some of the time (22); strongly disagree or never (5); and not applicable or I have not experienced this (5). There were 311 responses for remote courses, item 51, which were selected as follows: strongly agree or always (11); agree or most of the time (68); neutral or sometimes (124); disagree or some of the time (58); strongly disagree or never (35); and not applicable or I have not experienced this (15).

The researcher inquired in items 21 and 52 whether presenters give demonstrations at continuing education courses. The 313 responses for live courses, item 21, were represented across the scale as follows: (41) selected strongly agree or always; (150) selected agree or most of the time; (94) selected neutral or sometimes; (20) selected disagree or some of the time; (2) selected strongly disagree or never; and (6) selected not applicable or I have not experienced this. Remote courses, item 52, received 310 responses, which were represented across the scale as follows: (25) selected strongly agree or always; (121) selected agree or most of the time; (113) selected neutral or sometimes; (33) selected disagree or some of the time; (10) selected strongly disagree or never; and (8) selected not applicable or I have not experienced this.

In items 22 and 53, the researcher asked whether speech-language pathologists experience interactive learning, described as participating in discussions and sharing real-life cases as examples, during continuing education courses. Of the 311 responses for item 22, live courses, (77) selected strongly agree or always; (132) selected agree or most of the time; (77) selected neutral or sometimes; (18) selected disagree or some of the time; (5) selected strongly disagree or never; and (2) selected not applicable or I have not experienced this. Of the 309 responses for item 53, remote courses, (11) selected strongly

agree or always; (61) selected agree or most of the time; (103) selected neutral or sometimes; (67) selected disagree or some of the time; (54) selected strongly disagree or never; and (13) selected not applicable or I have not experienced this.

The researcher inquired in items 25 and 56 whether respondents complete surveys given out by presenters or the conference organizers at the conclusion of continuing education courses. There were 312 responses received for live courses, item 25, where (213) selected strongly agree or always; (80) selected agree or most of the time; (10) selected neutral or sometimes; (2) selected disagree or some of the time; (2) selected strongly disagree or never; and (5) selected not applicable or I have not experienced this. There were 312 responses received for item 56, remote courses, where (176) selected strongly agree or always; (82) selected agree or most of the time; (22) selected neutral or sometimes; (14) selected disagree or some of the time; (2) selected strongly disagree or never; and (16) selected not applicable or I have not experienced this.



**Table 4.4***Frequency of Responses for Items 9 to 10, 20 to 22, 25, 38, 40, 51 to 53, and 56*

| Survey Items | Number of Responses across the Likert Scale |                           |                      |                       |                            |   |
|--------------|---|---------------------------|----------------------|-----------------------|----------------------------|---|
|              | Strongly agree OR Always                    | Agree OR Most of the Time | Neutral OR Sometimes | Disagree OR Not Often | Strongly disagree OR Never | Not Applicable OR I have not experienced this |
| 9            | 109   | 107                       | 67                   | 24                    | 3                          | 3   |
| 38           | 16  | 19                        | 72                   | 66                    | 81                         | 58  |
| 10           | 120   | 100                       | 62                   | 20                    | 7                          | 3   |
| 20           | 40  | 140                       | 100                  | 22                    | 5                          | 5   |
| 51           | 11  | 68                        | 124                  | 58                    | 35                         | 15  |
| 21           | 41  | 150                       | 94                   | 20                    | 2                          | 6   |
| 52           | 25  | 121                       | 113                  | 33                    | 10                         | 8   |
| 22           | 77  | 132                       | 77                   | 18                    | 5                          | 2   |
| 53           | 11  | 61                        | 103                  | 67                    | 54                         | 13  |
| 25           | 213   | 80                        | 10                   | 2                     | 2                          | 5   |
| 56           | 176   | 82                        | 22                   | 14                    | 2                          | 16  |
| 40           | 38  | 69                        | 89                   | 71                    | 30                         | 16  |

*Note.* Responses to survey items regarding interactivity of continuing education.

#### **4.3.5 Items 10, 12, 16, 22 to 24, 26, 39, 47, 53 to 55, and 57: Quality of Continuing Education**

The researcher asked participants to rate the quality of their past learning experiences at continuing education courses throughout items 10, 12, 16, 22 to 24, 26, 39, 47, 53 to 55, and 57. The data are found in tabular form within Table 4.5, Frequency of Responses to Items 10, 12, 16, 22 to 24, 26, 39, 47, 53 to 55, and 57.

Survey items 10, 12, 16, 22 to 24, 26, 39, 47, 53 to 55, and 57 provided information on participants' perceptions of the quality of live and remote continuing education courses. The key findings from items 10, 12, 16, 22 to 24, 26, 39, 47, 53 to 55, and 57 are:

- (1) Respondents reported (110/312, 35.26%) that for the medium of live continuing education courses “sometimes” the best speakers are on those programs (item 12). For remote courses, respondents reported (150/312, 48.08%) that “sometimes” the best speakers are on those programs (item 39).
- (2) Items 16 and 47 yielded differences in respondents' reports on whether the amount of money spent on continuing education was worth what they paid for it. Respondents reported (129/312, 41.35%) that “most of the time” they felt the amount of money spent on attending live courses was worth what they paid for it (item 16). Remote courses received 133 responses (133/312, 42.63%) indicating the “most of the time” they felt the amount of money spent on attending those courses was worth what they spent for it.
- (3) Respondents indicated (194/310, 62.58%) in item 23 that “most of the time” they are satisfied with the resources given at live courses. In item 54, respondents stated that “most of the time” they are satisfied with the resources given at remote courses.
- (4) Respondents stated (186/311, 59.81%) they agreed that they are satisfied with the content presented at live courses (item 24). Item 55 yielded respondents' reports (153/311, 49.2%) “most of the time” they are satisfied with the content presented at remote continuing education courses.

- (5) Items 26 and 57 yielded data on respondents reports on reading the learning outcomes prior to attending courses. Respondents reported that for live courses (154/310, 49.68%) they “always” read the learning outcomes prior to attending live courses and for remote courses (151/313, 48.24%) satisfied they “always” read the learning outcomes prior to attending those courses.
- (6) Respondents indicated in item 10 that live courses “always” facilitate a classroom learning environment (120/312, 38.46%).
- (7) Respondents’ responses to items 22 and 53 show that “most of the time” respondents reported (132/311, 42.44%) experiencing interactive learning at live courses, as for remote courses respondents stated that “sometimes” they experience interactive learning (103/309, 33.33%).

**4.3.5.1 Detailed Results for Items 10, 12, 16, 22 to 24, 26, 39, 47, 53 to 55, and 57: Quality of Continuing Education.** The researcher proposed in item 10 that live, in-person courses facilitate a classroom learning environment with other attendees, which is not offered with remote courses. There were 312 responses, which were selected as follows: strongly agree or always (120); agree or most of the time (100); neutral or sometimes (62); disagree or some of the time (20); strongly disagree or never (7); and not applicable or I have not experienced this (3).

Items 12 and 39 asked where the best speakers are on continuing education programs. Live courses, item 12, received 312 responses that were represented across the scale as follows: (26) selected strongly agree or always; (73) selected agree or most of the time; (110) selected neutral or sometimes; (68) selected disagree or some of the time; (29) selected strongly disagree or never; and (6) selected not applicable or I have not

experienced this. Remote courses, item 39, received 312 responses that were represented across the scale as follows: (13) selected strongly agree or always; (57) selected agree or most of the time; (150) selected neutral or sometimes; (53) selected disagree or some of the time; (19) selected strongly disagree or never; and (20) selected not applicable or I have not experienced this.

In items 16 and 47, the researcher asked whether speech-language pathologists feel as though the amount of money that they spend on attending continuing education courses is worth what they pay for them. Of the 312 responses received for item 16, live courses, (34) selected strongly agree or always; (129) selected agree or most of the time; (91) selected neutral or sometimes; (33) selected disagree or some of the time; (14) selected strongly disagree or never; and (11) selected not applicable or I have not experienced this. Of the 312 responses received for item 47, remote courses, (60) selected strongly agree or always; (133) selected agree or most of the time; (79) selected neutral or sometimes; (17) selected disagree or some of the time; (3) selected strongly disagree or never; and (20) selected not applicable or I have not experienced this.

In items 22 and 53, the researcher asked whether speech-language pathologists experience interactive learning, described as participating in discussions and sharing real-life cases as examples, during continuing education. Of the 311 responses for live courses, item 22, (77) selected strongly agree or always; (132) selected agree or most of the time; (77) selected neutral or sometimes; (18) selected disagree or some of the time; (5) selected strongly disagree or never; and (2) selected not applicable or I have not experienced this. Of the 309 responses for item 53, remote courses, (11) selected strongly agree or always; (61) selected agree or most of the time; (103) selected neutral or

sometimes; (67) selected disagree or some of the time; (54) selected strongly disagree or never; and (13) selected not applicable or I have not experienced this.

In items 23 and 54, the researcher asked whether speech-language pathologists are satisfied with the quality of the instructional and educational resources given at continuing education courses. Live, in-person courses, item 23, received 310 responses represented across the scale as follows: (44) selected strongly agree or always; (194) selected agree or most of the time; (57) selected neutral or sometimes; (8) selected disagree or some of the time; (4) selected strongly disagree or never; and (3) selected not applicable or I have not experienced this. Remote courses, item 54, received 312 responses represented across the scale as follows: (53) selected strongly agree or always; (156) selected agree or most of the time; (71) selected neutral or sometimes; (19) selected disagree or some of the time; (5) selected strongly disagree or never; and (8) selected not applicable or I have not experienced this.

The researcher asked in items 24 and 55 whether speech-language pathologists are satisfied with the challenging and relevant content presented at continuing education courses. Of the 311 responses received for item 24, live courses, (40) selected strongly agree or always; (186) selected agree or most of the time; (67) selected neutral or sometimes; (9) selected disagree or some of the time; (6) selected strongly disagree or never; and (3) selected not applicable or I have not experienced this. Of the 311 responses received for item 55, remote courses, (54) selected strongly agree or always; (153) selected agree or most of the time; (75) selected neutral or sometimes; (17) selected disagree or some of the time; (5) selected strongly disagree or never; and (8) selected not applicable or I have not experienced this.

Items 26 and 57 inquired about whether speech-language pathologists read the learning outcomes for a course prior to attending continuing education. There were 310 responses for item 26, live courses, selected as follows: strongly agree or always (154); agree or most of the time (114); neutral or sometimes (22); disagree or some of the time (11); strongly disagree or never (7); and not applicable or I have not experienced this (2). There were 313 responses for item 57, remote courses, selected as follows: strongly agree or always (151); agree or most of the time (115); neutral or sometimes (26); disagree or some of the time (7); strongly disagree or never (8); and not applicable or I have not experienced this (6).

**Table 4.5***Frequency of Responses for Items 10, 12, 16, 22 to 24, 26, 39, 47, 53 to 55, and 57*

| Survey Items | Number of Responses across the Likert Scale |                           |                      |                       |                            |   |
|--------------|---|---------------------------|----------------------|-----------------------|----------------------------|---|
|              | Strongly agree OR Always                    | Agree OR Most of the Time | Neutral OR Sometimes | Disagree OR Not Often | Strongly disagree OR Never | Not Applicable OR I have not experienced this |
| 10           | 120   | 100                       | 62                   | 20                    | 7                          | 3   |
| 12           | 26  | 73                        | 110                  | 68                    | 29                         | 6   |
| 39           | 13  | 57                        | 150                  | 53                    | 19                         | 20  |
| 16           | 34  | 129                       | 91                   | 33                    | 14                         | 11  |
| 47           | 60  | 133                       | 79                   | 17                    | 3                          | 20  |
| 22           | 77  | 132                       | 77                   | 18                    | 5                          | 2   |
| 53           | 11  | 61                        | 103                  | 67                    | 54                         | 13  |
| 23           | 44  | 194                       | 57                   | 8                     | 4                          | 3   |
| 54           | 53  | 156                       | 71                   | 19                    | 5                          | 8   |
| 24           | 40  | 186                       | 67                   | 9                     | 6                          | 3   |
| 55           | 54  | 153                       | 75                   | 17                    | 5                          | 7   |
| 26           | 154   | 114                       | 22                   | 11                    | 7                          | 2   |
| 57           | 151   | 115                       | 26                   | 7                     | 8                          | 6   |

*Note.* Responses to survey items regarding quality of continuing education.

#### **4.3.6 Items 12 to 13, 39, and 66 to 67: Preferences for Continuing Education**

##### **Medium**

The researcher explored participants' preferences for attending continuing education based on their previous learning experiences within the last five years. Survey items 12, 13, and 39 asked speech-language pathologists to select one response given a

Likert scale. However, for items 66 and 67 participants selected a response from three choices regarding their preferred medium of instruction. The data are found in tabular form in Table 4.6, Frequency of Responses to Items 12 to 13, 39, and 66 to 67.

Survey items 12 to 13, 39, and 66 to 67 provided information on participants' preferences for attending live and remote continuing education courses. The key findings from items 12, 39, 66, and 67 are:

- (1) Respondents reported (110/312, 35.26%) that, for the medium of live continuing education courses, "sometimes" the best speakers are on those programs (item 12). For remote courses, respondents reported (150/312, 48.08%) that "sometimes" the best speakers are on those programs (item 39).
- (2) Item 66 yielded responses (170/316, 53.8%) that stated respondents' preferred medium of instruction for continuing education was live, in-person. Respondents reported (79/316, 25%) that their preferred medium of instruction was remote courses.
- (3) Respondents indicated (135/316, 42.7%) in item 67 that they transferred learning from continuing education courses to their practice more so when respondents participated in live, in-person courses as for remote courses (52/316, 16.46%).

**4.3.6.1 Detailed Results for Items 12 to 13, 39, and 66 to 67: Preferences for Continuing Education Medium.** Items 12 and 39 asked where the best speakers are found on continuing education programs. Live courses, item 12, received 312 responses represented across the scale as follows: (26) selected strongly agree or always; (73) selected agree or most of the time; (110) selected neutral or sometimes; (68) selected



disagree or some of the time; (29) selected strongly disagree or never; and (6) selected not applicable or I have not experienced this. Remote courses, item 39, received 312 responses represented across the scale as follows: (13) selected strongly agree or always; (57) selected agree or most of the time; (150) selected neutral or sometimes; (53) selected disagree or some of the time; (19) selected strongly disagree or never; and (20) selected not applicable or I have not experienced this.

In item 13, the researcher addressed speech-language pathologists' preferences for live, in-person courses based on their convenient geographic locations. There were 312 responses, which were selected as follows: strongly agree or always (42); agree or most of the time (74); neutral or sometimes (97); disagree or some of the time (65); strongly disagree or never (31); and not applicable or I have not experienced this (3).

Item 66 asked participants to select their preferred medium of instruction for continuing education courses. Of the 316 responses, 170 selected live, in-person, as in attending a conference, workshop, or seminar or workplace in-service; 79 selected remote, as in online webinar, online continuing education course, video/DVD, CD-ROM; and 67 selected I do not have a preference.

Lastly, the researcher inquired, in item 67, about speech-language pathologists' transfer of learning occurring more frequently when they participate in continuing education courses that are delivered in a certain medium (live, in-person or remote) or whether the respondent has not preference. There were 316 responses; of these, 135 selected live, in-person, as in attending a conference, workshop, or seminar or workplace in-service; 52 selected remote, as in online webinar, online continuing education course, video/DVD, CD-ROM; and 129 selected I do not have a preference.

**Table 4.6***Frequency of Responses for Items 12 to 13, 39, and 66 to 67*

|              | Number of Responses across the Likert Scale   |                           |                      |                       |                            |   |
|--------------|---|---------------------------|----------------------|-----------------------|----------------------------|---|
| Survey Items | Strongly agree OR Always  | Agree OR Most of the Time | Neutral OR Sometimes | Disagree OR Not Often | Strongly disagree OR Never | Not Applicable OR I have not experienced this |
| 12           | 26  | 73                        | 110                  | 68                    | 29                         | 6   |
| 39           | 13  | 57                        | 150                  | 53                    | 19                         | 20  |
| 13           | 42  | 74                        | 97                   | 65                    | 31                         | 3   |
| Survey Items | Number of Responses across Multiple Choices<br>a. Live, in-person; b. Remote; c. I do not have a preference |                           |                      |                       |                            |   |
| 66           | a. 170  | b. 79                     | c. 67                |                       |                            |   |
| 67           | a. 135  | b. 52                     | c. 129               |                       |                            |   |

*Note.* Responses to survey items regarding preferences for continuing education medium.

#### **4.3.7 Items 27 to 33, 58 to 65 and 67: Transfer of Learning from Continuing**

##### **Education to Practice Settings**

In this section, the researcher probed participants regarding the application of their learning from past continuing education courses to their practice settings. The format of items 27 to 33 and 58 to 65 consisted of a Likert scale for participants to rate their experiences using the six response options listed. Multiple choice question 67 asked participants to select one of the three choices provided. The data are found in Table 4.7, Frequency of Responses to Items 27 to 33, 58 to 65 and 67.

Survey items 27 to 33, 58 to 65 and 67 provided information on participants' preferences for attending live and/or remote continuing education courses. The key findings from items 27 to 33, 58 to 64 and 67 are:

- (1) Items 27 and 58 yielded respondents' reports that "most of the time" they self-reflect on their knowledge and/or skills set following completion of both mediums of continuing education courses (live, in-person 149/311, 47.91%, item 27, and remote 153/311, 49.2%, item 58).
- (2) Respondents reported in response to items 28 and 59 that "most of the time" they applied the knowledge that they learned from both mediums of continuing education courses (live, in-person 159/311, 51.13%, item 28, and remote 157/311, 50.48%, item 59) to their practice settings.
- (3) Items 29 and 60 yielded respondents' reports that "most of the time" they applied the skills that they learned from both mediums of continuing education courses (live, in-person 160/311, 51.45%, item 29, and remote: 156/312, 50%, item 60) to their practice settings.
- (4) Respondents stated in response to items 30 and 61 that "most of the time" they applied the attitudes developed from both mediums of continuing education courses (live, in-person 136/311, 43.73%, item 30, and remote 131/309, 42.39%, item 61) to their practice settings.
- (5) Items 31 and 62 yielded responses that indicated respondents' agreement to transfer learning because of later reference to resources obtained at both mediums of continuing education courses (live, in-person 158/314, 50.32%, item 31, and remote 147/313, 46.96%, item 62).

- (6) In items 32 and 63 respondents agreed that they transfer learning because the information is presented explicitly at both mediums of continuing education courses (live, in-person 147/311, 47.27%, item 32, and remote 139/309, 44.98%, item 63).
- (7) In items 33 and 64 respondents stated that “most of the time” they transferred learning because of the direct instruction received at both mediums of continuing education courses (live, in-person 139/313, 44.41%, item 33, and remote 114/312, 36.54%, item 64).
- (8) Respondents indicated (135/316, 42.7%) in item 67 that they transferred learning from continuing education courses to their practice more so when respondents participated in live, in-person courses. The number of respondents who transferred learning more so from remote courses was 52/316, 16.46%.

**4.3.7.1 Detailed Results for Items 27 to 33, 58 to 65 and 67: Transfer of Learning from Continuing Education to Practice Settings.** The researcher asked in items 27 and 58 whether speech-language pathologists transfer learning due to self-reflection on their knowledge and/or skill set following the completion of continuing education courses. Item 27, live courses, yielded 311 responses, selected as follows: strongly agree or always (127); agree or most of the time (149); neutral or sometimes (28); disagree or some of the time (3); strongly disagree or never (1); and not applicable or I have not experienced this (3). Remote courses, item 58, yielded 311 responses, selected as follows: strongly agree or always (96); agree or most of the time (153);

neutral or sometimes (47); disagree or some of the time (6); strongly disagree or never (3); and not applicable or I have not experienced this (6).

In items 28 and 59, the researcher asked whether speech-language pathologists apply their knowledge from continuing education courses to their practice. There were 311 responses for item 28, live courses, selected as follows: strongly agree or always (113); agree or most of the time (159); neutral or sometimes (36); disagree or some of the time (1); strongly disagree or never (0); and not applicable or I have not experienced this (2). There were 311 responses for remote courses, item 59, selected as follows: strongly agree or always (94); agree or most of the time (157); neutral or sometimes (48); disagree or some of the time (3); strongly disagree or never (2); and not applicable or I have not experienced this (7).

The researcher asked in items 29 and 60 whether speech-language pathologists apply their skills acquired from continuing education courses to their practice. The 311 responses gathered for live courses, item 29, represented across the scale as follows: (111) selected strongly agree or always; (160) selected agree or most of the time; (38) selected neutral or sometimes; (0) selected disagree or some of the time; (0) selected strongly disagree or never; and (2) selected not applicable or I have not experienced this. Item 60 gathered responses for remote courses, represented across the scale as follows: (88) selected strongly agree or always; (156) selected agree or most of the time; (53) selected neutral or sometimes; (7) selected disagree or some of the time; (2) selected strongly disagree or never; and (6) selected not applicable or I have not experienced this.

Survey items 30 and 61 asked whether speech-language pathologists apply the attitudes developed from continuing education courses. Of the 311 responses for live

courses, item 30, (77) selected strongly agree or always; (136) selected agree or most of the time; (89) selected neutral or sometimes; (3) selected disagree or some of the time; (0) selected strongly disagree or never; and (6) selected not applicable or I have not experienced this. Remote courses, item 61, acquired 309 responses, spread as follows: (61) selected strongly agree or always; (131) selected agree or most of the time; (90) selected neutral or sometimes; (14) selected disagree or some of the time; (4) selected strongly disagree or never; and (9) selected not applicable or I have not experienced this.

In items 31 and 62, the researcher asked whether speech-language pathologists transfer their learning from continuing education because they later refer to the resources given. Item 31 yielded 314 responses for live courses, selected as follows: strongly agree or always (90); agree or most of the time (158); neutral or sometimes (56); disagree or some of the time (6); strongly disagree or never (1); and not applicable or I have not experienced this (3). Item 62 yielded 313 responses for remote courses, selected as follows: strongly agree or always (75); agree or most of the time (147); neutral or sometimes (71); disagree or some of the time (9); strongly disagree or never (4); and not applicable or I have not experienced this (7).

Items 32 and 63 proposed that speech-language pathologists transfer their learning from continuing education courses because instructors present the information explicitly. There were 311 responses to item 32, selected as follows: strongly agree or always (38); agree or most of the time (147); neutral or sometimes (90); disagree or some of the time (22); strongly disagree or never (10); and not applicable or I have not experienced this (4). There were 309 responses for remote courses, item 63, selected as follows: strongly agree or always (45); agree or most of the time (139); neutral or sometimes (89); disagree

or some of the time (18); strongly disagree or never (10); and not applicable or I have not experienced this (8).

In items 33 and 64, the researcher asked whether speech-language pathologists transfer learning because of the direct instruction received from case histories at continuing education courses. Live courses, item 33, received 313 responses represented across the scale as follows: (43) selected strongly agree or always; (139) selected agree or most of the time; (99) selected neutral or sometimes; (19) selected disagree or some of the time; (9) selected strongly disagree or never; and (4) selected not applicable or I have not experienced this. Remote courses, item 64, received 312 responses represented across the scale as follows: (49) selected strongly agree or always; (114) selected agree or most of the time; (111) selected neutral or sometimes; (18) selected disagree or some of the time; (12) selected strongly disagree or never; and (8) selected not applicable or I have not experienced this.

The researcher inquired in item 65 whether remote courses allow attendees to replay information, which assists in transfer of learning. This item yielded 311 responses, dispersed across the scale as follows: (89) selected strongly agree or always; (99) selected agree or most of the time; (80) selected neutral or sometimes; (16) selected disagree or some of the time; (14) selected strongly disagree or never; and (13) selected not applicable or I have not experienced this.

Lastly, in item 67, the researcher inquired about speech-language pathologists' transfer of learning occurring more frequently when they participate in continuing education courses that are delivered in a certain medium (live, in-person or remote) or whether the respondent has not preference. Of the 316 responses, (135) selected live, in-

person, as in attending a conference, workshop, or seminar or workplace in-service; (52) selected remote, as in online webinar, online continuing education course, video/DVD, CD-ROM; and (129) selected I do not have a preference.

**Table 4.7**

*Frequency of Responses for Items 27 to 33, 58 to 65, and 67*

| Survey Items | Number of Responses across the Likert Scale |                                    |                            |                             |                                  |   |
|--------------|---|------------------------------------|----------------------------|-----------------------------|----------------------------------|---|
|              | Strongly agree<br>OR Always                 | Agree<br>OR<br>Most of the<br>Time | Neutral<br>OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly disagree<br>OR<br>Never | Not<br>Applicable<br>OR I have not<br>experienced<br>this |
| 27           | 127   | 149                                | 28                         | 3                           | 1                                | 3   |
| 58           | 96  | 153                                | 47                         | 6                           | 3                                | 6   |
| 28           | 113   | 159                                | 36                         | 1                           | 0                                | 2   |
| 59           | 94  | 157                                | 48                         | 3                           | 2                                | 7   |
| 29           | 111   | 160                                | 38                         | 0                           | 0                                | 2   |
| 60           | 88  | 156                                | 53                         | 7                           | 2                                | 6   |
| 30           | 77  | 136                                | 89                         | 3                           | 0                                | 6   |
| 61           | 61  | 131                                | 90                         | 14                          | 4                                | 9   |
| 31           | 90  | 158                                | 56                         | 6                           | 1                                | 3   |
| 62           | 75  | 147                                | 71                         | 9                           | 4                                | 7   |
| 32           | 38  | 147                                | 90                         | 22                          | 10                               | 4   |
| 63           | 45  | 139                                | 89                         | 18                          | 10                               | 8   |
| 33           | 43  | 139                                | 99                         | 19                          | 9                                | 4   |
| 64           | 49  | 114                                | 111                        | 18                          | 12                               | 8   |
| 65           | 89  | 99                                 | 80                         | 16                          | 14                               | 13  |



| Survey Items | Number of Responses across the Multiple Choices               |       |        |
|--------------|---|-------|--------|
|              | a. Live, in-person; b. Remote; c. I do not have a preference. |       |        |
| 67           | a. 135  | b. 52 | c. 129 |

*Note.* Responses to survey items regarding transfer of learning from continuing education.

#### 4.4 Most Frequent Results

The results obtained gave an overview of the respondents’ perspectives on past continuing education courses they had attended within the last five years. Speech-language pathologists reported information on the two mediums of continuing education courses. The responses to survey items 3 to 67 provided insight into participants’ perspectives on continuing education in regard to the six constructs under examination and the mediums of continuing education courses (live, in-person versus remote), and provided data to respond to all three research questions.

##### 4.4.1 Respondents’ Employment Setting and Years Spent Practicing Speech-Language Pathology

The three primary employment settings largely represented in this study included public school K-12 (81/317, 25.55%), university (82/317, 25.8%), and private practice, for profit (28/317, 8.83%) totaling 191 respondents (60.25%) who stated their employment is within these three settings. The employment setting that yielded the least amount of responses (under 1% of sample) included hospitals-pediatric acute care, inpatient(0/317, 0%), long term care facility (0/317, 0%), employment outside of the field of speech-language pathology (1/317, 0.32%), private school K-12 (2/317, 0.63%), and private practice, non-profit (3/317, 0.95%).

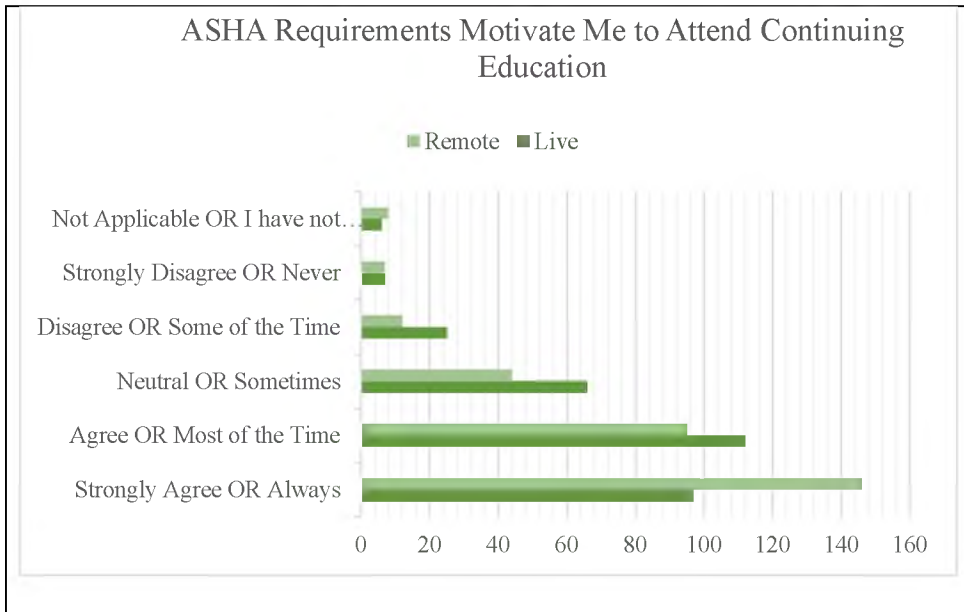
The range in years spent practicing in the field of speech-language pathology as reported by respondents was 1 to 31 years or more. The majority of the respondents (89/316, 28.16%) respondents who answered item 4 represented 31 years or more of experience. Data yielded from item 4 shows that respondents who have been practicing in speech-language pathology for one to two years (5/316, 1.56%) that these individuals were less represented in the sample of this study.

#### **4.4.2 Respondents' Responses on Motivation for Continuing Education**

The researcher compared the mediums based upon various intrinsic and extrinsic motivators for attending continuing education, as shown by survey items 5 to 8 and 34 to 37. Figure 4.1 shows that for live, in-person courses, item 5, respondents reported (112/313, 35.78%) that they agree that their motivation for attending continuing education is to complete credentialing requirements. For item 34, respondents reported (146/312, 46.79%) that they strongly agree that it is ASHA CCC and other credentialing requirements that motivate them to attend remote courses. This finding revealed the difference that respondents that attend remote courses are more extrinsically motivated to attend continuing education based on ASHA requirements or other credentialing requirements.

**Figure 4.1**

*Item 5 and 34: ASHA Requirements Motivate Me to Attend Continuing Education*

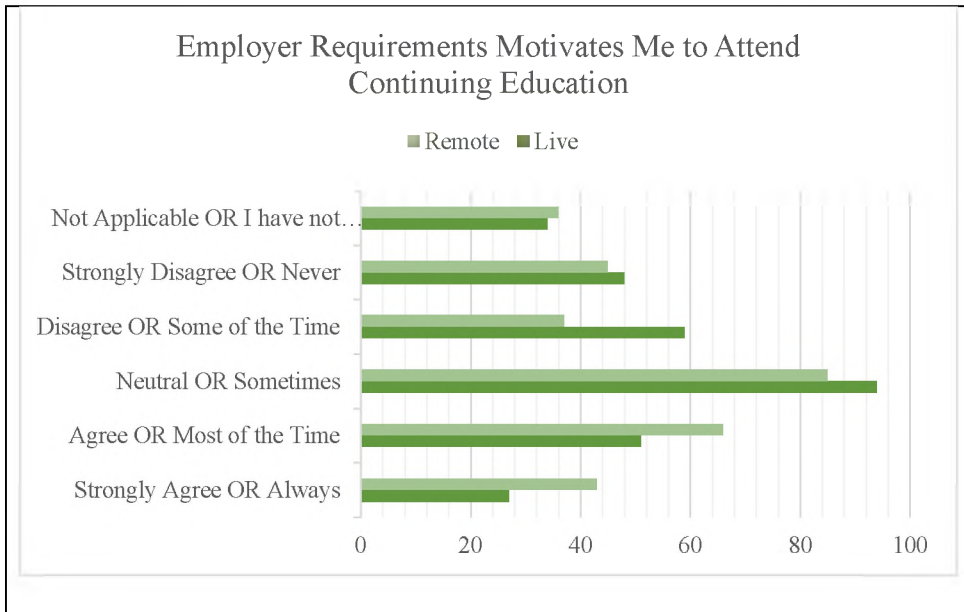


*Note.* Comparison of two mediums regarding ASHA requirements motivating respondents to attend continuing education.

Figure 4.2 displays the responses to items 6 and 35, in which respondents reported (179/625, 28.64%) that “sometimes” employer requirements motivate them to attend live and remote continuing education courses. Live courses, item 6, received 94 of the 313 responses (30.03%) that “sometimes” employer requirements motivate them to attend those courses. Item 35 yielded respondents’ reports (85/312, 27.24%) that “sometimes” employer requirements motivate them to attend remote courses.

**Figure 4.2**

*Item 6 and 35: Employer Requirements Motivate Me to Attend Continuing Education*

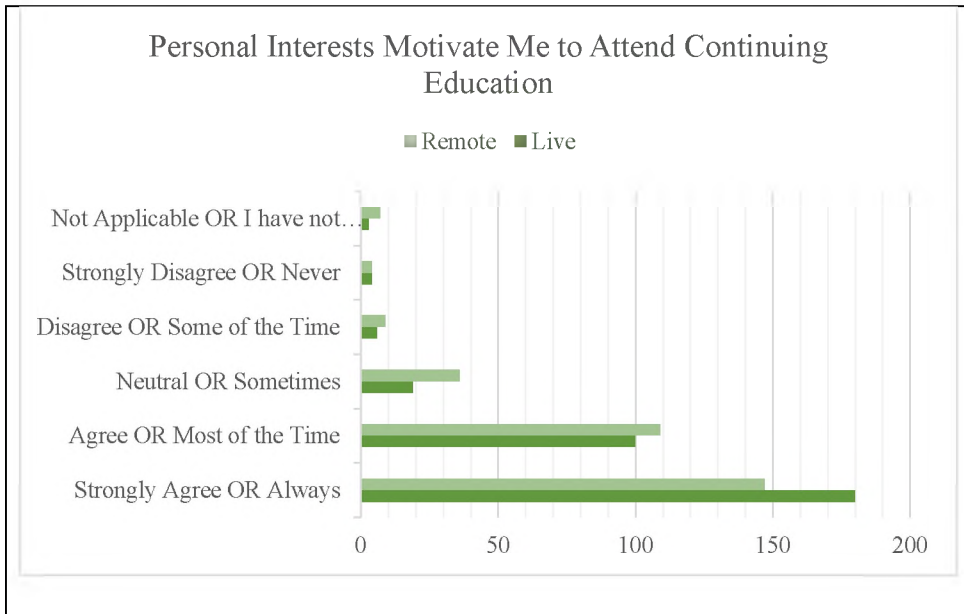


*Note.* Comparison of two mediums regarding employer requirements motivating respondents to attend continuing education.

Figure 4.3 shows that the aggregated responses for items 7 and 36 were 327 of 624, 54.4% of sample, which strongly agreed that personal interests motivate them to attend both mediums of continuing education (item 7). Respondents reported in item 7 (180/312, 57.69%) that personal interests “always” motivate them to attend live, in-person courses. Respondents reported in item 36 (147/312, 47.11%) that personal interests “always” motivate them to attend remote courses. Overall, respondents stated that personal interests (intrinsic motivation) “always” motivate them to attend both mediums of continuing education courses (live and remote).

**Figure 4.3**

*Item 7 and 36: Personal Interests Motivate Me to Attend Continuing Education*

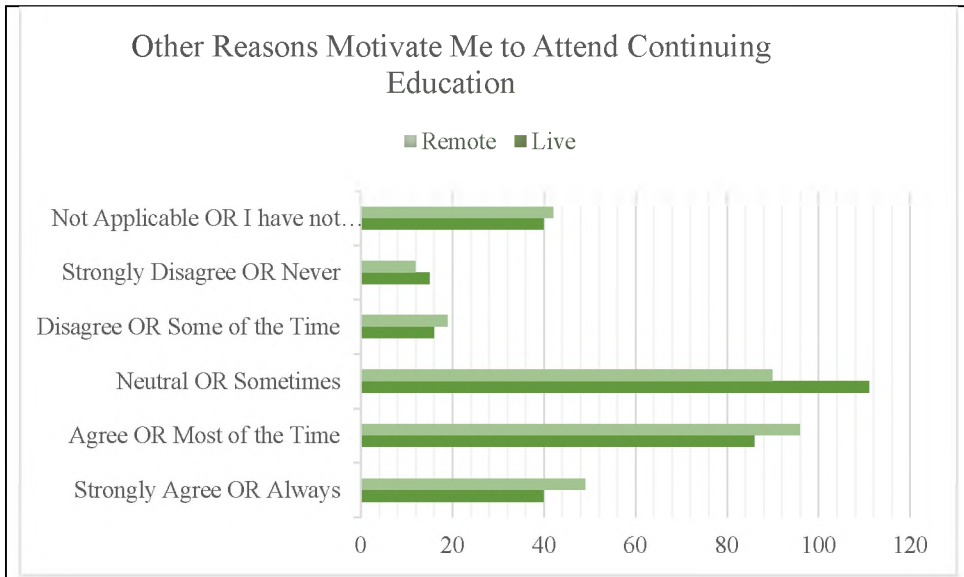


*Note.* Comparison of two mediums regarding personal interests motivating respondents to attend continuing education.

Figure 4.4 shows responses to items 8 and 37 that respondents reported (111/308, 36.04%) that “sometimes” other reasons motivate them to attend live, in-person courses, while for the medium of remote courses, respondents reported (96/308, 31.17%) that “most of the time” other reasons motivate them to attend these courses. Respondents reported that for the medium of remote continuing education courses they were motivated by other reasons to attend those courses more than live courses.

**Figure 4.4**

*Item 8 and 37: Other Reasons Motivate Me to Attend Continuing Education*

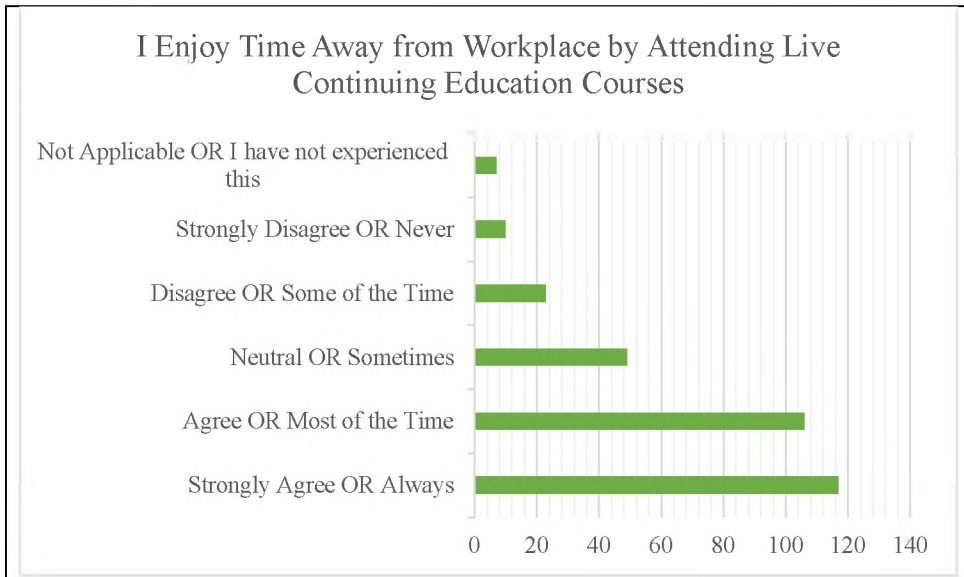


*Note.* Comparison of two mediums regarding other reasons motivating respondents to attend continuing education.

In Figure 4.5, the researcher arranged the data obtained on item 11. Respondents reported (117/312, 37.5%) that they “always” enjoy time away from their workplace by attending live courses. Overall, respondents reported that they “always” enjoy time away from their workplace by attending live continuing education courses.

**Figure 4.5**

*Item 11: I Enjoy Time Away from Workplace by Attending Live Courses*

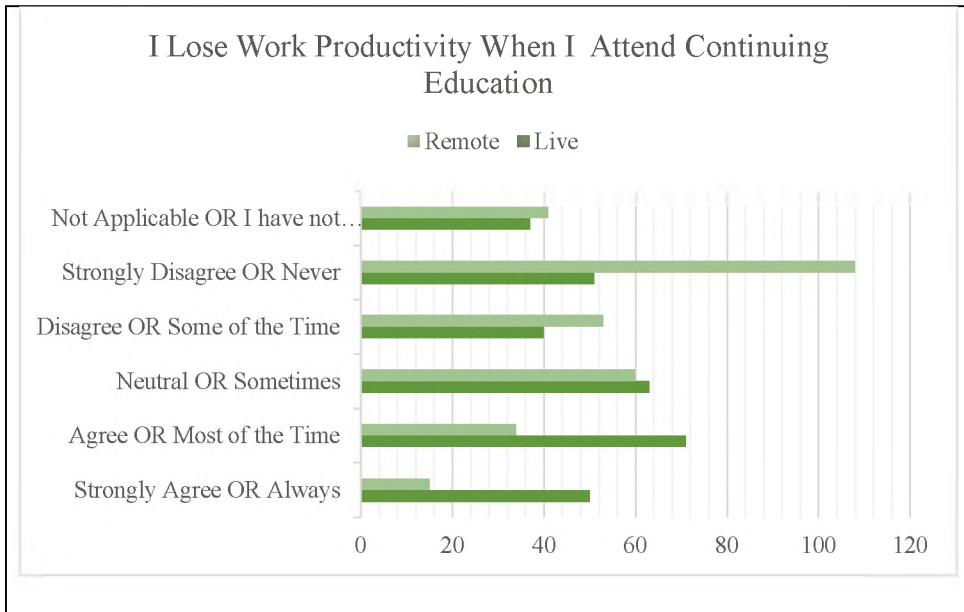


*Note.* Respondents' enjoyment in time away from the workplace to attend live, in-person continuing education courses.

Items 19 and 50, displayed in Figure 4.6, asked about loss of work productivity when respondents attend courses. Responses for item 19 showed that "most of the time" respondents reported (71/312, 22.76%) losing work productivity when they attended live, in-person courses. For remote courses, item 50, responses (108/311, 34.73%) showed that respondents "never" lost work productivity.

**Figure 4.6**

*Item 19 and 50: I Lose Work Productivity When I Attend Continuing Education*



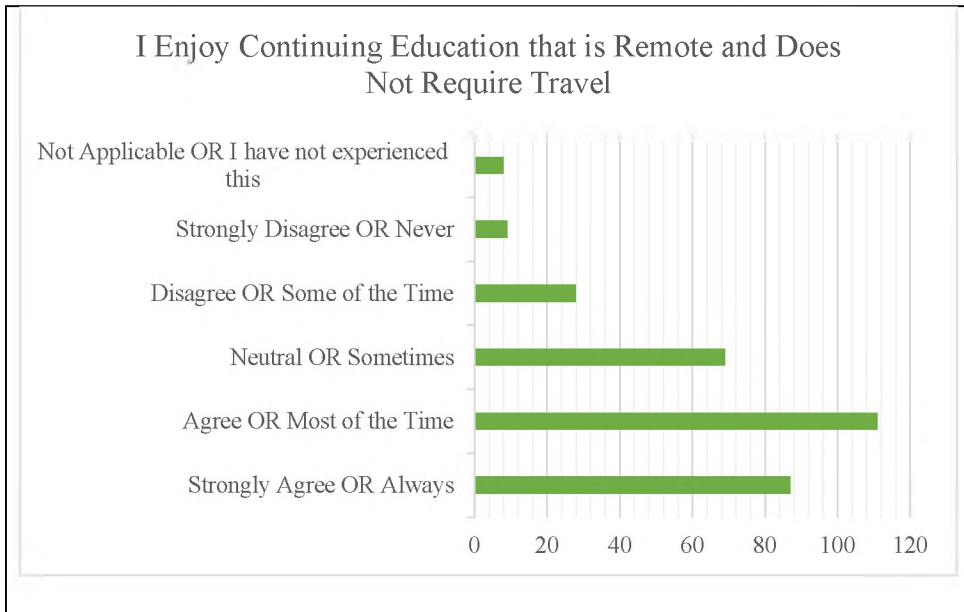
*Note.* Comparison of two mediums regarding respondents' loss of work productivity when attending continuing education.

Figure 4.7 presents responses to survey item 41, which dealt with respondents' enjoyment of remote continuing education courses as they do not require traveling. Respondents reported (11/312, 35.58%) that "most of the time" they enjoy continuing education that is remote and does not require traveling.



**Figure 4.7**

*Item 41: I Enjoy Continuing Education that is Remote and Does Not Require Traveling*

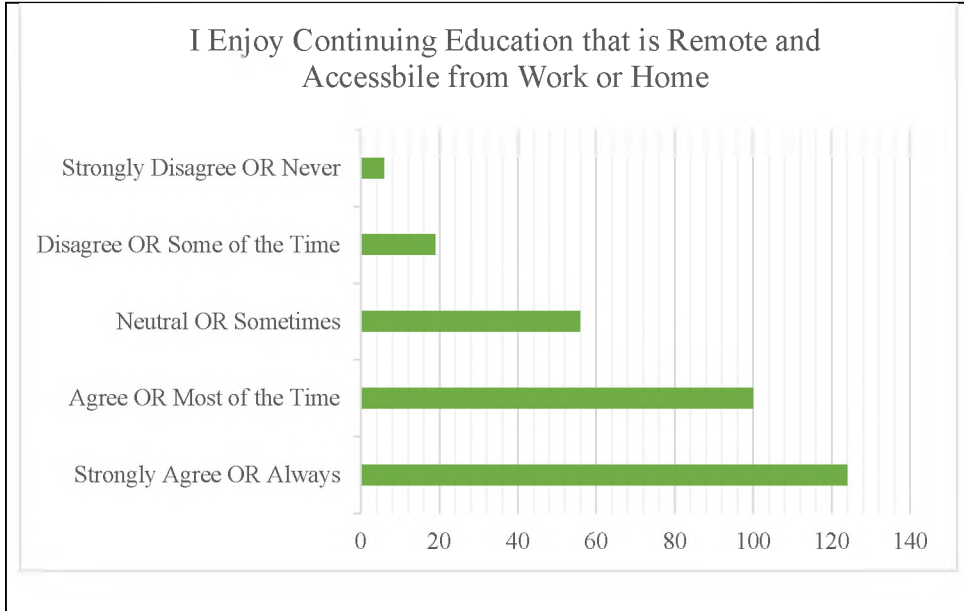


*Note.* Respondents' enjoyment of remote courses as they do not require traveling to acquire continuing education.

Figure 4.8 shows that respondents (124/312, 39.74%) “always” enjoy continuing education that they can access from work or at home by completing remote courses (item 42). The data revealed that remote courses were motivating to respondents based the accessibility of them.

**Figure 4.8**

*Item 42: I Enjoy Continuing Education that is Remote and Accessible from Work or at Home*

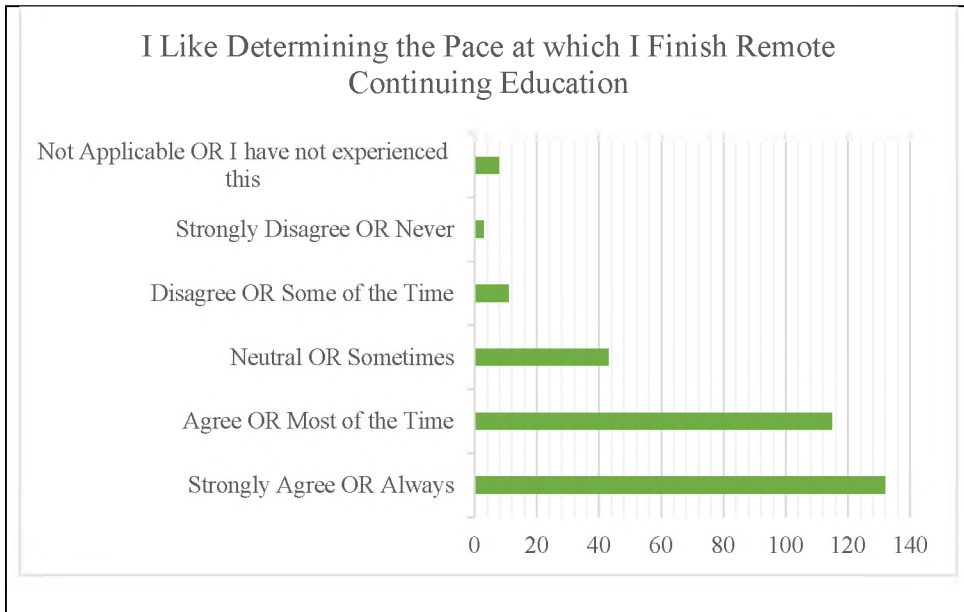


*Note.* Respondents' enjoyment with remote continuing education courses as they are accessible from work or at home.

Figure 4.9 displays the responses reported (132/312, 42.31%) that respondents strongly agreed that they like determining the pace at which they finish remote courses (item 43). Data revealed that respondents' motivation for attending remote courses included the self-pacing features of those courses.

**Figure 4.9**

*Item 43: I Like Determining the Pace at Which I Finish Remote Courses*

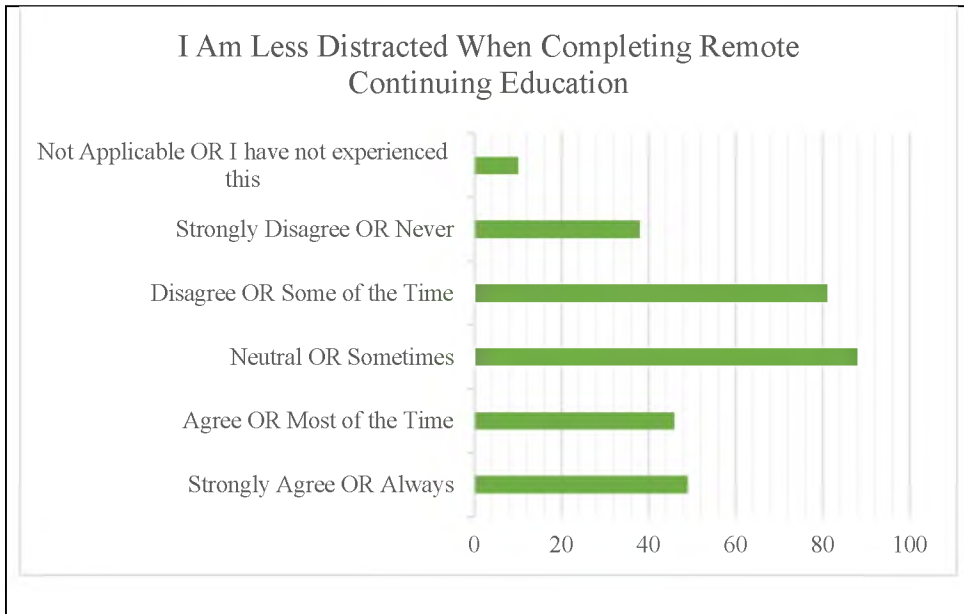


*Note.* Respondents determining the pace at which they finish remote continuing education courses.

Figure 4.10 shows data obtained in response to item 44. Respondents reported (88/312, 28.21%) that they are “sometimes” less distracted when completing remote courses.

**Figure 4.10**

*Item 44: I Am Less Distracted When Completing Remote Continuing Education*



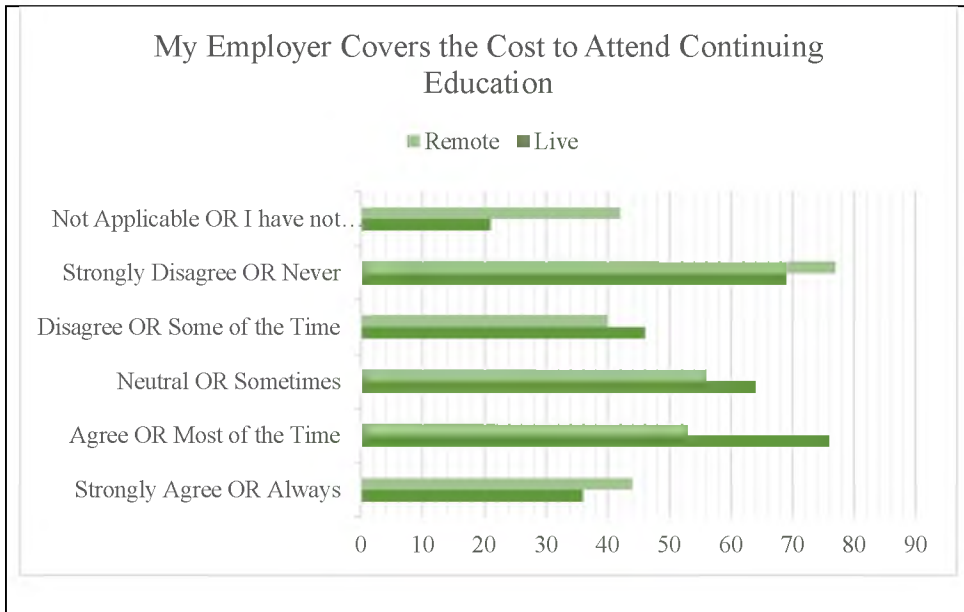
*Note.* Respondents being less distracted when completing remote continuing education courses.

#### **4.4.3 Respondents' Responses on Costs of Continuing Education**

Items 14 and 45 pertained to the constructs of motivation and costs for continuing education. Costs can motivate or act against motivation for course attendance. Figure 4.11 displays respondents who reported (76/312, 24.36%) that “most of the time” their employer covers the expense of attending live courses in response to item 14. In response to item 45, respondents reported (77/312, 24.86%) that for remote courses their employer “never” covers the expenses to attend continuing education.

**Figure 4.11**

*Item 14 and 45: My Employer Covers the Costs to Attend Continuing Education*

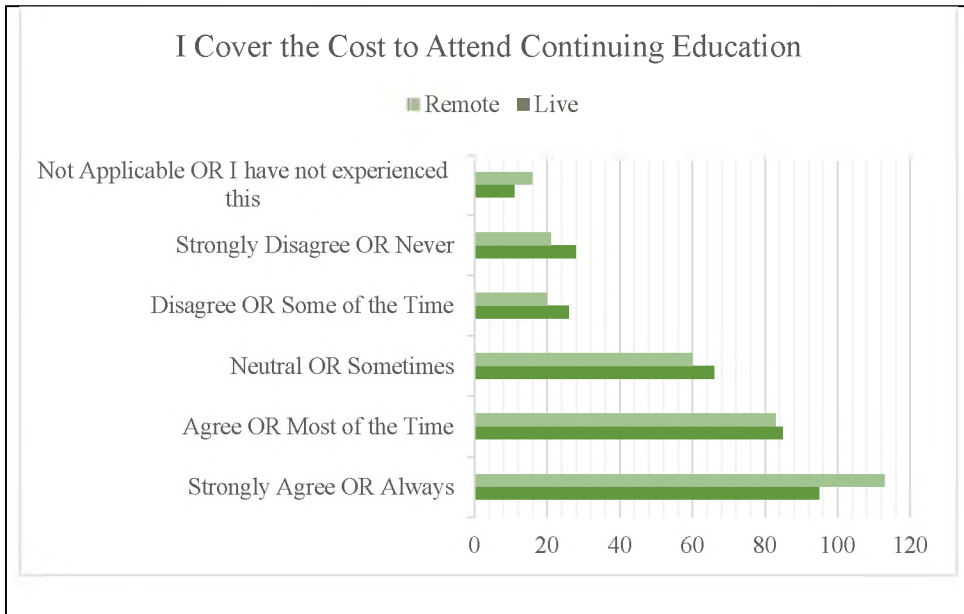


*Note.* Comparison of mediums regarding respondents’ reports of their employer covering the costs to attend continuing education courses.

Items 15 and 46 revealed that respondents reported (208/624, 33.3%) they “always” cover their own costs to attend both mediums of continuing education courses (live, in-person and remote), as depicted in Figure 4.12. Live courses, item 15, received 95/33 (30.5%) responses indicating that respondents “always” cover their own costs to attend. For item 46, remote courses, 113/313 (36.1%) respondents reported that they “always” cover their own costs to attend.

**Figure 4.12**

*Item 15 and 46: I Cover the Cost to Attend Continuing Education*

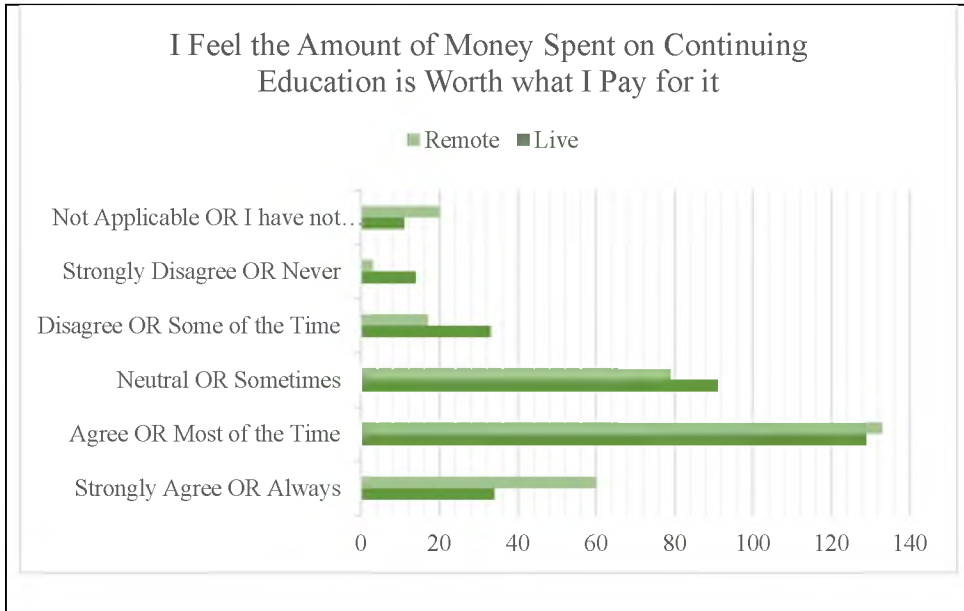


*Note.* Comparison of mediums regarding respondents' reports on them covering the costs to attend continuing education courses.

The researcher arrayed responses to items 16 and 47 in Figure 4.13. Respondents reported (262/624, 41.98%) for both mediums of courses that “most of the time” they felt as though the amount of money spent on continuing education is worth what they paid for it. Live courses, item 16, received 129/312 (41.35%) responses from participants who indicated “most of the time” they felt the amount of money spent on continuing education is worth what they paid for it. For remote courses, item 47, there were 133/312 (42.63%) respondents who reported that “most of the time” they felt the amount of money spent is worth what they paid for continuing education. This finding unveiled that a large majority of respondents (262/624, 41.98%) felt that the amount of money spent on both mediums of continuing education was worth what they paid for it.

**Figure 4.13**

*Item 16 and 47: I Feel the Amount of Money Spent on Continuing Education is Worth what I Pay for it*

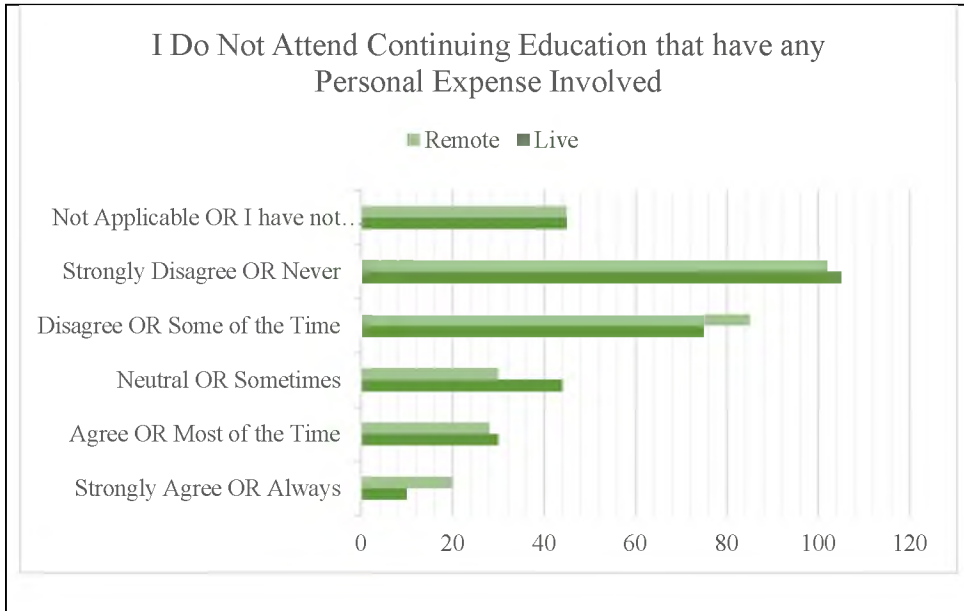


*Note.* Comparison of mediums regarding respondents' reportedly felt that the amount of money spent on continuing education courses are worth what they pay for it.

Figure 4.14 shows responses to items 17 and 48, which dealt with continuing education that has personal expenses involved. Respondents reported in items 17 and 48 (206/619, 33.27%) that they “never” attended continuing education courses for both mediums of continuing education courses (live and remote) with personal expenses involved. The live courses, item 17 received 105/309 (33.98%) responses from participants who stated that they did not attend courses that have personal expenses involved. For remote courses, item 48, 102/310 (32.9%) respondents reported that they did not attend continuing education that had personal expenses involved.

**Figure 4.14**

*Item 17 and 48: I Do Not Attend Continuing Education that have any Personal Expense Involved*



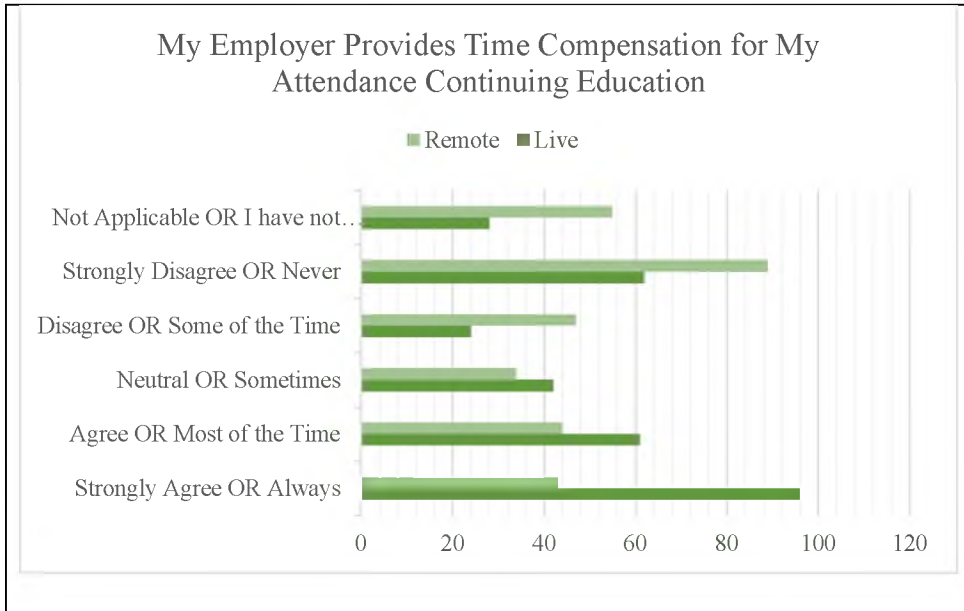
*Note.* Comparison of mediums regarding respondents' reports on them not attending continuing education courses that have any personal expense involved.

Figure 4.15 displays responses to items 18 and 49. Respondents reported in item 18 (96/313, 30.67%) that their employer “always” provides professional time compensation for respondents’ attendance at live, in-person courses. For remote courses, item 49, respondents reported (89/312, 28.53%) that their employer “never” provides time compensation for their attendance. The data revealed a difference in respondents’ reports on their employers’ provision of time compensation for respondents’ attendance at continuing education courses based on the medium employed.



**Figure 4.15**

*Item 18 and 49: My Employer Provides Time Compensation for My Attendance to Continuing Education*



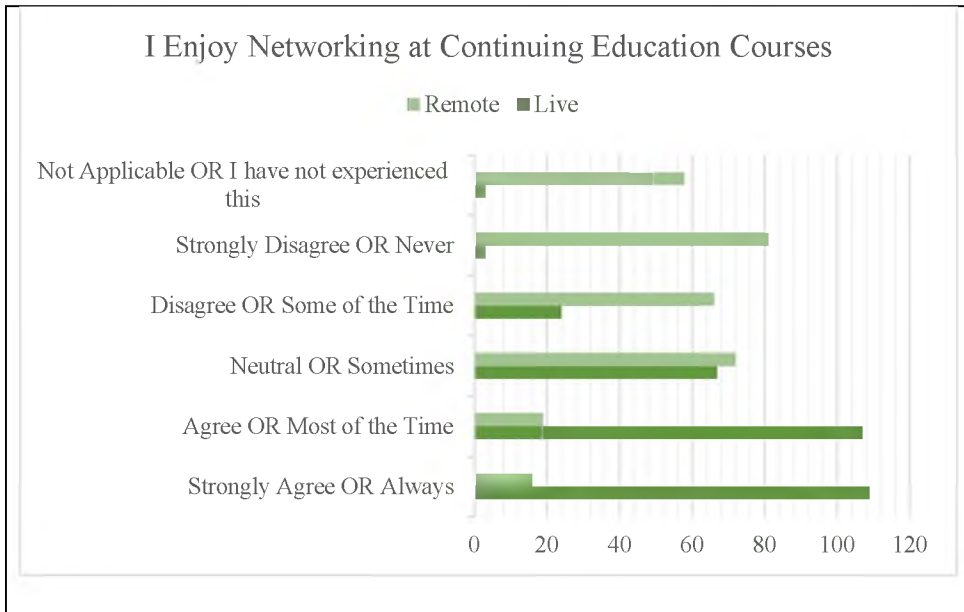
*Note.* Comparison of mediums regarding respondents’ reports on their employers’ providing time compensation for their attendance to continuing education courses.

#### **4.4.4 Respondents’ Responses on the Interactivity of Continuing Education**

The next set of figures present a comparison of mediums in regard to the survey items probing the constructs of motivation and interactivity. The researcher graphed responses to items 9 and 38 in Figure 4.16. For item 9, respondents stated (109/313, 34.82%) that they “always” enjoy networking at live continuing education courses. For remote courses, in item 38, respondents reported (81/312, 25.96%) that they “never” enjoy networking at those courses. Overall, the data revealed differences in respondents’ reports on networking at continuing education courses (live and remote).

**Figure 4.16**

*Item 9 and 38: I Enjoy Networking at Continuing Education*

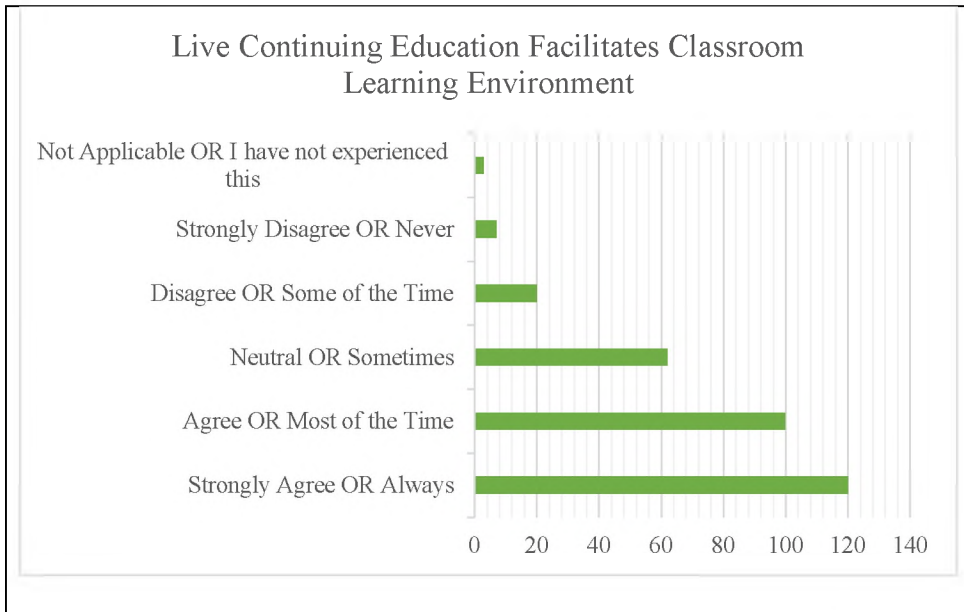


*Note.* Comparison of mediums regarding respondents' enjoyment with networking at continuing education courses.

Item 10 covered the construct of interactivity of continuing education courses. Figure 4.17 show the spread of responses for item 10, in which respondents reported (120/312, 38.46%) that live courses “always” facilitated a classroom learning environment. Data revealed that the interactive classroom learning environment of live courses motivated respondents to attend those courses and facilitated interaction with other attendees.

**Figure 4.17**

*Item 10: Live Courses Facilitate a Classroom Learning Environment*

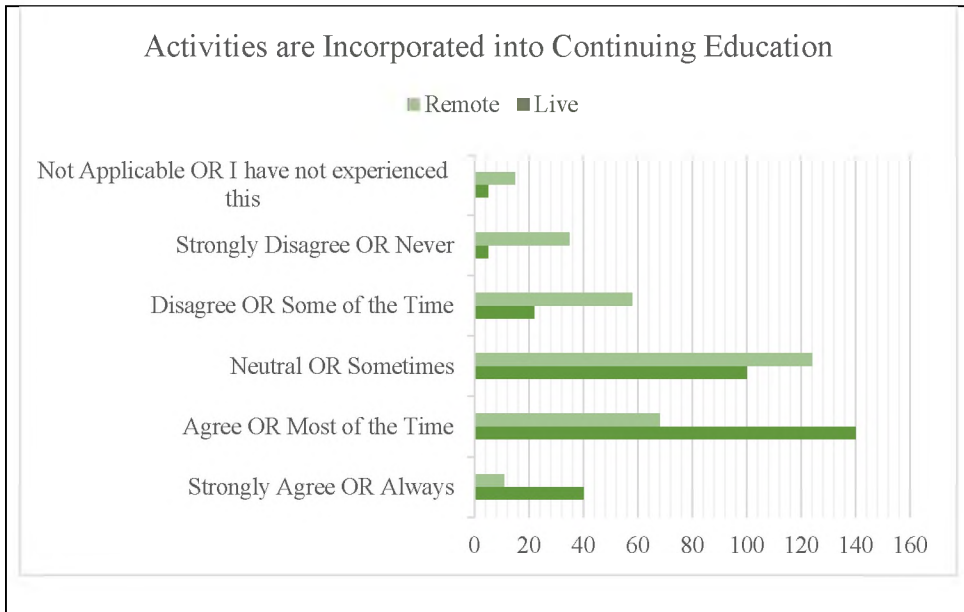


*Note.* Respondents’ reports on live continuing education courses facilitating a classroom learning environment.

Figure 4.18 exhibits a comparison of mediums regarding the incorporation of activities into presentations at continuing education courses (items 20 and 51). Item 20 revealed that respondents reported (140/312, 44.87%) that activities are “most of the time” incorporated into the presentations given at live, in- person courses. For remote courses, respondents reported (124/311, 39.87%) that activities are “sometimes” incorporated into the presentations (item 51). The difference in responses between the mediums reveals that each medium varies in their incorporation of activities into their programs for speech-language pathologists.

**Figure 4.18**

*Item 20 and 51: Activities are Incorporated into Continuing Education*

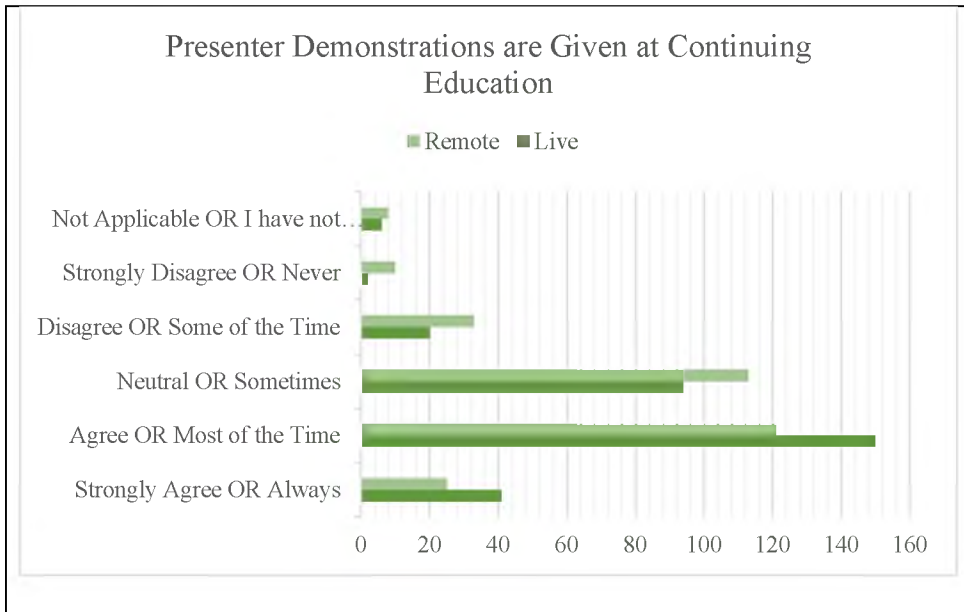


*Note.* Comparison of two mediums regarding continuing education courses' incorporation of activities.

In Figure 4.19 displays responses to items 21 and 52 that dealt with presenter demonstrations given at continuing education courses. Aggregated responses showed that respondents reported (271/623, 43.49%) that presenter demonstrations are given most of the time” at both mediums of continuing education courses (live and remote). Respondents reported (150/313, 47.92%) that presenter demonstrations are given at live courses (item 21). Remote courses received responses (121/310, 39.03%) that “most of the time” presenter demonstrations are provided at these courses (item 52). Overall, the data showed that for both mediums of continuing education courses (live and remote) presenter demonstrations were incorporated into the programs.

**Figure 4.19**

*Item 21 and 52: Presenter Demonstrations are Given at Continuing Education*



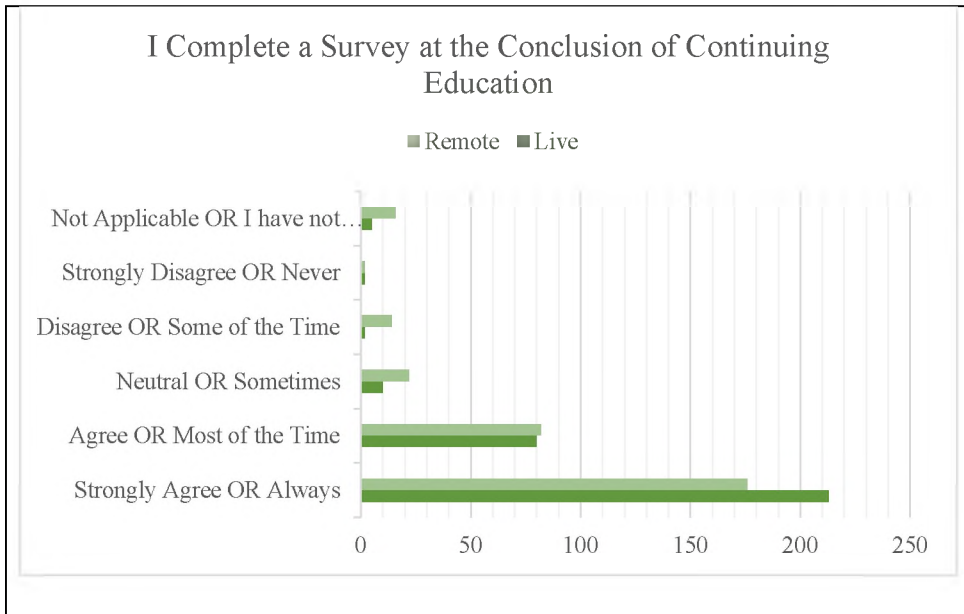
*Note.* Comparison of two mediums regarding presenter demonstrations given at continuing education courses.

The researcher arrayed the responses to items 25 and 56 in Figure 4.20.

Respondents reported (389/624, 62.33%) that they “always” complete a survey at the conclusion of both mediums of continuing education courses. For live courses in item 25, 213 respondents reported that they “always” complete the survey at the conclusion of the course and 176 respondents reported that they complete the survey at the conclusion of remote courses (item 56). Data uncovered that respondents overall complete the survey given out by presenters or the conference organizers at the conclusion of both mediums of continuing education courses (live and remote).

**Figure 4.20**

*Item 25 and 56: I Complete a Survey at the Conclusion of Continuing Education*

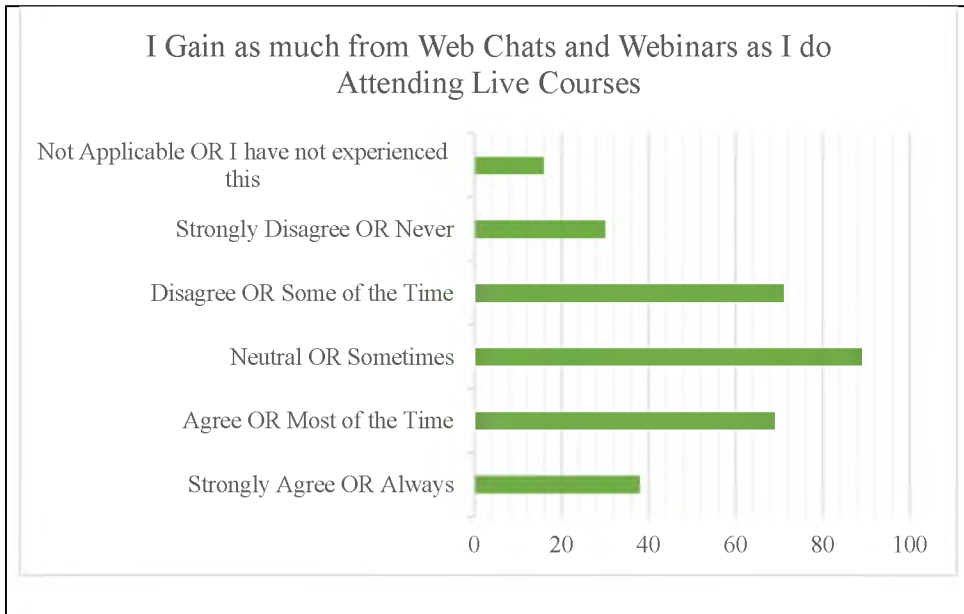


*Note.* Comparison of two mediums regarding respondents' completion of a survey at the conclusion of continuing education courses.

Figure 4.21 shows that respondents reported (89/313, 28.43%) in response to item 40 that they “sometimes” gain as much from web chats and webinars as they do in attending live courses.

**Figure 4.21**

*Item 40: I Gain as much from Web Chats and Webinar as I do Attending Live Courses*



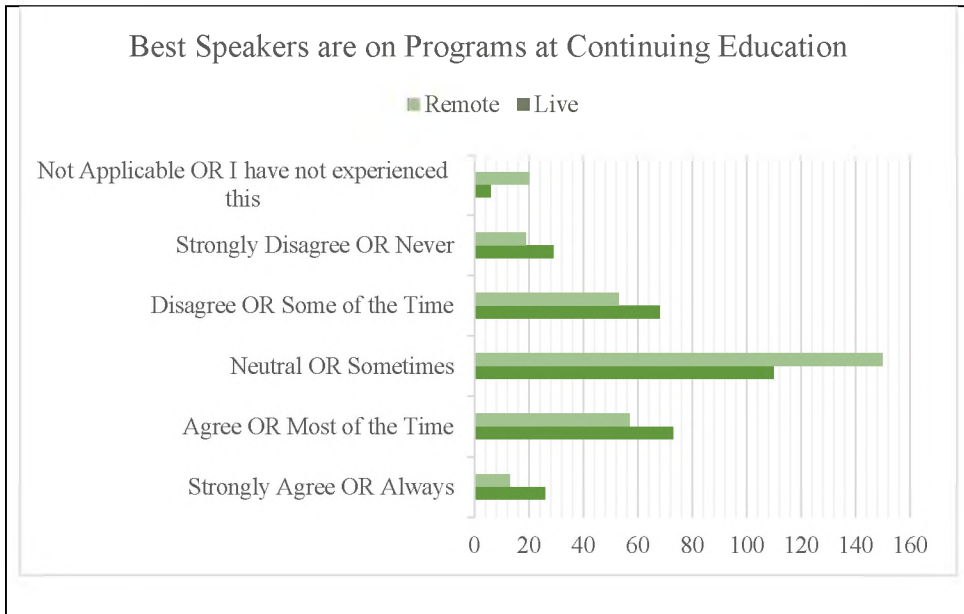
*Note.* Respondents' gain from web chats and webinars for continuing education courses.

#### **4.4.5 Respondents' Responses on Quality of Continuing Education**

The researcher graphed data points gathered for items that examined the construct of quality in Figures 4.22. to 4.26. Items 12 and 39 dealt with the quality of the continuing education courses. Figure 4.22 shows that, in item 12, 110/312 (35.26%) respondents stated that “sometimes” the best speakers are on programs at live, in-person courses (item 12). For remote courses, 150/312 (48.08%) respondents reported that “sometimes” the best speakers are on those programs (item 39).

**Figure 4.22**

*Item 12 and 39: Best Speakers are on Programs at Continuing Education*



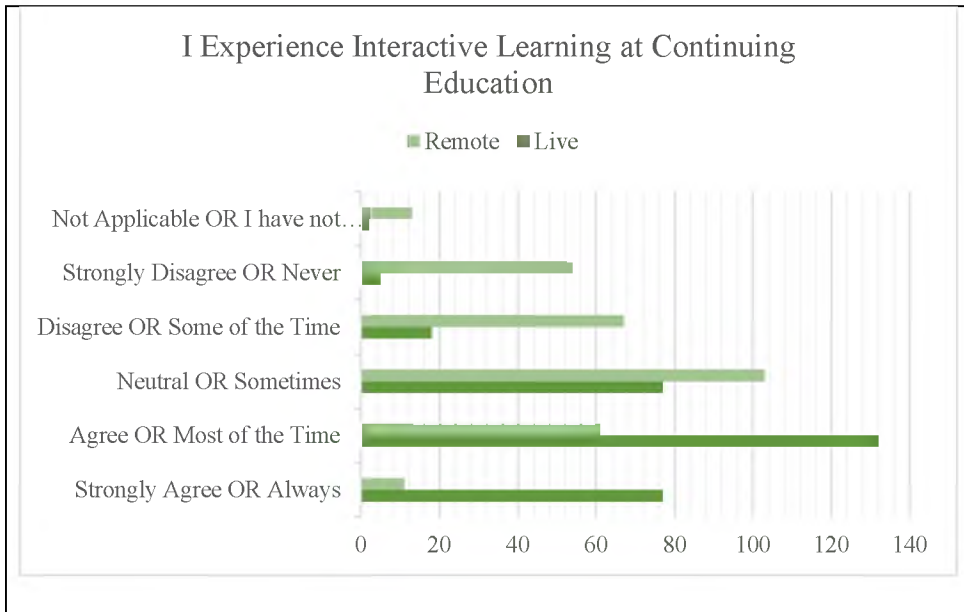
*Note.* Comparison of mediums regarding respondents' reports on best speakers on programs at continuing education courses.

Figure 4.23 displays items 22 and 53, in which 132/311 (42.44%) respondents responded that “most of the time” they experienced interactive learning during live, in-person courses (item 22). For remote courses, responses indicated (103/309, 33.33%) that respondents “sometimes” experienced interactive learning (item 53). Data showed that respondents' experience of interactive learning varied based on the medium employed for the continuing education course.



**Figure 4.23**

*Item 22 and 53: I Experience Interactive Learning at Continuing Education*

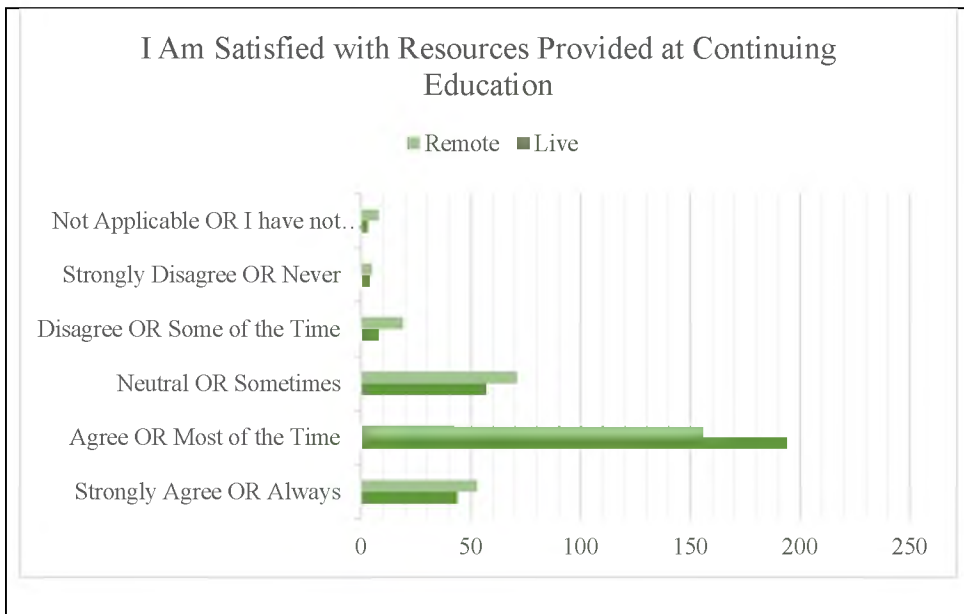


*Note.* Comparison of mediums regarding respondents' reported experience of interactive learning at continuing education courses.

Figure 4.24 shows the response to items 23 and 54, in which respondents reported (350/622, 56.27%) that they are satisfied “most of the time” with the resources provided at both mediums of continuing education courses. Respondents stated (194/310, 62.58%) that “most of the time” they are satisfied with the resources provided at live courses (item 23). For remote courses, respondents indicated (156/312, 50%) that “most of the time” they are satisfied with the resources provided at such courses (item 54). Data revealed that overall respondents indicated satisfaction with the resources provided at both mediums of continuing education courses (live and remote).

**Figure 4.24**

*Item 23 and 54: I Am Satisfied with Resources Provided at Continuing Education*

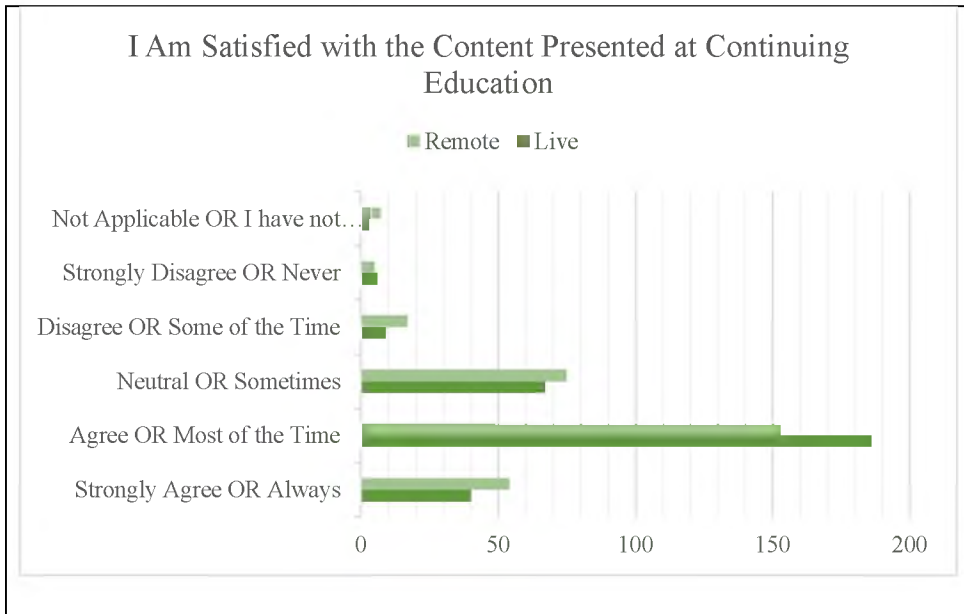


*Note.* Comparison of two mediums regarding respondents' satisfaction with resources provided at continuing education courses.

In Figure 4.25, items 24 and 55 revealed that respondents reported (339/622, 54.5%) that “most of the time” they are satisfied with the content covered at both mediums of continuing education courses. For live courses, respondents reported (186/311, 59.81%) that “most of the time” they are satisfied with the content presented (item 24). For remote courses, respondents reported (153/311, 49.2%) that “most of the time” they are satisfied with the content presented (item 55).

**Figure 4.25**

*Item 24 and 55: I Am Satisfied with the Content Presented at Continuing Education*

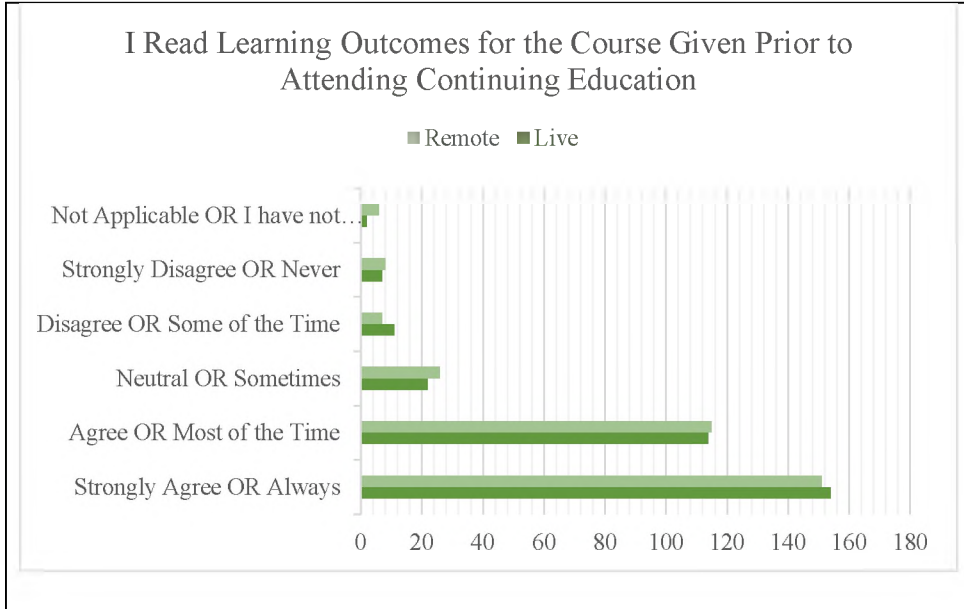


*Note.* Comparison of two mediums regarding respondents' satisfaction with content presented at continuing education courses.

Figure 4.26 shows respondents' reported responses (305/623, 48.95%) that they "always" read learning outcomes prior to attending both mediums of continuing education courses (items 26 and 57). 154 respondents reported that they "always" read the learning outcomes given prior to attending live courses (item 26). For remote courses, 151 respondents reported that they "always" read learning outcomes given prior to attending continuing education (item 57).

**Figure 4.26**

*Item 26 and 57: I Read Learning Outcomes for the Courses Given Prior to Attending Continuing Education*



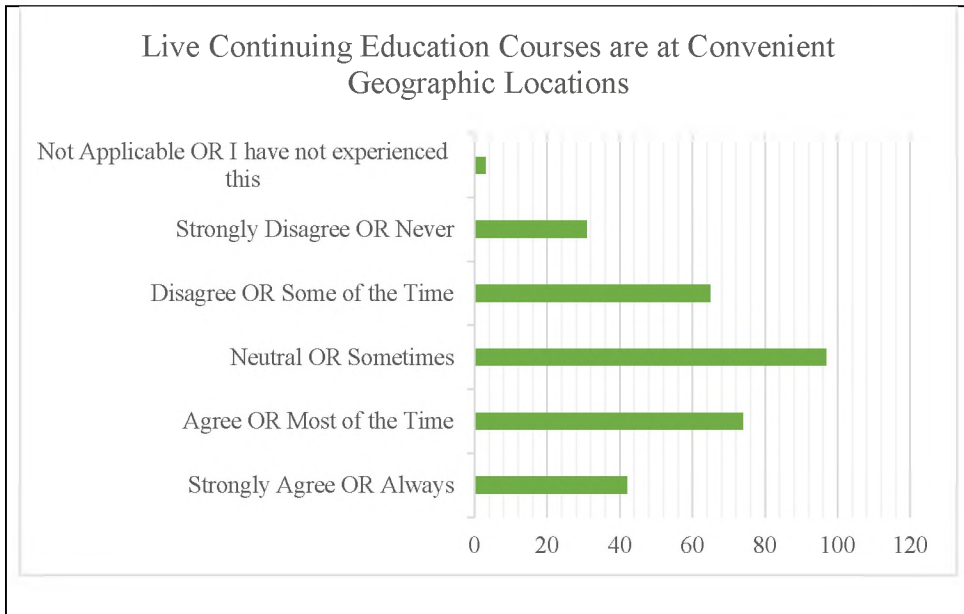
*Note.* Comparison of two mediums regarding respondents reading learning outcomes prior to attending continuing education courses.

#### **4.4.6 Respondents' Responses on Preferences for Continuing Education Mediums**

The researcher examined respondents' preferences for continuing education courses with item 13, shown in Figure 4.27. Respondents reported (97/312, 31.09%) that "sometimes" live courses are at convenient geographic locations.

**Figure 4.27**

*Item 13: Live Courses are at Convenient Geographic Locations*

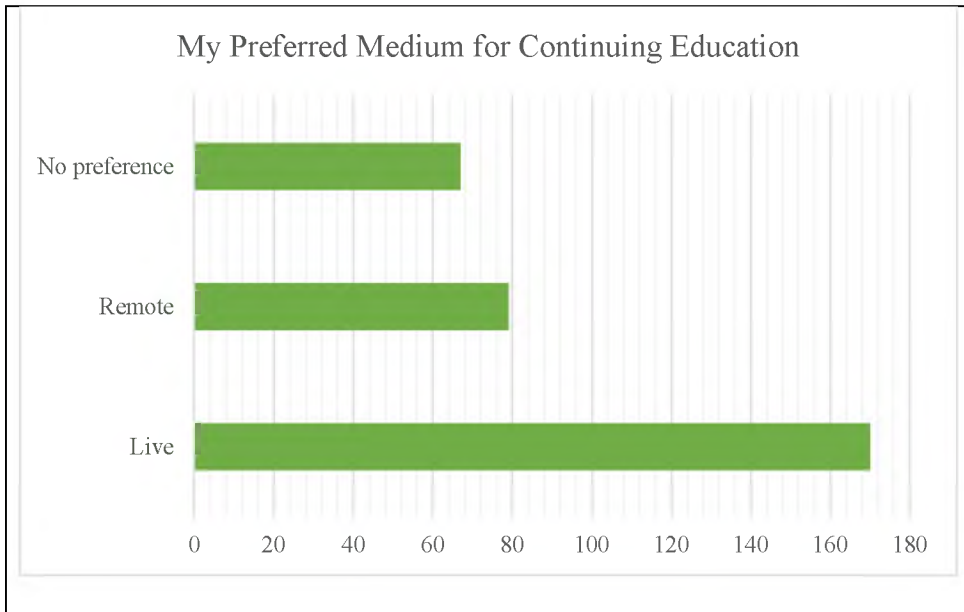


*Note.* Respondents' reports on live continuing education courses being at convenient geographic locations.

The responses to item 66 revealed that respondents reported (170/316, 53.8%) that their preferred medium of instruction for continuing education is live, in-person as shown in Figure 4.28. Remote courses received 79/316 (25%) responses, indicating that remote is respondents' preferred medium for continuing education. Overall, the data revealed that respondents' preferred medium of instruction for continuing education is live, in-person courses.

**Figure 4.28**

*Item 66: My Preferred Medium for Continuing Education*



*Note.* Comparison of mediums regarding respondents’ preferences for continuing education courses.

#### **4.4.7 Respondents’ Responses on Transfer of Learning from Continuing Education to Practice Settings**

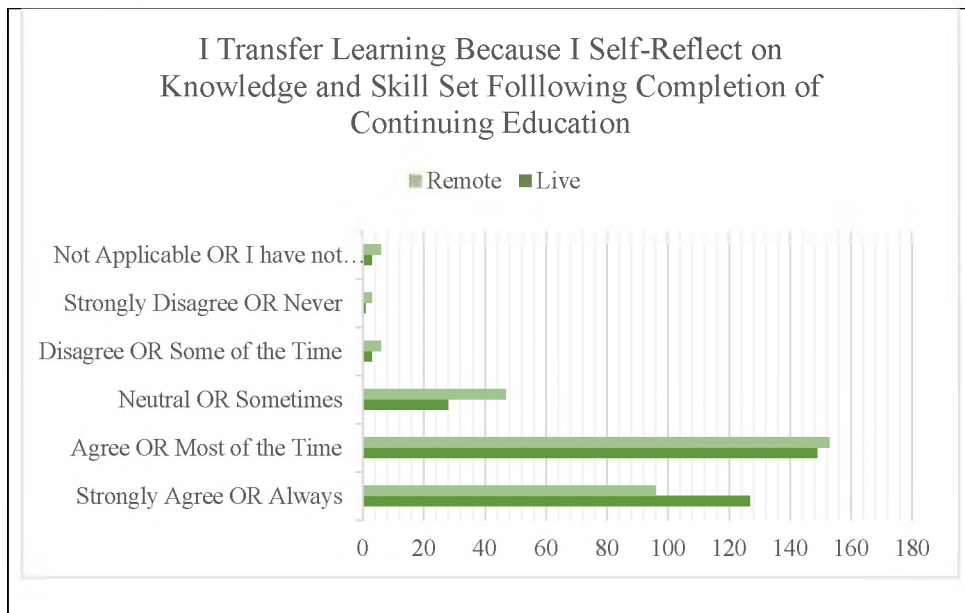
The researcher compared the mediums of continuing education courses in regard to respondents’ reports of their transfer of learning outcomes to practice settings. However, because the construct of transfer of learning is central to this study, the aggregations of responses to items across the mediums will be presented as well as the comparisons across the mediums.

Respondents’ responses based on the constructs of transfer and motivation included survey items 27 and 58. Figure 4.29 exhibits that respondents reported (302/622, 48.55%) that for both mediums of continuing education they transferred learning “most of the time” because they self-reflect on their knowledge and skills following the completion of courses. For item 27, 149/311 (47.91%) respondents reported that “most of

the time” they transfer learning following the completion of live courses because of their self-reflection on knowledge and skills, while 153/311 (49.2%) respondents stated that “most of the time” they transfer learning after the completion of remote courses due to their self-reflection on knowledge and skills(item 58). Overall, respondents indicated that “most of the time” they transfer learning because of the self-reflection completed following the conclusion of both mediums of continuing education courses (live and remote).

**Figure 4.29**

*Item 27 and 58: I Transfer Learning Because I Self-Reflect Following Completion of Continuing Education*



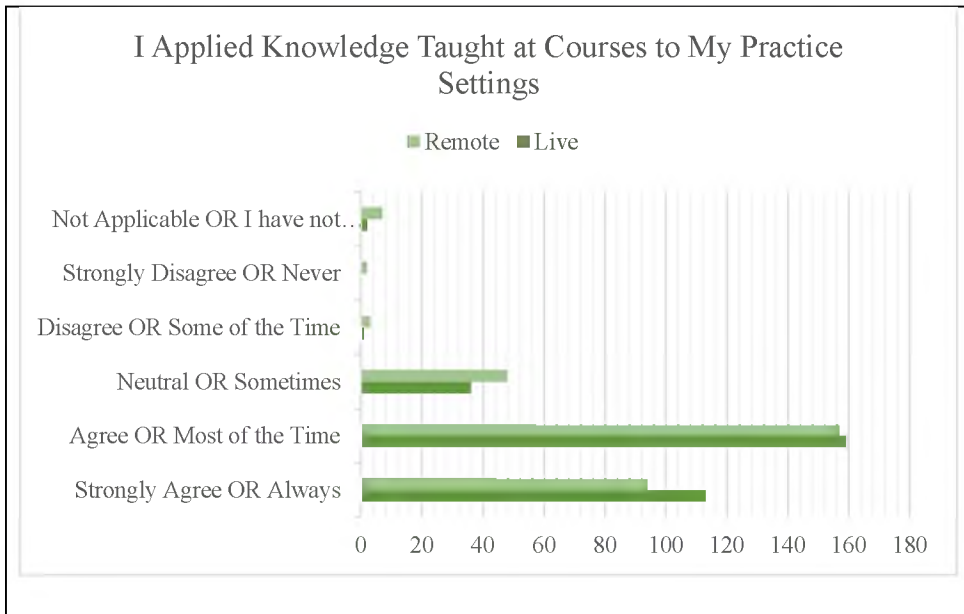
*Note.* Comparison of mediums regarding respondents’ reported transfer of learning because they self-reflect following the completion of continuing education courses.

Figure 4.30 graphs the responses to items 28 and 59. An aggregate of 316/622 (50.8%) respondents reported that “most of the time” they applied knowledge taught at both mediums of continuing education courses to their practice settings. For live courses in item 28, 159 respondents reported that “most of the time” they applied knowledge

taught. For remote courses, 157 respondents reported that “most of the time” they applied knowledge taught (item 59). The data revealed that “most of the time” respondents reported that they applied the knowledge taught at both mediums of continuing education courses to their practice settings.

**Figure 4.30**

*Item 28 and 59: I Applied Knowledge Taught at Courses to My Practice Settings*



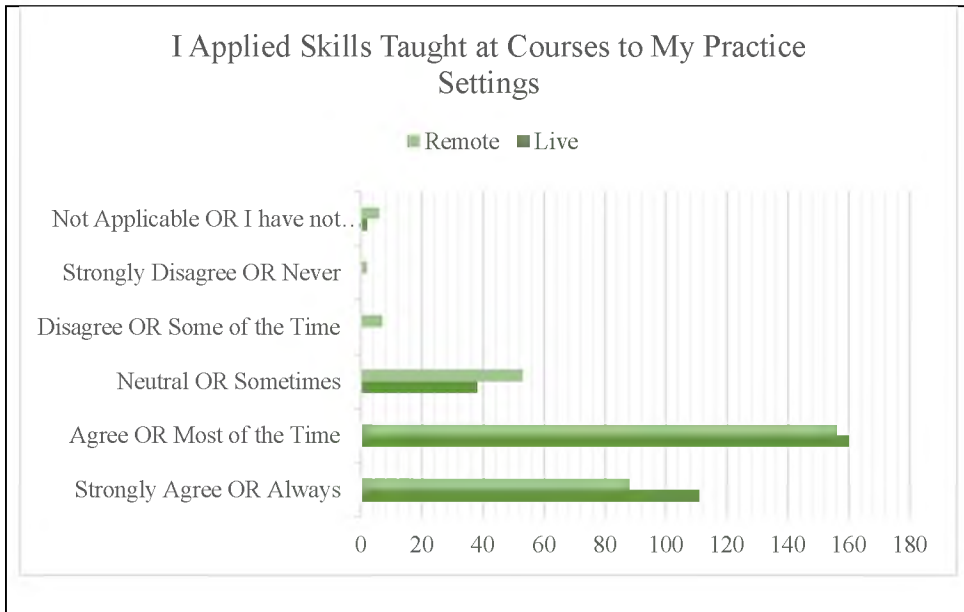
*Note.* Comparison of mediums regarding respondents’ application of knowledge taught at courses to their practice settings.

Figure 4.31 depicts the response to items 29 and 60, an aggregated 316/623 (50.72%) respondents reported that “most of the time” they applied skills taught at both mediums of continuing education courses to their practice settings. For live courses, 160 respondents stated that “most of the time” they applied skills taught (item 29). For remote courses, 156 respondents reported that “most of the time” they applied the skills taught at continuing education (item 60). Overall, respondents reported that “most of the time” they applied the skills taught at both mediums of continuing education courses (live and remote).



**Figure 4.31**

*Item 29 and 60: I Applied Skills Taught at Courses to My Practice Settings*

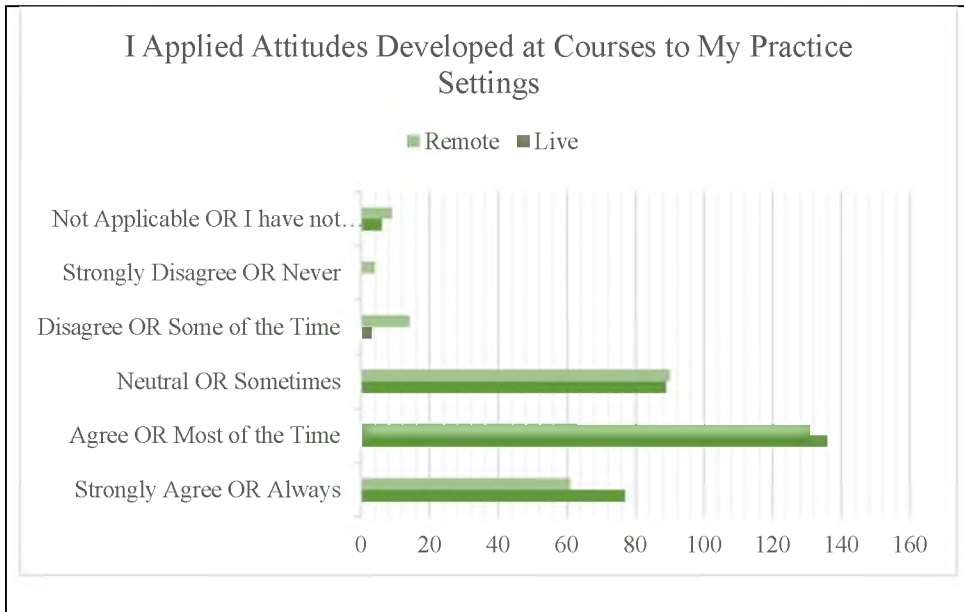


*Note.* Comparison of mediums regarding respondents' application of skills taught at courses to their practice settings.

In response to items 30 and 61, a total of 267/620 (43.06%) respondents reported that they applied attitudes developed at both mediums of continuing education courses to their practice settings “most of the time,” as exhibited in Figure 4.32. There were 136 respondents who reported that “most of the time” they applied the attitudes developed at live courses (item 30). For remote courses, 131 respondents stated that “most of the time” they applied the attitudes developed from continuing education (item 61). Data revealed that “most of the time” respondents applied the attitudes developed at both mediums of continuing education courses to their practice settings.

**Figure 4.32**

*Item 30 and 61: I Applied Attitudes Developed at Courses to My Practice Settings*

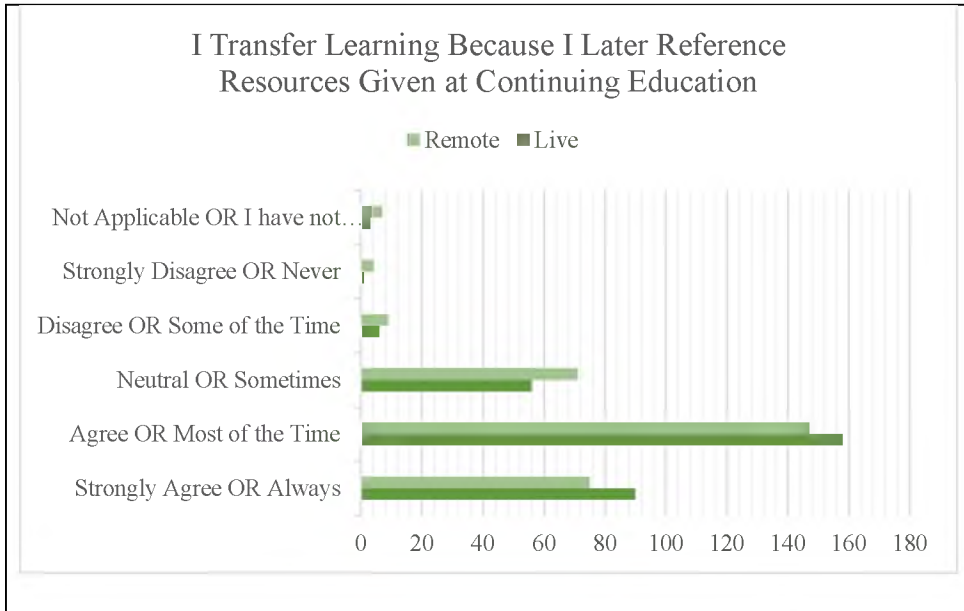


*Note.* Comparison of mediums regarding respondents’ application of attitudes developed at courses to their practice settings.

Figure 4.33 shows the responses to items 31 and 62, which indicated that respondents report (305/627, 48.64%) that “most of the time” they transfer learning because they later reference the resources given at both mediums of continuing education courses. There were 158/314 (50.32%) respondents who reported that “most of the time” they later reference the resources given at live, in-person courses (item 31). For remote courses, 147/311 (46.96%) respondents reported that “most of the time” they later reference the resources given at continuing education (item 62). Overall, the respondents reported that “most of the time” they transfer learning because they later refer to resources given at both mediums of continuing education courses.

**Figure 4.33**

*Item 31 and 62: I Transfer Learning Because I Later Reference Resources Given at Continuing Education*

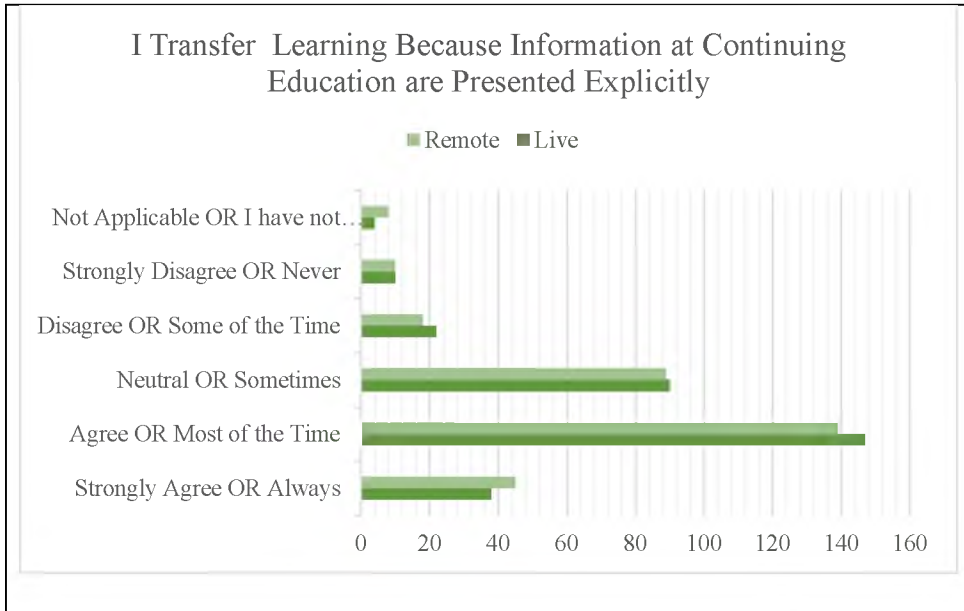


*Note.* Comparison of mediums regarding respondents’ transfer of learning because they later refer to resources obtained from continuing education courses.

In Figure 4.34, items 32 and 63, respondents reported (286/620, 46.12%) that they transferred learning “most of the time” because information at both mediums of continuing education courses are presented explicitly. There were 147/311 (47.27%) respondents who reported that “most of the time” they transfer because information was presented explicitly at live courses (item 32) and 139/309 (44.98%) respondents stated “most of the time” they transfer because the information was presented explicitly at remote courses (item 63). Data revealed that “most of the time” they transfer learning because information was presented explicitly at both mediums of continuing education courses.

**Figure 4.34**

*Item 32 and 63: I Transfer Learning Because Information at Continuing Education are Presented Explicitly*

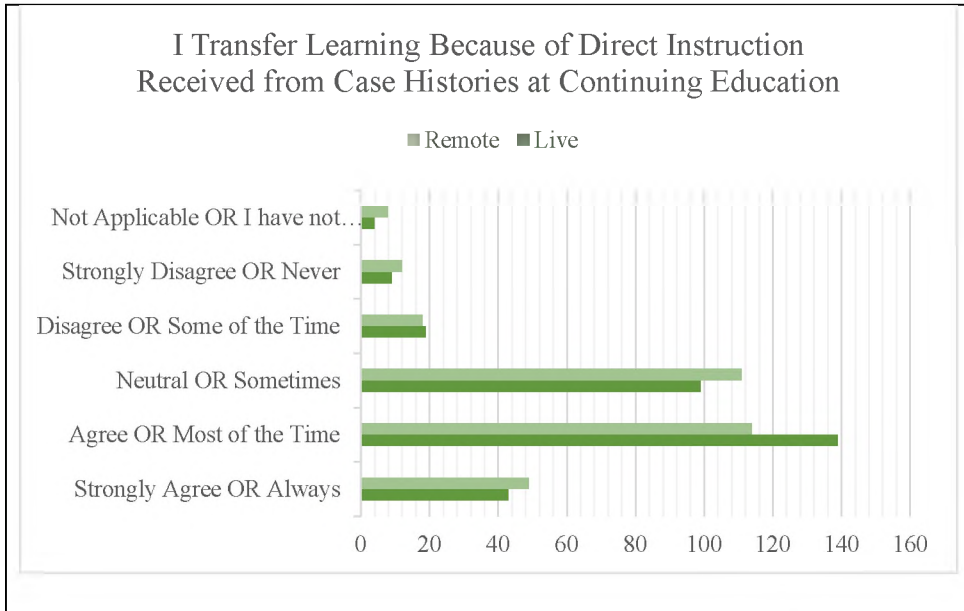


*Note.* Comparison of mediums regarding respondents’ transfer of learning because the information is presented explicitly at continuing education courses.

Figure 4.35 depicts responses yielded from items 33 and 64. There were 253/625 (40.48%) respondents that reported they transferred learning “most of the time” because of direct instruction received at both mediums of continuing education courses. There were 139/313 (44.41%) respondents who indicated that “most of the time” they transferred learning because of direct instruction received at live courses (item 33). For remote courses, 114/312 (36.54%) respondents stated that “most of the time” they transferred learning due to direct instruction received at continuing education (item 64). Overall, respondents stated that “most of the time” they transferred learning because of the direct instruction received at both mediums of continuing education courses.

**Figure 4.35**

*Item 33 and 64: I Transfer Because of Direct Instruction Received from Case Histories at Continuing Education*

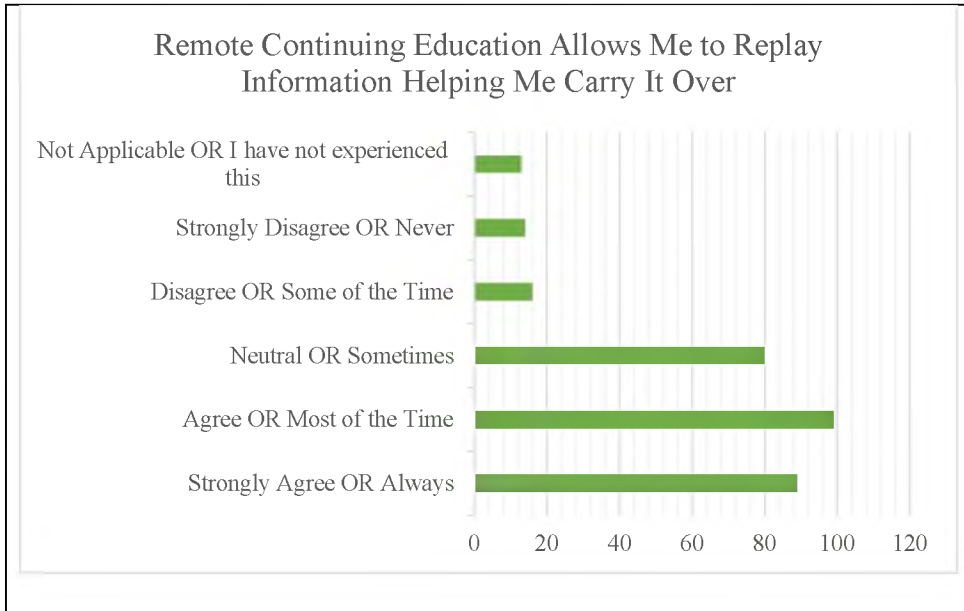


*Note.* Comparison of mediums regarding respondents’ transfer of learning because of direct instruction received from case histories at continuing education courses.

Figure 4.36 shows that for item 65, 99 respondents reported that “most of the time” remote continuing education allows them to replay information, which helps them carry it over.

**Figure 4.36**

*Item 65: Remote Continuing Education Allows Me to Replay Information Helping Me Carry It Over*

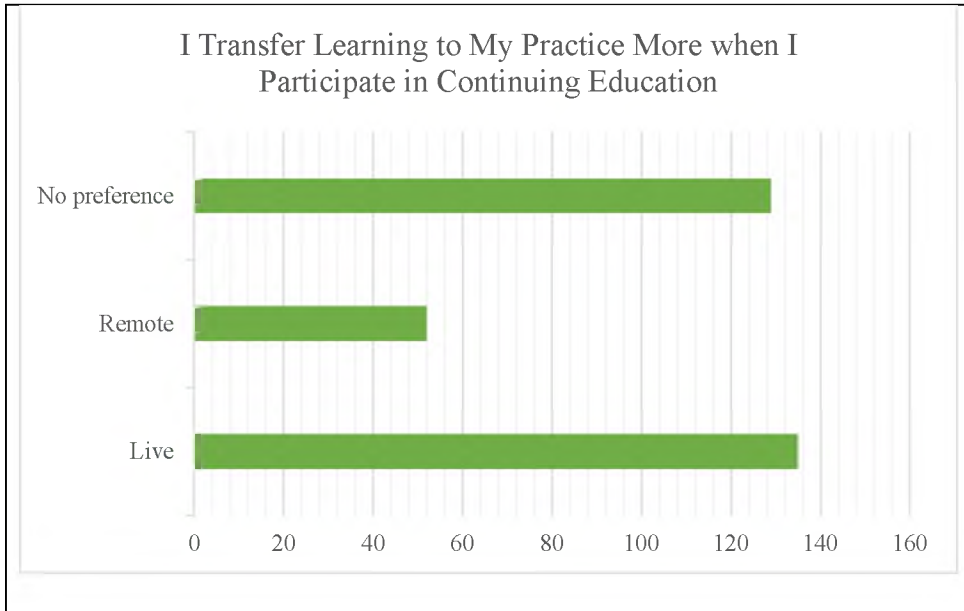


*Note.* Respondents replaying information presented at remote continuing education courses to help them carry it over.

Figure 4.37 shows the responses to items related to the constructs of transfer of learning and preferences for medium. There were 135/316 (42.7%) respondents who reported that they transfer learning from continuing education courses to their practice settings more when they participated in live, in-person courses (item 67). Remote courses received 52/316 (16.46%) responses to item 67 concerning the transfer of learning from continuing education courses to practice settings based on participation at remote instruction. Data revealed that respondents preferred live courses and that when participating in live courses they transfer learning more to their practice settings than remote courses.

**Figure 4.37**

*Item 67: I Transfer Learning to Practice More when I Participate in Continuing Education*



*Note.* Comparison of mediums regarding respondents' reported transfer of learning occurring based on medium of continuing education courses.

#### **4.5 Summary of Results**

The researcher presented all the data obtained on survey items in order to display the respondents' reported perspectives on continuing education courses. Also, these results provided insight to the realistic behavior of speech-language pathologists regarding their general tendencies with each medium of continuing education in consideration of the six constructs in review: motivation, costs, interactivity, quality, preferences, and transfer of learning.

In summary, the following information was obtained.

- (1) Motivation is greatest when speech-language pathologists can access the courses from their home or work and they can control the pace at which they complete the

course (items 42 and 43). The better medium based on respondents' motivation to attend continuing education was remote courses (items 5 and 34).

- (2) Cost is a factor in that speech-language pathologists covered the costs to attend continuing education courses (items 15 and 46). The better medium based on costs to attend continuing education is live, in-person courses (14, 17 to 18, 45, and 48 to 49).
- (3) Interactivity is a factor in that speech-language pathologists enjoyed networking at continuing education courses (items 9 and 38). The better medium based on the interactivity of continuing education was live, in-person courses (items 9, 20, 22, 38, 51 and 53).
- (4) Quality is greatest when speech-language pathologists are satisfied with the resources provided and content presented at continuing education courses (items 23 to 24 and 54 to 55). There was not a better medium based on the quality of both continuing education courses (live and remote) as gathered from items 23 to 24, 26, 54 to 55, and 57.
- (5) Preference is for instruction that employs the medium of live, in-person continuing education courses, as gathered from items 66 and 67.
- (6) Transfer is better for courses that employ the medium of live, in-person continuing education (item 67). Speech-language pathologists reported that they do transfer the learning outcomes (knowledge, skills, and attitudes) from continuing education courses to their practice settings (items 28 to 30 and 59 to 61).



## CHAPTER V

### CONCLUSIONS

The intent of this research was to explore speech-language pathologists' perspectives on their experiences regarding past continuing education courses delivered as either live, in-person instruction or remote instruction and to unveil speech-language pathologists' perceptions for six constructs under examination: motivation, costs, interactivity, quality, preferences, and transfer of learning. A related intent was to ascertain whether participants reported that learning outcomes taught in continuing education courses were transferred to the practice settings of speech-language pathologists. Data would help ascertain whether participants reported differences in transfer of learning related to knowledge, skills, and attitudes to their practice settings. These data would help determine whether each medium for continuing education courses influences speech-language pathologists' transfer of learning outcomes to their practice settings.

Regarding motivation, remote courses appeared to be motivating to participants based on the unique features embedded into this medium of instruction (items 42 and 43).

Those features of remote courses included accessibility and self-pacing. For costs, the data suggested live, in-person courses were the better medium for costs, as shown by survey items 14, 17 to 18, 45, and 48 to 49. Live, in-person courses were the better medium for interactivity as shown by survey items 9, 20, 22, 38, 51 and 53. As for the quality of continuing education courses, there was not a better medium revealed by speech-language pathologists' responses to items 23 to 24, 26, 54 to 55, and 57. The data yielded from items 66 and 67 found that respondents' preferred medium of instruction was live, in-person courses. In all, the data suggested live, in-person courses were the better medium for transfer of learning outcomes to practice settings, as gathered from survey items 28 to 30, 59 to 61, and 67.

A comparison of the two mediums of continuing education courses with regards to the constructs under study is shown in Table 5.1, Comparison of Course Mediums Based on Constructs under Examination. Table 5.1 presents all the six constructs under examination along the first column of the table. The Yes or No summary remarks indicate which medium received the most responses for a given construct. Overall, this table serves to show respondents' reports of the better medium related to the construct.

**Table 5.1**

*Comparison of Course Mediums Based on Constructs under Examination*

| <b>Constructs under Examination</b>                     | <b>Live, In-person Courses</b> | <b>Remote Courses</b> |
|---|--------------------------------|-----------------------|
| Motivation to attend continuing education               | No                             | Yes                   |
| Costs to attend continuing education                    | Yes                            | No                    |
| Interactivity of continuing education                   | Yes                            | No                    |
| Quality of continuing education                         | Yes                            | Yes                   |
| Preferences for continuing education                    | Yes                            | No                    |
| Transfer of learning outcomes from continuing education | Yes                            | No                    |

*Note.* Comparison of mediums of continuing education courses based on the six constructs under examination.

### **5.1 Examination of Trends in Motivation, Costs, Interactivity, and Quality of Continuing Education**

Research question 1, which asked what data were found among speech-language pathologists' perceptions of motivation, costs, interactivity, and the quality of continuing education courses for the mediums of live, in-person continuing education courses and/or for remote continuing education courses, can be answered by the survey data. Results of the survey served to provide data on speech-language pathologists' perceptions of motivation, costs, interactivity, and the quality of continuing education they experienced in the last five years during live, in-person and/or remote continuing education courses.

#### **5.1.1 Motivation**

Based on speech-language pathologists' reports, a consistent finding was that these professionals possessed various motivations for engaging in continuing education.

*The Institute of Medicine Committee on Planning a Continuing Health Professional Education Institute* (2010) suggested that motivation falls into two categories: extrinsic and intrinsic. Items 5 to 6 and 34 to 35 identified extrinsic motivations and items 7 to 8 and 36 to 37 identified intrinsic motivations. Both types of motivation were apparent in the data on live, in-person instruction and remote instruction. Self-motivation is evident from the responses to the intrinsic motivation items. Specifically, the researcher found intrinsic motivation in the present study as it showed that many of the respondents (180/312, 57.69%) reported that personal interests “always” motivate them to attend live, in-person continuing education courses (item 7). This difference in responses might suggest that participants are more intrinsically motivated to attend live, in-person continuing education. Therefore, it seems that respondents sought out more live, in-person courses than remote courses based on participants’ intrinsic motivations for attending continuing education. Most participants (146/312, 46.79%) responded that ASHA CCC and/or state licensure and/or teacher licensure renewal requirements “always” motivate them to attend remote continuing education courses (item 34), which would constitute as an extrinsic motivator. These data support the work of Daffron et al. (2007), who specified that self-motivation strongly influences successful transfer of learning. The researcher explains the data found for self-motivation and transfer of learning in section 5.3 of this chapter.

The mediums of continuing education courses yielded six contrasting perspectives on the construct of motivation. Motivation was construed in this study as being represented by the items that included (1) enjoying time away from work, (2) not losing work productivity, (3) no travel necessary, (4) remote courses being easily accessible

from home or work, (5) self-paced instruction, and (6) fewer distractions at remote continuing education courses. Data to support these six perspectives on motivation include the following results.

- (1) Some participants (117/312, 37.5%) strongly agreed that they enjoy time away from their workplace by attending live courses, as gathered from item 11.
- (2) Attending remote courses led to respondents (108/311, 34.73%) to “never” lose work productivity (item 50). As for live, in-person courses several respondents (71/312, 22.76%) stated that “most of the time” they lose work productivity when they attend live, in-person courses. The consideration of losing work productivity can be a motivator to attend remote continuing education courses.
- (3) Some respondents (111/312, 35.58%) agreed that they enjoy continuing education that is remote and does not require traveling (item 41).
- (4) A substantial 39.74% of respondents (124/312) indicated that they strongly agreed that they enjoy remote courses as they can be accessed from work or at home (item 42). This 39.74% exceeds the 37.5% response for being motivated by enjoying time away from work. There appear to be motivators for attending remote courses that surpassed respondents’ reported motivations for attending live courses.
- (5) A substantial proportion of respondents (132/312, 42.31%) strongly agreed that they like determining the pace at which they finish remote courses (item 43).

(6) Some respondents (88/312, 28.21%) “sometimes” are less distracted when they complete remote courses, as gathered from item 44.

Participants’ responses to survey items 19 and 50 produced contrasting reports based on the medium employed for courses. Attendance at live courses led to a portion of respondents reporting losing productivity “most of the time” (71/312, 22.76%) (item 19). Attending remote courses led respondents (108/311, 34.73%) to never lose work productivity (item 50).

In all, respondents appeared to be motivated to attend remote courses, as they offer unique features that prevent speech-language pathologists from losing work productivity. These features included accessibility of courses (item 42) and self-pacing of course completion (item 43). In addition, the data suggested that respondents seem to be more intrinsically motivated to attend continuing education than extrinsically motivated. When comparing the mediums of courses, respondents were more intrinsically motivated to attend live courses, as gathered from items 7 and 36.

### **5.1.2 Cost**

This study provided current information on how speech-language pathologists cover the cost of attending continuing education courses for speech-language pathology. Limited research has rendered realizations on the costs of continuing education for the targeted population of this study. Items 14 to 18 and 45 to 49 showed findings on the construct of costs to attend continuing education for each medium employed for the course.

The present study found evidence of employers not funding the costs for most respondents to attend continuing education courses (items 14 and 45). The researcher

found a contrast in respondents' reports in regard to medium employed for the course. A majority of responses (76/312, 24.36%) for item 14, live courses, unveiled that "most of the time" respondents' employers cover the costs. In comparison, for remote courses, many respondents (77/312, 24.86%) reported that their employer "never" covers the costs (item 45).

For both mediums of continuing education, respondents reported that they "always" (208/624, 33.3%) cover their own costs for continuing education courses (items 15 and 46). Those that reportedly "always" cover their expenses for live, in-person costs included 30.5% (95/311) of the sample (item 15). More respondents (113/311, 36.1%) stated that they "always" cover expenses for remote courses (item 46).

Another notable finding unveiled that, for both mediums of continuing education, respondents agreed (22/624, 41.98%) that "most of the time" they feel the amount of money that they spend on attending continuing education is worth what they pay for it (items 16 and 47). The majority of participants stated that "most of the time" (129/312, 41.35%) they feel the amount of money they spend on live, in-person learning experiences is worth what they pay for it (item 16). In item 47, 42.63% of the sample (133/312) agreed that "most of the time" the amount of money respondents spend on remote instruction is worth what they pay for it.

Lastly, the researcher recorded differences in responses to items 18 and 49. For item 18, many participants (96/313, 30.67%) reported that their employer "always" provides professional time compensation for their attendance at live courses. For item 49, respondents (89/312, 28.53%) indicated that their employer "never" provides professional time compensation for their attendance at remote courses.

**5.1.2.1 Interface of Costs and Motivation on Continuing Education.** It would seem that costs and motivation would interface. Each has a role in speech-language pathologists' participation in continuing education. The researcher found respondents' reports on costs and motivation to attend continuing education for each course medium. The data suggested that speech-language pathologists cover the costs to attend continuing education courses (item 15 and 46). The respondents reported that they cover costs to attend remote courses more so than live, in-person courses. Respondents reported employers cover costs to attend live instruction, while for remote instruction respondents stated that employers "never" cover costs to attend continuing education. Overall, participants reported the amount of money they spend on continuing education is worth what they pay for it, with remote courses being slightly higher than live courses by 1.28% (items 16 and 47). Lastly, respondents stated in item 18 that they strongly agreed that their employers provide time compensation for their attendance to live courses (x/y%), while those that attend remote courses reported that employers "never" provide time compensation (89/312, 28.53%) (item 49).

In all, employer coverage of costs appeared to be better for live, in-person continuing education courses. The data suggested that participants are motivated to attend remote courses, as they prevent a loss of work productivity; however, employers are reportedly inclined to cover the costs of live, in-person courses more so than remote continuing education. Similarly, participants covered their own costs to attend remote courses more so than they did for live, in-person instruction. Employer supports play a role in speech-language pathologists' costs to attend continuing education. Speech-language pathologists who are intrinsically motivated to attend continuing education and



cover the costs of courses may select live courses, as the data suggested that employees are more likely to receive time compensation from their employers.

### **5.1.3 Interactivity**

Participants imparted insight on the interactivity of continuing education courses for speech-language pathologists. In Chapter 2, the researcher reviewed prior research on the interactivity component of workers' completion of continuing education. As considered by Curry et al. (1994), the trainer is imperative in facilitating transfer of learning. Similarly, Moore, Green, and Gallis (2009) noted that having interactivity during presentations at courses enables and solidifies the learners' understanding of the concepts presented at continuing education courses. Daffron et al. (2015), in their research "Transfer of Learning for Health Care Workers," found that their participants' preferred learning methods included visual, auditory, interactive, and repetitive. These health care workers reported that they learned through a variety of different delivery style combinations and that their learning environment was important to prime themselves for optimal learning. Daffron et al. (2015, p.55) recorded in their research that "many stated that the instructor was very good and enjoyed his engaging way of teaching." Their respondents provided detail on the structure of courses attended to have encompassed lectures, small group discussions, and role-playing.

In this study, the researcher found data amongst participants' reports on the interactivity of continuing education at live, in-person courses and remote courses. Items 9 to 10, 20 to 22, 25, 38, 51 to 53, and 56 all provided key findings on the construct of the interactivity of continuing education. The researcher found a contrast between the mediums in regard to respondents' enjoyment of networking at continuing education

courses (items 9 and 38). In item 9, respondents stated that they “always” enjoy networking at live, in-person courses (109/313, 34.8%), while respondents indicated on item 38 that they “never” enjoy networking at remote courses (81/312, 25.96%). In accordance with Daffron et al. (2015), this present study revealed that the common perspective shared amongst respondents was that “most of the time” (140/312, 44.87%) live courses completed in the last five years incorporated activities into presentations, as gathered from item 20. Additionally, many respondents (150/313, 47.92%) stated that they agreed that presenter demonstrations were given at live, in-person courses (item 21). In item 22, most respondents (132/311, 42.44%) reported that they experience interactive learning during live instruction “most of the time.” Also, the researcher found that 68.27% of the sample (213/312) indicated that they “always” complete surveys given out by the presenters or conference organizers at the conclusion of live courses (item 25).

Respondents did not report remote courses as similar to live courses, as seen in item 51, which asked about the incorporation of activities into continuing education programs. Many participants (124/311, 39.87%) responded that “sometimes” remote courses incorporate activities into presentations. In item 52, respondents (121/310, 39.03%) stated that they agreed that presenters give demonstrations during remote instruction. Respondents also shared that they “sometimes” experience interactive learning at remote courses (103/309, 33.33%), as obtained from item 53. For remote courses (item 56), participants stated that they strongly agreed (176/312, 56.41%) that they complete surveys at the conclusion of continuing education.

In all, interactivity appears to be better for the medium of live, in-person courses. The data suggested that live courses incorporate activities and provide presenter

demonstrations more than remote courses. Additionally, participants (109/313, 34.82%) enjoy networking at live courses and they complete surveys given at the conclusion of live courses (213/312, 68.26%) more than they do at remote courses (enjoy networking: 16/312, 5.12% and completion of surveys: 176/312, 56.41%). The interactivity of continuing education courses may be a motivator for participants. Participants may be more inclined to attend live, in-person instruction based on the interactive aspects of that continuing education course medium.

#### **5.1.4 Quality**

Participants' responses yielded information on the quality of speech-pathology courses. In Chapter 2, the researcher reasserted ASHA's (n.d.) commitment to provide "quality CE [continuing education] experiences for its members and certificate holders." Items 10, 23 to 24, 26, 54 to 55, and 57 all yielded data on the key findings for the construct of the quality of continuing education. Many respondents reported that they strongly agreed (120/312, 38.64%) that live courses facilitate a classroom learning environment with other attendees, as gathered from item 10. A consistent finding amongst respondents was that the mediums did not differ in regard to the responses given on the quality of the resources provided to participants at continuing education courses (items 23 and 54). Item 23 found that many respondents (194/310, 62.58%) stated that they agreed to being satisfied with the quality of resources given at live courses. The medium of remote courses was rated by participants that "most of the time" (156/312, 50%) they were satisfied with the resources and content provided at continuing education courses (item 54). Although the review of several online companies reported in Chapter 2 provided limited information on how providers create and vet their content, several

respondents (153/311, 49.2%) reported that “most of the time” they are satisfied with the challenging and relevant content presented at remote courses (item 55). For live courses (item 24), respondents indicated that they agreed (186/311, 59.81%) that they are satisfied with the content presented. Additionally, in items 26 and 57, the respondents indicated that they “always” read learning outcomes for courses prior to attending continuing education (154/310, 49.68% for live courses, item 26, and 151/313, 48.24% for remote courses, item 57).

In all, quality appears to be better for the medium of live, in-person courses. The data suggested that participants are more satisfied with the content and resources provided at live courses than for remote courses. The quality of continuing education may be considered a motivator for participants when selecting continuing education courses with consideration to the medium employed

## **5.2 Examination of Speech-Language Pathologists’ Preferences for Mediums of Continuing Education Courses**

Research question 2, were preferences found among the speech-language pathologists’ perspectives on their past learning experiences based on A) four of the six constructs under study (motivation, costs, interactivity, and quality), and B) the medium of continuing education courses (live, in-person versus remote), unveiled information about respondents’ perspectives on past learning experiences. Speech-language pathologists possessed a preference based on the medium of continuing education courses.

For four of the six constructs under study (motivation, costs, interactivity, quality), respondents reported preferences for live versus remote courses (items 5, 9, 12,

18, 20, 22 to 24, 26, 38 to 39, 49, 51, 53 to 57, and 66). Survey items 5 and 34 yielded a difference in respondents' motivation to attend continuing education courses based on the extrinsic motivator of ASHA CCC renewal or other credential requirements. For items 5 and 34, the data showed that live, in-person courses had an "agree" response for 112/313, 35.78%, and for remote courses there was a "strongly agree" response for 146/313, 30.99%). There was a difference in speech-language pathologists' reports regarding costs on survey items 18 and 49, which dealt with employers providing time compensation for respondents' attendance at continuing education. Respondents stated (96/313, 30.67%) that their employer "always" provided time compensation for their attendance at live continuing education courses (item 18). Remote courses received 89/312 responses (28.53%) that their employer "never" provide time compensation for their attendance to continuing education (item 49).

Survey items 9, 20, 22, 38, 51 and 53 all revealed differences in respondents' reports on preferences based on the interactivity of live or remote courses. Items 9 and 38 found that 109/313 (34.82%) of respondents reported that they "always" enjoyed networking at live courses, while remote courses received 81/312 (25.96%) responses that respondents "never" enjoyed networking at those courses. Respondents reported (140/312, 44.87%) that activities were "most of the time" incorporated into live courses (item 20). As for remote courses, respondents reported (124/310, 39.87%) "sometimes" activities were incorporated into these courses (item 51). Item 22 revealed that "most of the time" respondents experienced interactive learning at live courses (132/311, 42.44%). Respondents reported (103/309, 33.33%) that "sometimes" they experienced interactive learning at remote courses (item 53).

Survey items 23 to 24, 26, 54 to 55, and 57 all revealed that there was not a difference in respondents' reports on preferences based on the quality of live or remote courses. Items 23 and 54 yielded data that revealed respondents' perspectives on their satisfaction levels with the resources provided at continuing education courses. Respondents' reported (350/622, 56.27%) that "most of the time" they were satisfied with resources given at both mediums of continuing education courses (items 23 and 54). Respondents stated (194/310, 62.58%) that "most of the time" they are satisfied with the resources provided at live courses (item 23). For remote courses, respondents indicated (156/312, 50%) that "most of the time" they are satisfied with the resources provided at such courses (item 54). Both mediums of continuing education courses (live and remote) received an aggregated response by respondents (339/622, 54.5%) that "most of the time" they were satisfied with the content covered at courses (items 24 and 55). For live courses, respondents reported (186/311, 59.81%) that "most of the time" they were satisfied with the content presented (item 24). For remote courses, respondents reported (153/311, 49.2%) that "most of the time" they are satisfied with the content presented (item 55). Items 26 and 57 revealed that respondents (305/623, 48.95%) "always" read learning outcomes prior to attending both mediums of continuing education courses. 154/310 (49.67%) respondents reported that they "always" read the learning outcomes given prior to attending live courses (item 26). For remote courses, 151/313 (48.24%) respondents reported that they "always" read learning outcomes given prior to attending continuing education (item 57).

The preferred medium of instruction for continuing education courses was live, in-person, as reported by item 66 (170/316, 53.8%) The key findings on preferences

based on the medium of continuing education courses was derived from survey items 12, 39, and 66. These items served to reflect the presence of the best speakers being at programs for each medium. The live, in-person medium, as reported by much of the sample (110/312, 35.26%, for item 12), received the Likert scale rating that “sometimes” the best speakers are on these programs. Remote courses received the most responses regarding the best speakers “sometimes” being on these programs as reported by 48.08% of the sample (150/312, item 39). Survey item 66 answered research question 2B directly as respondents reported (170/316, 53.8%) that their preferred medium of instruction is live, in-person courses.

In all, differences were found among speech-language pathologists’ reports of their preferences based on the four constructs under study (motivation, costs, interactivity, and quality) and that the preferred medium of continuing education was live courses. Regardless of participants’ indication of remote courses having the best presenters on their programs, speech-language pathologists preferred attending live courses. This finding may be based on participants’ intrinsic motivations to attend live courses, coverage by employers of their costs, experiences of interactivity, and the quality of those courses in comparison to remote courses.

### **5.3 Examination of Speech-Language Pathologists’ Transfer of Learning Outcomes to Practice Settings**

Research question 3, (A) did speech-language pathologists report transfer of learning outcomes (knowledge, skills, and attitudes) taught in continuing education courses to speech-language pathology practice settings; (B) were there differences in speech-language pathologists’ subjective reports of transfer of learning objectives related

to knowledge, skills, and attitudes; (C) were there differences in speech-language pathologists' subjective reports of transfer of learning outcomes related to the medium of instruction (live, in-person versus remote), rendered data on the context of speech-language pathologists' reports on transfer of learning outcomes taught in continuing education courses and about each of the mediums for continuing education courses. Items 27 to 33, 58 to 65, and 67 all examined the construct of transfer of learning outcomes from continuing education courses to participants' practice settings.

Data gathered from survey items 28 to 30 and 56 to 61 answered parts A and B of research question 3. Overall, speech-language pathologists reported that they transfer learning outcomes from continuing education courses to their practice settings. There were differences found in speech-language pathologists' reports on transfer of learning outcomes related to knowledge, skills, and attitudes. A majority of respondents (159/311, 51.13%), reported that they "most of the time" applied knowledge taught at live continuing education courses attended in the past five years to their practice settings, as gathered from item 28. For remote courses, respondents also agreed (157/311, 50.48%) that they applied knowledge taught to their practice settings (item 59). When comparing the mediums of the continuing education courses in regard to respondents' application of skills, there was not a difference in reports across the Likert scale (items 29 and 60). Most respondents (160/311, 51.45%) reported that they agreed they have applied the skills learned from live courses to their practice settings (item 29). For remote courses, a majority of respondents (156/311, 50%) stated that "most of the time" they applied the skills learned from those courses to their practice settings (item 60). In items 30 and 61, respondents indicated their application of the attitudes developed from continuing



education to their practice settings. The frequency of responses for those who applied attitudes from live courses (136/311, 43.73%, item 30) to their practice settings was closely aligned with respondents' reports on remote courses, which included 42.39% of the sample (131/309), as obtained from item 61.

Data gathered for items 27 to 33, 58 to 65, and 67 answered part C of research question 3. There were differences found in speech-language pathologists' reports of transfer of learning outcomes related to the medium of continuing education courses. Items 27 and 58 unveiled that respondents "most of the time" transferred learning because they self-reflected on the knowledge and/or skills set following the completion of both mediums of continuing education courses (302/622, 48.55%). For item 27, 149/311 (47.91%) respondents reported that "most of the time" they transfer learning following the completion of live courses because of their self-reflection on knowledge and skills, while 153/311 (49.2%) respondents stated that "most of the time" they transfer learning after the completion of remote courses due to their self-reflection on knowledge and skills (item 58). The researcher revealed a resounding finding on respondents transferring their learning because of later reference to resources obtained from continuing education courses from items 31 and 62. For the "agree" responses, live courses received more responses (158/314, 50.32%, item 31) than remote (147/313, 46.96%, item 62). Items 32 and 63 unveiled that "most of the time" respondents transferred learning because information was presented explicitly in both mediums of continuing education (286/620, 46.12%). Live courses received 47.27% responses (17/311) of agreement for item 32, whereas some respondents reported (139/309, 44.98%) that "most of the time" they transfer learning due to information being presented explicitly at remote courses (item

63). As for items 33 and 64, which dealt with respondents' transfer of learning because of direct instruction received from case histories at continuing education courses, respondents stated for each medium that "most of the time" they transferred learning, but they contrasted in the frequency of responses received. For instance, respondents indicated (139/313, 44.41%, item 33) that they agreed that they received case histories at live courses; in contrast, remote courses received 36.54% (114/312) of responses (item 64). Lastly, item 67 revealed that respondent reported (135/316, 42.7%) that they transferred learning more when they participated in continuing education that is live, in-person.

All in all, the transfer of learning outcomes was prominently connected to the medium of live courses. Participants reported that they applied the knowledge, skills, and attitudes developed from live courses to their practice settings more than in comparison to their remote courses.

#### **5.4 Summary of Key Findings**

Overall, the researcher found that in this sample speech-language pathologists were intrinsically motivated to complete continuing education courses, especially for live, in-person courses. The data suggested that participants were motivated by the features of remote courses (i.e., accessibility and self-pacing) to attend that medium of continuing education. Participants indicated that, when completing remote courses, they "never" lost work productivity. Another aspect of employer support that the researcher examined include covering the costs of continuing education, in which participants reported that employers covered costs "most of the time" for live courses, as well as "always" provided time compensation for these courses. While participants often covered the costs to attend

continuing education, especially for remote courses, in this sample respondents reported that their employers “never” provided time compensation for their remote courses.

For the construct of interactivity, it seems as though the better medium was live, in-person courses, based on the responses gathered from participants. In this study, the sample reported that live courses received higher responses than remote courses in several areas that dealt with interactivity. Respondents did not indicate differences in reports on the quality of continuing education courses regardless of the medium employed, so there was not a better medium for this construct. Both of these constructs can also be considered a motivator to participants when attending continuing education. The preferred medium of instruction for participants was live, in-person courses. The participants transferred learning outcomes from live courses to their practice settings more than from courses that employed the medium of remote instruction.

### **5.5 Implications**

This study contributed information that has theoretical as well as practical implications. In terms of theoretical implications, this study addressed the problem that there is not enough information regarding speech-language pathologists’ transfer of learning outcomes into practice settings and whether the medium of continuing education courses yields differences in transfer. Nor does the past literature on speech-language pathologists compare continuing education course mediums based on their learning experiences with consideration for the six constructs of (1) motivation, (2) costs, (3) interactivity, (4) quality, (5) preferences, and (6) transfer of learning. The evidence generated herein may contribute to the theoretical understanding of speech-language

pathologists' completion of continuing education courses and transferring learning outcomes to their practice settings.

A practical implication of this study included data gathered on speech-language pathologists' realistic behaviors when selecting, completing, and applying continuing education course learnings to their respective practice settings. Presently, there are limited reports on speech-language pathologists' transfer of learning for the investigator to reference. Moreover, the information compiled from prior studies did not focus upon the transfer of allied health professionals' learning outcomes to their respective work settings (Fordis et al., 2005; Ifediora, 2019; Jacob et al., 2018; Ryan et al., 2007; Stephenson et al., 2016).

This present study recorded speech-language pathologists' reported perspectives on learning experiences at continuing education courses attended over their recollections of the past five years. Thus, the data gathered insight pertaining to the six constructs under examination. Based on the responses received, the speech-language pathologists considered a variety of factors when they selected their continuing education courses regarding the medium employed. Participants acknowledged the features and motivators that each medium embeds into their courses of continuing education. For example, speech-language pathologists contemplated attending remote courses over live courses, as they are more likely to cover the costs and not receive time compensation from employers, yet they can access them from their home or workplace and do not lose as much work productivity as they would attending a live course. Moreover, on the other hand, those that considered attending a live course received time away from their workplace, which affected their work productivity negatively and they may still have to

cover the costs to attend. However, speech-language pathologists' employers may provide time compensation for their attendance at live courses.

The preferred medium of instruction for continuing education was live, in-person courses. There was not a difference between the two mediums of continuing education related to the quality of the courses based on respondents' reports. As the data suggested, participants resoundingly reported that live courses are the better medium for interactivity and transfer of learning outcomes to practice settings.

### **5.6 Delimitations**

This study had boundaries set by the researcher, which limit the generalizability of findings. One such restriction was the scope of interest for this study. The targeted practice pertained to the researchers' curiosity about speech-language pathologists' perspectives on continuing education courses, as well as sought to reveal findings that were otherwise unbeknownst. The researcher did not pursue other scopes of practice as they were not of interest. Additionally, the researcher set restrictions upon participants' participation in this study based on meeting criteria. The criteria outlined for participants were set to reflect the perspectives of those who had previous experience attending continuing education in the field of speech-language pathology. This study was not concerned with students in pursuit of a conditional license in speech-language pathology. The last delimitation was that the researcher developed survey items that rendered only six Likert scaled categories of responses. Therefore, the responses were not open-ended and did not capture responses that differed from the options provided. With only the six-point Likert scale, a generalization of the data to the overall population of speech-language pathologists cannot be made.

### **5.7 Limitations**

While this study provided a great deal of information on this sample of speech-language pathologists, some limitations to the study existed. A limitation noted includes the accuracy of the responses gathered. The method of data collection depended upon the self-reports of respondents, which made the process more accessible to the targeted population. However, respondents could have provided socially acceptable responses that may be less accurate than their actual behavior.

### **5.8 Assumptions**

The researcher asserted the underlying assumption that continuing education will continue to be important for the field of speech-language pathology. Advancements in technology paved the way for remote continuing education courses as well as live courses; moreover, speech-language pathologists carry on with their fulfillment of the requirements of licensing boards to complete continuing education. Also, the researcher contended that one must assume the sample obtained was representative of the population of SLPs across the nation. Both the recruitment statement and informed consent form outlined the established criteria for the participants to adhere to in order to engage in the study. The researcher assumed that participants would answer truthfully on the survey. The researcher informed participants that their involvement was voluntary. Participants could have withdrawn from the study at any time with no ramifications. The researcher preserved the anonymity and confidentiality of the participants through settings enabled on SurveyMonkey.

### **5.9 Future Research**

ASHA, as the national professional, scientific, and credentialing association, might benefit from additional knowledge in order to factor in the continuing education perspectives of their members and affiliates. While the present data provided useful information on the learning experiences and perspectives of speech-language pathologists, future research should focus on gathering information on specific continuing education courses for speech-language pathologists based on medium employed. The researcher suggests that future research employ directional hypotheses based on the findings obtained from the present study.

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APPENDIX A

**Construct Chart**

| <b>Question</b>   | <b>Motivation</b> | <b>Preference</b> | <b>Cost</b> | <b>Interactivity</b> | <b>Quality</b> | <b>Transfer</b> |
|---|-------------------|-------------------|-------------|----------------------|----------------|-----------------|
| 3. What is your current employment setting or therapy population?   | N                 | Y                 | N           | N                    | N              | N               |
| 4. How many years have you been a practicing speech-language pathologist?   | N                 | Y                 | N           | N                    | N              | N               |
| 5. ASHA CCC and/ or state licensure and/or teacher licensure renewal requirements motivate me to attend live, in-person continuing education courses. | Y                 | N                 | N           | N                    | N              | N               |
| 6. Employer requirements motivate me to attend live, in-person continuing education courses.  | Y                 | N                 | N           | N                    | N              | N               |
| 7. Personal interests motivate me to attend live, in-person continuing education courses.   | Y                 | N                 | N           | N                    | N              | N               |
| 8. Other reasons motivate me to attend live, in-person continuing education courses.  | Y                 | N                 | N           | N                    | N              | N               |
| 9. I enjoy networking at live, in-person continuing education courses.  | Y                 | N                 | N           | Y                    | N              | N               |

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 10. Live, in-person courses facilitate a classroom learning environment with other attendees, which is not provided with remote courses.          | Y | N | N | Y | Y | N |
| 11. I enjoy having time away from my workplace by attending live, in-person courses.  | Y | N | N | N | N | N |
| 12. The best speakers are on the programs at live, in-person courses.   | Y | Y | N | N | Y | N |
| 13. Live, in-person courses are at convenient geographic locations (locally offered in my area or offered in areas to which I can easily travel). | Y | Y | N | N | N | N |
| 14. My employer covers the expense of my registration and other costs to attend live, in-person continuing education courses.                     | Y | N | Y | N | N | N |
| 15. I cover the expense of my registration and other costs to attend live, in-person continuing education courses.                                | Y | N | Y | N | N | N |
| 16. I feel that the amount of money that I spend on attending in-person learning experiences is worth what I pay for it.                          | N | N | Y | N | Y | N |

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 17. I do not attend live, in-person continuing education courses that have any personal expense involved.   | Y | N | Y | N | N | N |
| 18. My employer provides professional time compensation for my attendance at live, in-person continuing education courses (e.g., paid professional time off, comp time).                                  | Y | N | Y | N | N | N |
| 19. I lose work productivity when I attend live, in-person continuing education courses.  | Y | N | N | N | N | N |
| 20. Activities are incorporated into the presentations given at live, in-person continuing education courses.   | N | N | N | Y | N | N |
| 21. Presenter demonstrations are given at live, in-person continuing education courses.   | N | N | N | Y | N | N |
| 22. I experience interactive learning during live, in-person continuing education courses (i.e., I am participating in discussions, asking and answering questions, sharing real-life cases as examples). | N | N | N | Y | Y | N |

|  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| 23. I am satisfied with the quality of the instructional and educational resources provided to me at live, in-person continuing education courses.           | N | N | N | N | Y | N |
| 24. I am satisfied with the challenging and relevant content presented at live, in-person continuing education courses.                                      | N | N | N | N | Y | N |
| 25. I complete the survey given out by presenters or the conference organizers at the conclusion of live, in-person continuing education courses.            | N | N | N | Y | N | N |
| 26. I read the learning outcomes for the course before I attend live, in-person continuing education courses.  | N | N | N | N | Y | N |
| 27. I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of live, in-person continuing education courses. | Y | N | N | N | N | Y |
| 28. I have applied the knowledge that I learned from live, in-person continuing education courses to my practice settings.                                   | N | N | N | N | N | Y |

|  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| 29. I have applied the skills that I learned from live, in-person continuing education courses to my practice settings.                      | N | N | N | N | N | Y |
| 30. I have applied the attitudes that I developed from live, in-person continuing education courses to my practice settings.                 | N | N | N | N | N | Y |
| 31. I transfer learning because I later make reference to the resources I obtained from the live, in-person continuing education courses.    | N | N | N | N | N | Y |
| 32. I transfer learning because the information is presented explicitly at live, in-person continuing education courses.                     | N | N | N | N | N | Y |
| 33. I transfer learning because of the direct instruction received from case histories at live, in-person continuing education courses.      | N | N | N | N | N | Y |
| 34. ASHA CCC and/or state licensure and/or teacher licensure renewal requirements motivate me to attend remote continuing education courses. | Y | N | N | N | N | N |
| 35. Employer requirements motivate me to attend remote continuing education courses.   | Y | N | N | N | N | N |

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 36. Personal interests motivate me to attend remote continuing education courses.   | Y | N | N | N | N | N |
| 37. Other reasons motivate me to attend remote continuing education courses.  | Y | N | N | N | N | N |
| 38. I enjoy networking during remote continuing education courses.  | Y | N | N | Y | N | N |
| 39. The best speakers offer remote courses.   | Y | Y | N | N | Y | N |
| 40. I gain as much from web chats and webinars where people are learning together as I do attending a live, in-person conference. | Y | N | N | Y | N | N |
| 41. I enjoy continuing education that is remote and does not require traveling.   | Y | N | N | N | N | N |
| 42. I enjoy continuing education that I can access from work or at home by completing remote courses.                             | Y | N | N | N | N | N |
| 43. I like that I can determine the pace at which I finish remote continuing education courses.                                   | Y | N | N | N | N | N |
| 44. I am less distracted when completing remote continuing education courses.   | Y | N | N | N | N | N |
| 45. My employer covers the expense of my registration and other costs to attend remote continuing education courses.              | Y | N | Y | N | N | N |

|  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| 46. I cover the expense of my registration and other costs to attend remote continuing education courses.  | Y | N | Y | N | N | N |
| 47. I feel that the amount of money that I spend on attending remote learning experiences is worth what I pay for it.                              | N | N | Y | N | Y | N |
| 48. I do not attend remote continuing education courses that have any personal expense involved.   | Y | N | Y | N | N | N |
| 49. My employer provides time compensation for my attendance at remote continuing education courses (e.g., paid professional time off, comp time). | Y | N | Y | N | N | N |
| 50. I lose work productivity when I attend remote continuing education courses.  | Y | N | N | N | N | N |
| 51. Activities are incorporated into the presentations given at remote continuing education courses.   | N | N | N | Y | N | N |
| 52. Presenter demonstrations are given during remote continuing education courses.   | N | N | N | Y | N | N |
| 53. I experience interactive learning during remote continuing education courses (i.e., I am participating in discussions, asking and              | N | N | N | Y | Y | N |



|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| answering questions, sharing real-life cases as examples).  |   |   |   |   |   |   |
| 54. I am satisfied with the quality of the instructional and educational resources provided to me at remote continuing education courses.           | N | N | N | N | Y | N |
| 55. I am satisfied with the challenging and relevant content presented at remote continuing education courses.                                      | N | N | N | N | Y | N |
| 56. I complete the survey given out by presenters or the conference organizers at the conclusion of remote continuing education courses.            | N | N | N | Y | N | N |
| 57. I read the learning outcomes for the course before I attend remote continuing education courses.  | N | N | N | N | Y | N |
| 58. I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of remote continuing education courses. | Y | N | N | N | N | Y |
| 59. I have applied the knowledge that I learned from remote continuing education courses to my practice settings.                                   | N | N | N | N | N | Y |
| 60. I have applied the skills that I learned from remote continuing   | N | N | N | N | N | Y |

|  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| education courses to my practice settings.   |   |   |   |   |   |   |
| 61. I have applied the attitudes that I developed from remote continuing education courses to my practice settings.              | N | N | N | N | N | Y |
| 62. I transfer learning because I later make reference to the resources I obtained from the remote continuing education courses. | N | N | N | N | N | Y |
| 63. I transfer learning because the information is presented explicitly at remote continuing education courses.                  | N | N | N | N | N | Y |
| 64. I transfer learning because of the direct instruction received from case histories at remote continuing education courses.   | N | N | N | N | N | Y |
| 65. Remote courses allow me to replay the information, which helps me carry it over.   | N | N | N | N | N | Y |
| 66. My preferred medium of instruction for continuing education courses is:  | N | Y | N | N | N | N |
| 67. I transfer learning from continuing education courses to my practice more when I have participated in:                       | N | Y | N | N | N | Y |

## APPENDIX B

### Survey Instrument

#### Evaluating Speech-Language Pathologists' Transfer of Continuing Education Learning Outcomes to their Practice Settings

##### Welcome to My Survey

**Thank you for participating in our survey. Your feedback is important.**

##### Informed Consent

Evaluating Speech-Language Pathologists' Transfer of Continuing Education Learning Outcomes to their Practice Settings  
Principal Investigators: Elizabeth Graber, B.S. and Monica Gordon Pershey, Ed.D., CCC-SLP

##### INTRODUCTION

I am Elizabeth Graber (grabereizab02@gmail.com) (419) 349-3505, a graduate student in the Speech-Language Pathology program in the School of Health Sciences at Cleveland State University. My thesis supervisor is Monica Gordon Pershey, Ed.D., CCC-SLP, Associate Professor (m.pershey@csuohio.edu) (216) 687-4534. As part of my thesis, I am researching speech-language pathologists' (SLPs) transfer of continuing education learning outcomes to their practice settings. I am surveying SLPs' perspectives on their experiences in continuing education courses in speech-language pathology.

Please read this consent form carefully. Participation is voluntary. You may print or save a copy of this form for your records.

##### PURPOSE

This study compares transfer of learning following live, in-person courses versus online learning in the field of speech-language pathology. The data will help us understand how continuing education is transferred to SLPs' professional practices.

##### PARTICIPANTS

Participants are licensed and/or certified SLPs who have attended one or more continuing education experiences in speech-language pathology. The learning could have been either in-person or online. Examples include professional conferences, continuing education courses, webinars, or workplace inservices. Retired SLPs or SLPs not currently employed may participate if they attend continuing education. Clinical Fellows may not participate. Participants must reside in the United States.

Feel free to forward the recruiting announcement that brought you to this consent form to other SLPs. You may post the recruiting announcement on social media.

##### PROCEDURE

The survey is completed online in about 10 minutes. To participate, read this consent form, then click YES to open the survey. You may skip any questions that you wish. You may stop the survey at any time. Your responses are recorded when you click SUBMIT RESPONSES.

##### BENEFITS

There is no direct benefit for participating.

##### RISKS

There are no risks in participation greater than in daily living.

##### CONFIDENTIALITY

No self-identifying information is requested. This survey is anonymous. Survey Monkey software will not store names, email addresses,

or IP addresses. Data will be kept within the survey software and on password protected computers. Only summary results will be published or presented.

**CONSENT STATEMENT**

"I understand that if I have any questions about my rights as a research subject, I can contact the Cleveland State University Institutional Review Board (IRB) Office at (216) 687-3630."

By checking Yes below, I agree that:

- I have read this consent form.
- I am at least 18 years old.
- I voluntarily agree to participate in this study.

Please click one choice below:

I agree to participate

- Yes (Survey Opens)
- No (Survey Closes)

1. Do you agree to the above terms? By clicking Yes, you consent that you are willing to answer the questions in this survey.

- Yes
- No

## Evaluating Speech-Language Pathologists' Transfer of Continuing Education Learning Outcomes to their Practice Settings

- The purpose of this survey is to allow the investigators to gather data from speech-language pathologists (SLPs) who have previously attended continuing education courses pertaining to speech-language pathology topics and content.
- The survey questions pertain to SLPs' perceptions of their past continuing education experiences pertaining to speech-language pathology topics and content.

**How to answer the survey questions:**

**When you are thinking about continuing education, consider when you have participated in live, in-person instruction and in remote or digital instruction pertaining to speech-language pathology and content in the past five years.**

- Live, in-person instruction is characterized by a presentation given by a live instructor. The experiences could have been for example, professional conferences, continuing education courses, or employment-related inservices pertaining to speech-language pathology topics and content.
- Remote instruction is characterized as any form of instruction that requires technological access (i.e., webinars, CD-ROMs, DVDs, online courses, etc.) pertaining to speech-language pathology topics and content.

**Disregard any university courses taken for a degree.**

2. How did you receive the link to this survey? Choose ONE response.

- I received an ASHA Communities posting
- I received an email from a person I know
- I saw a social media site posting
- I saw a reposting or retweeting
- Other

3. What is your current employment setting or therapy population? Check the ONE location that best represents your practice.

- Hospital (adult acute care, inpatient)
- Hospital (adult acute care, outpatient)
- Hospital (pediatric acute care, inpatient)
- Hospital (pediatric acute care, outpatient)
- Rehabilitation center (inpatient and/or outpatient)
- Home care
- Skilled nursing facility
- Long term care facility
- Developmental disabilities (e.g., county board, school or treatment center, workshop, residential facility, etc.)
- Public school K-12
- Private school K-12
- Preschool (ages 3-5)
- Early intervention (ages birth-3)
- Community speech and hearing center
- Private practice, non-profit
- Private practice, for profit
- University
- Other SLP practice setting or population
- Employed outside of the field of SLP
- Not employed

4. How many years have you been a practicing speech-language pathologist?

- 1-2 years
- 3-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21-25 years
- 26-30 years
- 31 years or more

**PART 2: THIS SECTION OF THE SURVEY PERTAINS TO LIVE, IN-PERSON CONTINUING EDUCATION.**

5. Using the following scale, please select ONE response for each of the following questions pertaining to your past learning experiences in LIVE, IN-PERSON continuing education courses in the past five years. Live, in-person instruction is characterized by a presentation given by a live instructor. The experiences include, for example, professional conferences, continuing education courses, or employment-related inservices pertaining to speech-language pathology topics and content.

Choose ONE response per question.

|   | Strongly agree<br>OR Always | Agree OR Most<br>of the Time | Neutral OR<br>Sometimes | Disagree OR<br>Not Often | Strongly<br>disagree OR<br>Never | Not Applicable<br>OR I have not<br>experienced this |
|---|-----------------------------|------------------------------|-------------------------|--------------------------|----------------------------------|---|
| <b>Motivation for seeking live, in-person continuing education</b>  |                             |                              |                         |                          |                                  |   |
| ASHA CCD and/or state licensure and/or teacher licensure renewal requirements motivate me to attend live, in-person continuing education courses. | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| Employer requirements motivate me to attend live, in-person continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| Personal interests motivate me to attend live, in-person continuing education courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| Other reasons motivate me to attend live, in-person continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| <b>Preferences for live, in-person continuing education</b>   |                             |                              |                         |                          |                                  |   |
| I enjoy networking at live, in-person continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| Live, in-person courses facilitate a classroom learning environment with other attendees, which is not provided with remote courses.              | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |

|  | Strongly agree<br>OR Always | Agree OR Most<br>of the Time | Neutral OR<br>Sometimes | Disagree OR<br>Not Often | Strongly<br>disagree OR<br>Never | Not Applicable<br>OR I have not<br>experienced this |
|--|-----------------------------|------------------------------|-------------------------|--------------------------|----------------------------------|---|
| I enjoy having time away from my workplace by attending live, in-person courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| The best speakers are on the programs at live, in-person courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| Live, in-person courses are at convenient geographic locations (locally offered in my area or offered in areas to which I can easily travel).                        | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| <b><u>Cost of live, in-person continuing education</u></b>   |                             |                              |                         |                          |                                  |   |
| My employer covers the expense of my registration and other costs to attend live, in-person continuing education courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I cover the expense of my registration and other costs to attend live, in-person continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I feel that the amount of money that I spend on attending live, in-person learning experiences is worth what I pay for it.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I do not attend live, in-person continuing education courses that have any personal expense involved.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| My employer provides professional time compensation for my attendance at live, in-person continuing education courses (e.g., paid professional time off, comp time). | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |



|   | Strongly agree<br>OR Always | Agree OR Most<br>of the Time | Neutral OR<br>Sometimes | Disagree OR<br>Not Often | Strongly<br>disagree OR<br>Never | Not Applicable<br>OR I have not<br>experienced this |
|---|-----------------------------|------------------------------|-------------------------|--------------------------|----------------------------------|---|
| I lose work productivity when I attend live, in-person continuing education courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| <b>Interactivity of live, in-person continuing education</b>  |                             |                              |                         |                          |                                  |   |
| Activities are incorporated into the presentations given at live, in-person continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| Presenter demonstrations are given at live, in-person continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I experience interactive learning during live, in-person continuing education courses (i.e., I am participating in discussions, asking and answering questions, sharing real-life cases as examples). | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| <b>Quality of live, in-person continuing education</b>  |                             |                              |                         |                          |                                  |   |
| I am satisfied with the quality of the instructional and educational resources provided to me at live, in-person continuing education courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I am satisfied with the challenging and relevant content presented at live, in-person continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |

|  | Strongly agree<br>OR Always | Agree OR Most<br>of the Time | Neutral OR<br>Sometimes | Disagree OR<br>Not Often | Strongly<br>disagree OR<br>Never | Not Applicable<br>OR I have not<br>experienced this |
|--|-----------------------------|------------------------------|-------------------------|--------------------------|----------------------------------|---|
| I complete the survey given out by presenters or the conference organizers at the conclusion of live, in-person continuing education courses.            | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| <b>Transfer of learning from live, in-person continuing education</b>  |                             |                              |                         |                          |                                  |   |
| I read the learning outcomes for the course before I attend live, in-person continuing education courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of live, in-person continuing education courses. | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I have applied the knowledge that I learned from live, in-person continuing education courses to my practice settings.                                   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I have applied the skills that I learned from live, in-person continuing education courses to my practice settings.                                      | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I have applied the attitudes that I developed from live, in-person continuing education courses to my practice settings.                                 | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I transfer learning because I later make reference to the resources I obtained from the live, in-person continuing education courses.                    | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |

|   | Strongly agree<br>OR Always | Agree OR Most<br>of the Time | Neutral OR<br>Sometimes | Disagree OR<br>Not Often | Strongly<br>disagree OR<br>Never | Not Applicable<br>OR I have not<br>experienced this |
|---|-----------------------------|------------------------------|-------------------------|--------------------------|----------------------------------|---|
| I transfer learning because the information is presented explicitly at live, in-person continuing education courses.                | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |
| I transfer learning because of the direct instruction received from case histories at live, in-person continuing education courses. | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>    | <input type="radio"/>            | <input type="radio"/>                               |

**PART 2: THIS SECTION OF THE SURVEY PERTAINS TO REMOTE CONTINUING EDUCATION.**

6. Using the following scale, please select ONE response for each of the following questions pertaining to your past continuing education learning experiences taken REMOTELY in the past five years. Remote instruction is characterized as any form of instruction that requires technological access (i.e., webinars, CD-ROMs, DVDs, online courses, etc.) pertaining to speech-language pathology topics and content.

Choose ONE response per question.

|   | Strongly Agree<br>OR Always | Agree OR Most<br>of the Time | Neutral OR<br>Sometimes | Disagree OR<br>Some of the<br>Time | Strongly<br>Disagree OR<br>Never | Not Applicable<br>OR I have not<br>experienced this |
|---|-----------------------------|------------------------------|-------------------------|------------------------------------|----------------------------------|---|
| <b><u>Motivation for seeking remote continuing education</u></b>  |                             |                              |                         |                                    |                                  |   |
| ASHA, CCC and/or state licensure and/or teacher licensure renewal requirements motivate me to attend remote continuing education courses. | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| Employer requirements motivate me to attend remote continuing education courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| Personal interests motivate me to attend remote continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| Other reasons motivate me to attend remote continuing education courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |

|   | Strongly Agree<br>OR Always | Agree OR Most<br>of the Time | Neutral OR<br>Sometimes | Disagree OR<br>Some of the<br>Time | Strongly<br>Disagree OR<br>Never | Not Applicable<br>OR I have not<br>experienced this |
|---|-----------------------------|------------------------------|-------------------------|------------------------------------|----------------------------------|---|
| <b>Preferences for remote continuing education</b>  |                             |                              |                         |                                    |                                  |   |
| I enjoy networking during remote continuing education courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| The best speakers offer remote courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I gain as much from web chats and webinars where people are learning together as I do attending a live, in-person conference. | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I enjoy continuing education that is remote and does not require travelling.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I enjoy continuing education that I can access from work or at home by completing remote courses.                             | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I like that I can determine the pace at which I finish remote continuing education courses.                                   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I am less distracted when completing remote continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| <b>Cost of remote continuing education</b>  |                             |                              |                         |                                    |                                  |   |
| My employer covers the expense of my registration and other costs to attend remote continuing education courses.              | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I cover the expense of my registration and other costs to remote continuing education courses.                                | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |

|  | Strongly Agree<br>OR Always | Agree OR Most<br>of the Time | Neutral OR<br>Sometimes | Disagree OR<br>Some of the<br>Time | Strongly<br>Disagree OR<br>Never | Not Applicable<br>OR I have not<br>experienced this |
|--|-----------------------------|------------------------------|-------------------------|------------------------------------|----------------------------------|---|
| I feel that the amount of money that I spend on attending remote learning experiences is worth what I pay for it.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I do not attend remote continuing education courses that have any personal expense involved.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| My employer provides professional time compensation for my attendance at remote continuing education courses (e.g., paid professional time off, comp time).                                  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I lose work productivity when I attend remote continuing education courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| <b>Interactivity of remote continuing education</b>  |                             |                              |                         |                                    |                                  |   |
| Activities are incorporated into the presentations given at remote continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| Presenter demonstrations are given during remote continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I experience interactive learning during remote continuing education courses (i.e., I am participating in discussions, asking and answering questions, sharing real-life cases as examples). | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |

|   | Strongly Agree<br>OR Always | Agree OR Most<br>of the Time | Neutral OR<br>Sometimes | Disagree OR<br>Some of the<br>Time | Strongly<br>Disagree OR<br>Never | Not Applicable<br>OR I have not<br>experienced this |
|---|-----------------------------|------------------------------|-------------------------|------------------------------------|----------------------------------|---|
| <b><u>Quality of remote continuing education</u></b>  |                             |                              |                         |                                    |                                  |   |
| I am satisfied with the quality of the instructional and educational resources provided to me at remote continuing education courses.           | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I am satisfied with the challenging and relevant content presented at remote continuing education courses.                                      | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| <b><u>Transfer of learning from remote continuing education</u></b>   |                             |                              |                         |                                    |                                  |   |
| I read the learning outcomes for the course before I attend remote continuing education courses.  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of remote continuing education courses. | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I have applied the knowledge that I learned from remote continuing education courses to my practice settings.                                   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I have applied the skills that I learned from remote continuing education courses to my practice settings.                                      | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |

|  | Strongly Agree<br>OR Always | Agree OR Most<br>of the Time | Neutral OR<br>Sometimes | Disagree OR<br>Some of the<br>Time | Strongly<br>Disagree OR<br>Never | Not Applicable<br>OR I have not<br>experienced this |
|--|-----------------------------|------------------------------|-------------------------|------------------------------------|----------------------------------|---|
| I have applied the attitudes that I developed from remote continuing education courses to my practice settings.              | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I transfer learning because I later make reference to the resources I obtained from the remote continuing education courses. | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I transfer learning because the information is presented explicitly at remote continuing education courses.                  | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| I transfer learning because of the direct instruction received from case histories at remote continuing education courses.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| Remote courses allow me to replay the information, which helps me carry it over.   | <input type="radio"/>       | <input type="radio"/>        | <input type="radio"/>   | <input type="radio"/>              | <input type="radio"/>            | <input type="radio"/>                               |
| <b>7. Choose ONE response.</b>   |                             |                              |                         |                                    |                                  |   |
| My preferred medium of instruction for continuing education courses is:  |                             |                              |                         |                                    |                                  |   |
| <input type="radio"/> Live, in-person, as in attending a conference, workshop, or seminar or workplace inservice             |                             |                              |                         |                                    |                                  |   |
| <input type="radio"/> Remote, as in ONLINE webinar, ONLINE continuing education course, video/DVD, CD-ROM                    |                             |                              |                         |                                    |                                  |   |
| <input type="radio"/> I do not have a preference   |                             |                              |                         |                                    |                                  |   |
| <b>8. Choose ONE response.</b>   |                             |                              |                         |                                    |                                  |   |
| I transfer learning from continuing education courses to my practice more when I have participated in:                       |                             |                              |                         |                                    |                                  |   |
| <input type="radio"/> Live, in-person, as in attending a conference, workshop, or seminar or workplace inservice             |                             |                              |                         |                                    |                                  |   |
| <input type="radio"/> Remote, as in ONLINE webinar, ONLINE continuing education course, video/DVD, CD-ROM                    |                             |                              |                         |                                    |                                  |   |
| <input type="radio"/> I do not have a preference   |                             |                              |                         |                                    |                                  |   |

## APPENDIX C

### Recruitment Statement

#### **Evaluating Speech-Language Pathologists' Transfer of Continuing Education Learning Outcomes to their Practice Settings**

I am Elizabeth Graber ([graberelizabeth02@gmail.com](mailto:graberelizabeth02@gmail.com)), a graduate student in the Speech-Language Pathology program in the School of Health Sciences at Cleveland State University, and my thesis supervisor is Monica Gordon-Pershey, Ed.D., CCC-SLP, Associate Professor ([m.pershey@csuohio.edu](mailto:m.pershey@csuohio.edu)). As part of my thesis, I am researching speech-language pathologists' transfer of continuing education learning outcomes to their practice settings. To identify conditions related to transfer of learning outcomes, I am surveying speech-language pathologists' perspectives on their past experiences in continuing education courses in speech-language pathology.

I am asking that you please consider completing this survey if you fit these criteria:

- ❖ Licensed and/or certified speech-language pathologists who have previously attended one or more continuing education experiences in speech-language pathology. The experiences could have been either in-person or online, and include, for example, professional conferences, continuing education courses, webinars, or employment-related in-services pertaining to speech-language pathology topics and content. Retired SLPs or SLPs not currently employed may participate if they continue attending continuing education. Clinical Fellows may not participate.
- ❖ Participants must reside in the United States.

This survey will take only 10 minutes to complete. The questions are multiple choice and Likert-scale ratings. Participation is completely voluntary and anonymous, and no one will be able to identify you or your responses. You are free to decline to answer any questions or withdraw from the study at any time.

There is no direct benefit for participating in this study. There are no risks associated with participation in this study greater than daily living.

Feel free to forward this recruiting announcement containing the survey link to other SLPs or to post this recruiting announcement on social media.

By clicking the link below, you will be taken to a consent form and enter the survey.

If you have any questions or need to alert me to any technical difficulties using the survey response form, or if you would like additional information about this survey, please contact me at Elizabeth Graber, [graberelizabeth02@gmail.com](mailto:graberelizabeth02@gmail.com).

Thank you for your participation!

[CLICK HERE FOR ENTRY PAGE](#)



## APPENDIX D

### List of Social Media Posting Lists and American Speech Hearing Association Communities List

#### *ASHA Communities*

<https://community.asha.org/home>

48 POTENTIAL SITES, POST TO AS MANY AS CAN BE ACCESSED

#### **Linked-in Account Pages (4)**

Speech Language Pathologists of America

<https://www.linkedin.com/groups/1225767/>

Speech Language Pathologists

<https://www.linkedin.com/groups/119174/>

SPEECH and SWALLOWING THERAPY

<https://www.linkedin.com/groups/2298716/>

American Speech-Language Hearing Association

<https://www.linkedin.com/company/the-american-speech-language-hearing-association-asha-/>

#### **Facebook Groups (13)**

SLP Telepractice Collaboration

<https://www.facebook.com/groups/SLPTelepractice/>

Clinical Research for SLPs

<https://www.facebook.com/groups/clinicalresearchslps/>

SLPs for Evidence-Based Practice

<https://www.facebook.com/groups/EBPSLPs/>

Clinical Voice Therapy

<https://www.facebook.com/groups/1239873406051223/>

School-Based SLPs: For Professional Only!

<https://www.facebook.com/groups/SchoolSLPs/>

NWOSLHA

<https://www.facebook.com/NWOSLHA/>

Speech Pathologists at Large

<https://www.facebook.com/groups/2212002912/>

School SLP Jubilee

<https://www.facebook.com/groups/1442875842657778/>

SLPeeps

<https://www.facebook.com/CDUslpeeps1/>

Preschool Speech Language Pathologists

<https://www.facebook.com/groups/PreschoolSLPs/>

Middle School Speech Language Pathologists

<https://www.facebook.com/groups/780338485340430>

ASHA

<https://www.facebook.com/asha.org/>

Sublime Speech  
<https://www.facebook.com/SublimeSpeech/>

***Instagram Accounts (15)***

SLP Happy Hour  
<https://www.instagram.com/slphappyhour/>

Language and Lattes  
<https://www.instagram.com/languageandlattes/?hl=en>

Beautiful Speech Life  
<https://www.instagram.com/beautifulspeechlife/>

Jill Shook SLP  
<https://www.instagram.com/jillshookslp/>

Weetalkers  
<https://www.instagram.com/weetalkers/?hl=en>

Jessi Andricks  
<https://www.instagram.com/jessiandricks/?hl=en>

Salt\_by\_the\_sea  
<https://www.saltbythesea.com/>

Letstalkspeechtherapy  
<https://www.instagram.com/letstalkspeechtherapy/>

Speechy Musings  
<https://www.instagram.com/speechymusings/?hl=en>

Adventuresinspeechpathology  
<https://www.instagram.com/adventuresinspeechpathology/?hl=en>

Grahamspeechtherapy  
<https://www.instagram.com/grahamspeechtherapy/?hl=en>

themindandthemouth  
<https://www.instagram.com/themindandthemouth/?hl=en>

the.type.b.slp  
<https://www.instagram.com/the.type.b.slp/?hl=en>

slpnataliesnyders  
<https://www.instagram.com/slpnataliesnyders/?hl=en>

ASHA  
<https://www.instagram.com/ashaweb/?hl=en>

Sublime Speech  
<https://www.instagram.com/sublimespeech/?hl=en>

***Twitter Accounts (10)***

Life as a Speechie  
<https://twitter.com/whatismyslplife?lang=en>

ASHAWeb  
<https://twitter.com/ashaweb?lang=en>

Men in SLT/SLP  
<https://twitter.com/speechguys?lang=en>

Spanish Speechies

[https://twitter.com/span\\_speechies](https://twitter.com/span_speechies)

The Speech Chicks

<https://twitter.com/TheSpeechChicks/status/928665734921592832>

Home Speech Home

[https://twitter.com/HomeSpeechHome?ref\\_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor](https://twitter.com/HomeSpeechHome?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor)

@Dabblingspeech

<https://twitter.com/dabblingspeech>

@SpeechRoomNews

<https://twitter.com/speechroomnews>

Speech Time Fun

<https://twitter.com/speectimefun?lang=en>

Sublime Speech

<https://twitter.com/sublimespeech?lang=en>

### **Pinterest Accounts (11)**

PreK Speech and Language

<https://www.pinterest.com/dawndelz/prek-speech-language/>

SLP: Speech and Language Therapy Ideas

<https://www.pinterest.com/speechpins/speech-therapy-ideas/>

SLPs on TPT

<https://www.pinterest.com/teachingtalkingSLP/slps-on-tpt/>

Speech Therapy: Middle School and High School

<https://www.pinterest.com/rachaelbeebe/middle-high-school-slp-ideas/>

AdaptEd 4 Special Ed 1 Autism

<https://www.pinterest.com/AdaptEd4SPED/>

OT PT SLP Therapy

<https://www.pinterest.com/LightTablePlay/ot-pt-slp-therapy/>

SLP on TPT (Special Education, too!)

<https://www.pinterest.com/lookslanguage/slp-on-tpt-special-education-too/>

SLP Collaborative Board-all good things speech and language

<https://www.pinterest.com/miamcd/slp-collaborative-board-all-good-things-speech-lan/>

Creating Communicators SLP Resources

<https://www.pinterest.com/cr8comm/creating-communicators-slp-resources/>

SLP Bloggers and TPT ideas for speech therapy

<https://www.pinterest.com/sarahbtfb/slp-bloggers-and-tpt-ideas-for-speech-therapy/>

Sublime Speech

<https://www.pinterest.com/sublimespeech/>

## APPENDIX E

### Social Media Posting



## APPENDIX F

### Informed Consent

#### **Evaluating Speech-Language Pathologists' Transfer of Continuing Education Learning Outcomes to their Practice Settings**

Principal Investigators: Elizabeth Graber, B.S. and  
Monica Gordon Pershey, Ed.D., CCC-SLP

#### **INTRODUCTION**

I am Elizabeth Graber ([grabereizabeth02@gmail.com](mailto:grabereizabeth02@gmail.com)) (419) 349-3505. I'm a graduate student in the Speech-Language Pathology program in the School of Health Sciences at Cleveland State University. My thesis supervisor is Monica Gordon Pershey, Ed.D., CCC-SLP, Associate Professor ([m.pershey@csuohio.edu](mailto:m.pershey@csuohio.edu)) (216) 687-4534. As part of my thesis, I am researching speech-language pathologists' (SLPs) transfer of continuing education learning outcomes to their practice settings. I am surveying SLPs' perspectives on their experiences in continuing education courses in speech-language pathology.

Please read this consent form carefully. Participation is voluntary. You may print or save a copy of this form for your records.

#### **PURPOSE**

This study compares transfer of learning following live, in-person courses versus online learning in the field of speech-language pathology. The data will help us understand how continuing education is transferred to SLPs' professional practices.

#### **PARTICIPANTS**

Participants are licensed and/or certified SLPs who have attended one or more continuing education experiences in speech-language pathology. The learning could have been either in-person or online. Examples include professional conferences, continuing education courses, webinars, or workplace in-services. Retired SLPs or SLPs not currently employed may participate if they attend continuing education. Clinical Fellows may not participate. Participants must reside in the United States.

Feel free to forward the recruiting announcement that brought you to this consent form to other SLPs. You may post the recruiting announcement on social media.

#### **PROCEDURE**

The survey is completed online in about 10 minutes. To participate, read this consent form, then click YES to open the survey. You may skip any questions that you wish. You may stop the survey at any time. Your responses are recorded when you click SUBMIT RESPONSES.

#### **BENEFITS**

There is no direct benefit for participating.

**RISKS**

There are no risks in participation greater than in daily living.

**CONFIDENTIALITY**

No self-identifying information is requested. This survey is anonymous. Survey Monkey software will not store names, email addresses, or IP addresses. Data will be kept within the survey software and on password protected computers. Only summary results will be published or presented.

**CONSENT STATEMENT**

**“I understand that if I have any questions about my rights as a research subject, I can contact the Cleveland State University Institutional Review Board (IRB) Office at (216) 687-3630.”**

By checking **Yes** below, I agree that:

- I have read this consent form.
- I am at least 18 years old.
- I voluntarily agree to participate in this study.

**Please click one choice below:**

**I agree to participate**

- **Yes (Survey Opens)**
- **No (Survey Closes)**

APPENDIX G

Data Collection Tool

| Q#                      |  |  |  |   |   |   |  |  |
|-------------------------|--|--|--|---|---|---|--|--|
| Demographic Information |  |  |  |   |   |   |  |  |
| 2                       | How did you receive the link to this survey?<br>Choose ONE response.   | I received an ASHA Communities posting | I received an email from a person I know | I saw a social media site posting   | I saw a reposting or retweeting             | Other   |  |  |
| 3                       | What is your current employment setting or therapy population?<br>Check the ONE location that best represents your practice. | Hospital (adult acute care, inpatient) | Hospital (adult acute care, outpatient)  | Hospital (pediatric acute care, inpatient)  | Hospital (pediatric acute care, outpatient) | Rehabilitation center (inpatient and/or outpatient) | Home care                                |  |
|                         |  | Skilled nursing facility               | Long term care facility                  | Developmental disabilities (e.g., county board, school or treatment center, workshop, residential facility, etc.) | Public school K-12                          | Private school K-12                                 | Preschool (ages 3-6)                     |  |
|                         |  | Early intervention (ages birth-3)      | Community speech and hearing center      | Private practice, non-profit  | Private practice, for profit                | University  | Other SLP practice setting or population |  |
|                         |  | Employed outside of the field of SLP   | Not employed                             |   |   |   |  |  |
| 4                       | How many years have you been a practicing speech-language pathologist?   | 1-2 years                              | 3-5 years                                | 6-10 years  | 11-15 years                                 | 16-20 years   | 21-25 years                              |  |
|                         |  | 26-30 years                            | 31 years or more                         |   |   |   |  |  |

| Motivation |   |                             |                                 |                         |                             |                                  |  |  |
|------------|---|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|--|
| 5          | ASHA CCC and/or state licensure and/or teacher licensure renewal requirements motivate me to attend live, in-person continuing education courses. | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 6          | Employer requirements motivate me to attend live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 7          | Personal interests motivate me to attend live, in-person continuing education courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 8          | Other reasons motivate me to attend live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 9          | I enjoy networking at live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |



|    |   |                             |                                 |                         |                             |                                  |  |
|----|---|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|
| 10 | Live, in-person courses facilitate a classroom learning environment with other attendees, which is not provided with remote courses.          | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 11 | I enjoy having time away from my workplace by attending live, in-person courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 12 | The best speakers are on the programs at live, in-person courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 13 | Live, in-person courses are at convenient geographic locations (locally offered in my area or offered in areas to which I can easily travel). | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 14 | My employer covers the expense of my registration and other costs to attend live, in-person continuing education courses.                     | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |

|    |  |                             |                                 |                         |                             |                                  |  |
|----|--|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|
| 15 | I cover the expense of my registration and other costs to attend live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 17 | I do not attend live, in-person continuing education courses that have any personal expense involved.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 18 | My employer provides professional time compensation for my attendance at live, in-person continuing education courses (e.g., paid professional time off, comp time). | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 19 | I lose work productivity when I attend live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 27 | I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of live, in-person continuing education courses.             | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 34 | ASHA CCC and/or state licensure and/or teacher licensure renewal   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have                               |

|    |  |                             |                                 |                         |                             |                                  |  |                      |  |
|----|--|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|----------------------|--|
|    | requirements motivate me to attend remote continuing education courses.          |                             |                                 |                         |                             |                                  |  | not experienced this |  |
| 35 | Employer requirements motivate me to attend remote continuing education courses. | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                      |  |
| 36 | Personal interests motivate me to attend remote continuing education courses.    | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                      |  |
| 37 | Other reasons motivate me to attend remote continuing education courses.         | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                      |  |
| 38 | I enjoy networking at remote continuing education courses.                       | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                      |  |
| 39 | The best speakers are on the programs at remote courses.                         | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                      |  |
| 40 | I gain as much from web chats and webinars                                       | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have                               |                      |  |

|    |  |                             |                                 |                         |                             |                                  |  |                      |  |
|----|--|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|----------------------|--|
|    | where people are learning together as I do attending a live, in-person conference.                               |                             |                                 |                         |                             |                                  |  | not experienced this |  |
| 41 | I enjoy continuing education that is remote and does not require traveling.                                      | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                      |  |
| 42 | I enjoy continuing education that I can access from work or at home by completing remote courses.                | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                      |  |
| 43 | I like that I can determine the pace at which I finish remote continuing education courses.                      | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                      |  |
| 44 | I am less distracted when completing remote continuing education courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                      |  |
| 45 | My employer covers the expense of my registration and other costs to attend remote continuing education courses. | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not                        |                      |  |

|    |   |                             |                                 |                         |                             |                                  |  |                  |  |
|----|---|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|------------------|--|
|    |   |                             |                                 |                         |                             |                                  |  | experienced this |  |
| 46 | I cover the expense of my registration and other costs to attend remote continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                  |  |
| 48 | I do not attend remote continuing education courses that have any personal expense involved.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                  |  |
| 49 | My employer provides professional time compensation for my attendance at remote continuing education courses (e.g., paid professional time off, comp time). | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                  |  |
| 50 | I lose work productivity when I attend remote continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                  |  |
| 58 | I transfer learning because I self-reflect on my knowledge and/or my skill set following the  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not                        |                  |  |

|              |  |                             |                                 |                         |                             |                                  |  |                  |  |
|--------------|--|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|------------------|--|
|              | completion of remote continuing education courses.   |                             |                                 |                         |                             |                                  |  | experienced this |  |
| <b>Costs</b> |  |                             |                                 |                         |                             |                                  |  |                  |  |
| 14           | My employer covers the expense of my registration and other costs to attend live, in-person continuing education courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                  |  |
| 15           | I cover the expense of my registration and other costs to attend live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                  |  |
| 16           | I feel that the amount of money that I spend on attending live, in-person learning experiences is worth what I pay for it.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                  |  |
| 17           | I do not attend live, in-person continuing education courses that have any personal expense involved.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                  |  |
| 18           | My employer provides professional time compensation for my attendance at live, in-person continuing education courses (e.g., paid professional time off, comp time). | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |                  |  |

|                      |   |                             |                                 |                         |                             |                                  |  |
|----------------------|---|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|
| 45                   | My employer covers the expense of my registration and other costs to attend remote continuing education courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 46                   | I cover the expense of my registration and other costs to attend remote continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 47                   | I feel that the amount of money that I spend on attending remote learning experiences is worth what I pay for it.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 48                   | I do not attend remote continuing education courses that have any personal expense involved.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 49                   | My employer provides professional time compensation for my attendance at remote continuing education courses (e.g., paid professional time off, comp time). | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| <b>Interactivity</b> |   |                             |                                 |                         |                             |                                  |  |

|    |   |                             |                                 |                         |                             |                                  |  |
|----|---|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|
| 9  | I enjoy networking at live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 10 | Live, in-person courses facilitate a classroom learning environment with other attendees, which is not provided with remote courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 20 | Activities are incorporated into the presentations given at live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 21 | Presenter demonstrations are given at live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 22 | I experience interactive learning during live, in-person continuing education courses (i.e., I am participating in discussions, asking and answering questions, sharing real-life cases as examples). | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |



|    |   |                             |                                 |                         |                             |                                  |  |
|----|---|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|
| 25 | I complete the survey given out by presenters or the conference organizers at the conclusion of live, in-person continuing education courses. | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 38 | I enjoy networking during remote continuing education courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 40 | I gain as much from web chats and webinars where people are learning together as I do attending a live, in-person conference.                 | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 51 | Activities are incorporated into the presentations given at remote continuing education courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |

|                |  |                             |                                 |                         |                             |                                  |  |
|----------------|--|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|
| 52             | Presenter demonstrations are given at remote continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 53             | I experience interactive learning during remote continuing education courses (i.e., I am participating in discussions, asking and answering questions, sharing real-life cases as examples). | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 56             | I complete the survey given out by presenters or the conference organizers at the conclusion of remote continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| <b>Quality</b> |  |                             |                                 |                         |                             |                                  |  |
| 10             | Live, in-person courses facilitate a classroom learning environment with other attendees, which is not provided with remote courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 12             | The best speakers are on the programs at live, in-person courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |

|    |   |                             |                                 |                         |                             |                                  |  |  |
|----|---|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|--|
| 16 | I feel that the amount of money that I spend on attending live, in-person learning experiences is worth what I pay for it.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 22 | I experience interactive learning during live, in-person continuing education courses (i.e., I am participating in discussions, asking and answering questions, sharing real-life cases as examples). | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 23 | I am satisfied with the quality of the instructional and educational resources provided to me at live, in-person continuing education courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 24 | I am satisfied with the challenging and relevant content presented at live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 26 | I read the learning outcomes for the course before I attend live, in-person continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |

|    |  |                             |                                 |                         |                             |                                  |  |
|----|--|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|
| 39 | The best speakers are on the programs at remote courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 47 | I feel that the amount of money that I spend on attending remote learning experiences is worth what I pay for it.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 53 | I experience interactive learning during remote continuing education courses (i.e., I am participating in discussions, asking and answering questions, sharing real-life cases as examples). | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 54 | I am satisfied with the quality of the instructional and educational resources provided to me at remote continuing education courses.  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 55 | I am satisfied with the challenging and relevant content presented at remote continuing education courses.   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |

|                    |   |   |   |                            |                             |                                  |  |  |
|--------------------|---|---|---|----------------------------|-----------------------------|----------------------------------|--|--|
| 57                 | I read the learning outcomes for the course before I attend remote continuing education courses.  | Strongly agree<br>OR Always   | Agree OR<br>Most of the<br>Time   | Neutral OR<br>Sometimes    | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| <b>Preferences</b> |   |   |   |                            |                             |                                  |  |  |
| 12                 | The best speakers are on the programs at live, in-person courses.   | Strongly agree<br>OR Always   | Agree OR<br>Most of the<br>Time   | Neutral OR<br>Sometimes    | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 13                 | Live, in-person courses are at convenient geographic locations (locally offered in my area or offered in areas to which I can easily travel). | Strongly agree<br>OR Always   | Agree OR<br>Most of the<br>Time   | Neutral OR<br>Sometimes    | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 39                 | The best speakers are on the programs at remote courses.  | Strongly agree<br>OR Always   | Agree OR<br>Most of the<br>Time   | Neutral OR<br>Sometimes    | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |  |
| 66                 | Choose ONE response. My preferred medium of instruction for continuing education courses is:  | Live, in-person, as in attending a conference, workshop, or seminar or workplace in-service | Remote, as in ONLINE webinar, ONLINE continuing education course, video/DVD, CD-ROM | I do not have a preference |                             |                                  |  |  |

|                 |  |   |   |                            |                       |                            |   |  |
|-----------------|--|---|---|----------------------------|-----------------------|----------------------------|---|--|
| 67              | Choose ONE response. I transfer learning from continuing education courses to my practice more when I have participated in:                              | Live, in-person, as in attending a conference, workshop, or seminar or workplace in-service | Remote, as in ONLINE webinar, ONLINE continuing education course, video/DVD, CD-ROM | I do not have a preference |                       |                            |   |  |
| <b>Transfer</b> |  |   |   |                            |                       |                            |   |  |
| 27              | I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of live, in-person continuing education courses. | Strongly agree OR Always  | Agree OR Most of the Time   | Neutral OR Sometimes       | Disagree OR Not Often | Strongly disagree OR Never | Not Applicable OR I have not experienced this |  |
| 28              | I have applied the knowledge that I learned from live, in-person continuing education courses to my practice settings.                                   | Strongly agree OR Always  | Agree OR Most of the Time   | Neutral OR Sometimes       | Disagree OR Not Often | Strongly disagree OR Never | Not Applicable OR I have not experienced this |  |
| 29              | I have applied the skills that I learned from live, in-person continuing education courses to my practice settings.                                      | Strongly agree OR Always  | Agree OR Most of the Time   | Neutral OR Sometimes       | Disagree OR Not Often | Strongly disagree OR Never | Not Applicable OR I have not experienced this |  |

|    |   |                             |                                 |                         |                             |                                  |  |
|----|---|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|
| 30 | I have applied the attitudes that I developed from live, in-person continuing education courses to my practice settings.                        | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 31 | I transfer learning because I later make reference to the resources I obtained from the live, in-person continuing education courses.           | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 32 | I transfer learning because the information is presented explicitly at live, in-person continuing education courses.                            | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 33 | I transfer learning because of the direct instruction received from case histories at live, in-person continuing education courses.             | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 58 | I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of remote continuing education courses. | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |

|    |  |                             |                                 |                         |                             |                                  |  |
|----|--|-----------------------------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--|
| 59 | I have applied the knowledge that I learned from remote continuing education courses to my practice settings.                | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 60 | I have applied the skills that I learned from remote continuing education courses to my practice settings.                   | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 61 | I have applied the attitudes that I developed from remote continuing education courses to my practice settings.              | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 62 | I transfer learning because I later make reference to the resources I obtained from the remote continuing education courses. | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 63 | I transfer learning because the information is presented explicitly at remote continuing education courses.                  | Strongly agree<br>OR Always | Agree OR<br>Most of the<br>Time | Neutral OR<br>Sometimes | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |



|    |   |  |   |                               |                             |                                  |  |
|----|---|--|---|-------------------------------|-----------------------------|----------------------------------|--|
| 64 | I transfer learning because of the direct instruction received from case histories at remote continuing education courses.  | Strongly agree<br>OR Always  | Agree OR<br>Most of the<br>Time   | Neutral OR<br>Sometimes       | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 65 | Remote courses allow me to replay the information, which helps me carry it over.  | Strongly agree<br>OR Always  | Agree OR<br>Most of the<br>Time   | Neutral OR<br>Sometimes       | Disagree<br>OR Not<br>Often | Strongly<br>disagree OR<br>Never | Not<br>Applicable<br>OR I have<br>not<br>experienced<br>this |
| 67 | Choose ONE response. I transfer learning from continuing education courses to my practice more when I have participated in: | Live, in-<br>person, as in<br>attending a<br>conference,<br>workshop, or<br>seminar or<br>workplace in-<br>service | Remote, as in<br>ONLINE<br>webinar,<br>ONLINE<br>continuing<br>education<br>course,<br>video/DVD,<br>CD-ROM | I do not have a<br>preference |                             |                                  |  |

APPENDIX H

Data Collection Tool with Results

| Q#                      |   |  |                   |  |                 |   |                |   |                  |   |                 |  |                |
|-------------------------|---|--|-------------------|--|-----------------|---|----------------|---|------------------|---|-----------------|--|----------------|
| Demographic Information |   |  |                   |  |                 |   |                |   |                  |   |                 |  |                |
| 2                       | How did you receive the link to this survey? Choose ONE response.   | I received an ASHA Communities posting | 238/316<br>75.32% | I received an email from a person I know | 53/316<br>16.7% | I saw a social media site posting   | 15/316<br>4.7% | I saw a reposting or retweeting             | 0/316<br>0%      | Other   | 10/316<br>3.1%  |  |                |
| 3                       | What is your current employment setting or therapy population? Check the ONE location that best represents your practice. | Hospital (adult acute care, inpatient) | 14/317<br>4.4%    | Hospital (adult acute care, outpatient)  | 18/317<br>5.6%  | Hospital (pediatric acute care, inpatient)  | 0/317<br>0%    | Hospital (pediatric acute care, outpatient) | 5/317<br>1.58%   | Rehabilitation center (inpatient and/or outpatient) | 12/317<br>3.79% | Home care                                | 6/317<br>1.89% |
|                         |   | Skilled nursing facility               | 11/317<br>3.47%   | Long term care facility                  | 0/317<br>0%     | Developmental disabilities (e.g., county board, school or treatment center, workshop, residential facility, etc.) | 4/317<br>1.26% | Public school K-12                          | 81/317<br>25.55% | Private school K-12                                 | 2/317<br>0.63%  | Preschool (ages 3-6)                     | 13/317<br>4.1% |
|                         |   | Early intervention (ages birth-3)      | 16/317<br>5.05%   | Community speech and hearing center      | 4/317<br>1.26%  | Private practice, non-profit  | 3/317<br>0.95% | Private practice, for profit                | 28/317<br>8.83%  | University  | 82/317<br>25.8% | Other SLP practice setting or population | 5/317<br>1.58% |

|                   |   |                                      |                  |                           |                   |                      |                 |                       |                  |                            |                  |   |                  |
|-------------------|---|--------------------------------------|------------------|---------------------------|-------------------|----------------------|-----------------|-----------------------|------------------|----------------------------|------------------|---|------------------|
|                   |   | Employed outside of the field of SLP | 1/317<br>0.32%   | Not employed              | 12/317<br>3.79%   |                      |                 |                       |                  |                            |                  |   |                  |
| 4                 | How many years have you been a practicing speech-language pathologist?  | 1-2 years                            | 5/316<br>1.56%   | 3-5 years                 | 18/316<br>5.7%    | 6-10 years           | 39/316<br>12.3% | 11-15 years           | 36/316<br>11.3%  | 16-20 years                | 36/316<br>11.3%  | 21-25 years                                   | 49/316<br>15.51% |
|                   |   | 26-30 years                          | 44/316<br>13.92% | 31 years or more          | 89/316<br>28.16%  |                      |                 |                       |                  |                            |                  |   |                  |
| <b>Motivation</b> |   |                                      |                  |                           |                   |                      |                 |                       |                  |                            |                  |   |                  |
| 5                 | ASHA CCC and/or state licensure and/or teacher licensure renewal requirements motivate me to attend live, in-person continuing education courses. | Strongly agree OR Always             | 97/313<br>30.99% | Agree OR Most of the Time | 112/313<br>35.78% | Neutral OR Sometimes | 66/313<br>21.0% | Disagree OR Not Often | 25/313<br>7.99%  | Strongly disagree OR Never | 7/313<br>2.24%   | Not Applicable OR I have not experienced this | 6/313<br>1.92%   |
| 6                 | Employer requirements motivate me to attend live, in-person continuing education courses.   | Strongly agree OR Always             | 27/313<br>8.63%  | Agree OR Most of the Time | 51/313<br>16.29%  | Neutral OR Sometimes | 94/313<br>30%   | Disagree OR Not Often | 59/313<br>18.85% | Strongly disagree OR Never | 48/313<br>15.34% | Not Applicable OR I have not experienced this | 34/313<br>10.86% |

|    |  |                          |                   |                           |                   |                      |                  |                       |                 |                            |                 |   |                 |
|----|--|--------------------------|-------------------|---------------------------|-------------------|----------------------|------------------|-----------------------|-----------------|----------------------------|-----------------|---|-----------------|
| 7  | Personal interests motivate me to attend live, in-person continuing education courses.   | Strongly agree OR Always | 180/312<br>57.69% | Agree OR Most of the Time | 100/312<br>32%    | Neutral OR Sometimes | 19/312<br>6%     | Disagree OR Not Often | 6/312<br>1.92%  | Strongly disagree OR Never | 4/312<br>1.28%  | Not Applicable OR I have not experienced this | 3/312<br>.96%   |
| 8  | Other reasons motivate me to attend live, in-person continuing education courses.  | Strongly agree OR Always | 40/308<br>12.9%   | Agree OR Most of the Time | 86/308<br>27.9%   | Neutral OR Sometimes | 111/308<br>36%   | Disagree OR Not Often | 16/308<br>5.19% | Strongly disagree OR Never | 15/308<br>4.87% | Not Applicable OR I have not experienced this | 40/308<br>12.9% |
| 9  | I enjoy networking at live, in-person continuing education courses.  | Strongly agree OR Always | 109/313<br>34.82% | Agree OR Most of the Time | 107/313<br>34.19% | Neutral OR Sometimes | 67/313<br>21%    | Disagree OR Not Often | 24/313<br>7.67% | Strongly disagree OR Never | 3/313<br>0.96%  | Not Applicable OR I have not experienced this | 3/313<br>0.96%  |
| 10 | Live, in-person courses facilitate a classroom learning environment with other attendees, which is not provided with remote courses. | Strongly agree OR Always | 120/312<br>38.46% | Agree OR Most of the Time | 100/312<br>32%    | Neutral OR Sometimes | 62/312<br>19.87% | Disagree OR Not Often | 20/312<br>6.41% | Strongly disagree OR Never | 7/312<br>2.24%  | Not Applicable OR I have not experienced this | 3/312<br>0.96%  |

|    |   |                          |                  |                           |                   |                      |                   |                       |                  |                            |                  |   |                 |
|----|---|--------------------------|------------------|---------------------------|-------------------|----------------------|-------------------|-----------------------|------------------|----------------------------|------------------|---|-----------------|
| 11 | I enjoy having time away from my workplace by attending live, in-person courses.  | Strongly agree OR Always | 117/312<br>37.5% | Agree OR Most of the Time | 106/312<br>33.97% | Neutral OR Sometimes | 49/312<br>15.71%  | Disagree OR Not Often | 23/312<br>7.37%  | Strongly disagree OR Never | 10/312<br>3.21%  | Not Applicable OR I have not experienced this | 7/312<br>2.24%  |
| 12 | The best speakers are on the programs at live, in-person courses.   | Strongly agree OR Always | 26/312<br>8.33%  | Agree OR Most of the Time | 73/312<br>23.4%   | Neutral OR Sometimes | 110/312<br>35.26% | Disagree OR Not Often | 68/312<br>21.79% | Strongly disagree OR Never | 29/312<br>9.29%  | Not Applicable OR I have not experienced this | 6/312<br>1.92%  |
| 13 | Live, in-person courses are at convenient geographic locations (locally offered in my area or offered in areas to which I can easily travel). | Strongly agree OR Always | 42/312<br>13.46% | Agree OR Most of the Time | 74/312<br>23.7%   | Neutral OR Sometimes | 97/312<br>31%     | Disagree OR Not Often | 65/312<br>20.83% | Strongly disagree OR Never | 31/312<br>9.94%  | Not Applicable OR I have not experienced this | 3/312<br>0.96%  |
| 14 | My employer covers the expense of my registration and other costs to attend live, in-person continuing education courses.                     | Strongly agree OR Always | 36/312<br>11.54% | Agree OR Most of the Time | 76/312<br>24.36%  | Neutral OR Sometimes | 64/312<br>20.51%  | Disagree OR Not Often | 46/312<br>14.74% | Strongly disagree OR Never | 69/312<br>22.12% | Not Applicable OR I have not experienced this | 21/312<br>6.73% |

|    |  |                          |                  |                           |                  |                      |                  |                       |                  |                            |                  |   |                  |
|----|--|--------------------------|------------------|---------------------------|------------------|----------------------|------------------|-----------------------|------------------|----------------------------|------------------|---|------------------|
| 15 | I cover the expense of my registration and other costs to attend live, in-person continuing education courses.   | Strongly agree OR Always | 95/311<br>30.55% | Agree OR Most of the Time | 85/311<br>27.33% | Neutral OR Sometimes | 66/311<br>21.22% | Disagree OR Not Often | 26/311<br>8.36%  | Strongly disagree OR Never | 28/311<br>9%     | Not Applicable OR I have not experienced this | 11/311<br>3.54%  |
| 17 | I do not attend live, in-person continuing education courses that have any personal expense involved.  | Strongly agree OR Always | 10/309<br>3.24%  | Agree OR Most of the Time | 30/309<br>9.71%  | Neutral OR Sometimes | 44/309<br>14.24% | Disagree OR Not Often | 75/309<br>24.27% | Strongly disagree OR Never | 105/33/98%       | Not Applicable OR I have not experienced this | 45/309<br>14.56% |
| 18 | My employer provides professional time compensation for my attendance at live, in-person continuing education courses (e.g., paid professional time off, comp time). | Strongly agree OR Always | 96/313<br>30.67% | Agree OR Most of the Time | 61/313<br>19.44% | Neutral OR Sometimes | 42/313<br>13.42% | Disagree OR Not Often | 24/313<br>7.67%  | Strongly disagree OR Never | 62/313<br>19.81% | Not Applicable OR I have not experienced this | 28/313<br>8.95%  |
| 19 | I lose work productivity when I attend live, in-person   | Strongly agree OR Always | 50/312<br>16%    | Agree OR Most of the Time | 71/312<br>22.76% | Neutral OR Sometimes | 63/312<br>20.19% | Disagree OR Not Often | 40/312<br>12.82% | Strongly disagree OR Never | 51/312<br>16.35% | Not Applicable OR I have not                  | 37/312<br>11.86% |

|    |  |                          |                   |                           |                   |                      |                  |                       |                  |                            |                  |   |                  |
|----|--|--------------------------|-------------------|---------------------------|-------------------|----------------------|------------------|-----------------------|------------------|----------------------------|------------------|---|------------------|
|    | continuing education courses.  |                          |                   |                           |                   |                      |                  |                       |                  |                            |                  | experienced this                              |                  |
| 27 | I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of live, in-person continuing education courses. | Strongly agree OR Always | 127/311<br>40.84% | Agree OR Most of the Time | 149/311<br>47.91% | Neutral OR Sometimes | 28/311<br>9%     | Disagree OR Not Often | 3/311<br>.96%    | Strongly disagree OR Never | 1/311<br>.32%    | Not Applicable OR I have not experienced this | 3/311<br>.96%    |
| 34 | ASHA CCC and/or state licensure and/or teacher licensure renewal requirements motivate me to attend remote continuing education courses.                 | Strongly agree OR Always | 146/312<br>46.79% | Agree OR Most of the Time | 95/312<br>30.45%  | Neutral OR Sometimes | 44/312<br>14.1%  | Disagree OR Not Often | 12/312<br>3.85%  | Strongly disagree OR Never | 7/312<br>2.24%   | Not Applicable OR I have not experienced this | 8/312<br>2.56%   |
| 35 | Employer requirements motivate me to attend remote continuing education courses.   | Strongly agree OR Always | 43/312<br>13.78%  | Agree OR Most of the Time | 66/312<br>21.15%  | Neutral OR Sometimes | 85/312<br>27.24% | Disagree OR Not Often | 37/312<br>11.86% | Strongly disagree OR Never | 45/312<br>14.42% | Not Applicable OR I have not experienced this | 36/312<br>11.54% |

|    |   |                          |                   |                           |                   |                      |                   |                       |                  |                            |                  |   |                  |
|----|---|--------------------------|-------------------|---------------------------|-------------------|----------------------|-------------------|-----------------------|------------------|----------------------------|------------------|---|------------------|
| 36 | Personal interests motivate me to attend remote continuing education courses.   | Strongly agree OR Always | 147/312<br>47.12% | Agree OR Most of the Time | 109/312<br>34.94% | Neutral OR Sometimes | 36/312<br>11.54%  | Disagree OR Not Often | 9/312<br>2.88%   | Strongly disagree OR Never | 4/312<br>1.28%   | Not Applicable OR I have not experienced this | 7/312<br>2.24%   |
| 37 | Other reasons motivate me to attend remote continuing education courses.  | Strongly agree OR Always | 49/308<br>15.91%  | Agree OR Most of the Time | 96/308<br>31.17%  | Neutral OR Sometimes | 90/308<br>29.22%  | Disagree OR Not Often | 19/308<br>6.17%  | Strongly disagree OR Never | 12/308<br>3.9%   | Not Applicable OR I have not experienced this | 42/308<br>13.64% |
| 38 | I enjoy networking at remote continuing education courses.  | Strongly agree OR Always | 16/312<br>5.13%   | Agree OR Most of the Time | 19/312<br>6.09%   | Neutral OR Sometimes | 72/312<br>23%     | Disagree OR Not Often | 66/312<br>21.15% | Strongly disagree OR Never | 81/312<br>25.96% | Not Applicable OR I have not experienced this | 58/312<br>18.59% |
| 39 | The best speakers offer remote courses.   | Strongly agree OR Always | 13/312<br>4.17%   | Agree OR Most of the Time | 57/312<br>18.27%  | Neutral OR Sometimes | 150/312<br>48.08% | Disagree OR Not Often | 53/312<br>16.99% | Strongly disagree OR Never | 19/312<br>6.09%  | Not Applicable OR I have not experienced this | 20/312<br>6.41%  |
| 40 | I gain as much from web chats and webinars where people are learning together as I do attending a live, in-person conference. | Strongly agree OR Always | 38/313<br>12.14%  | Agree OR Most of the Time | 69/313<br>22%     | Neutral OR Sometimes | 89/313<br>28.43%  | Disagree OR Not Often | 71/313<br>22.68% | Strongly disagree OR Never | 30/313<br>9.58%  | Not Applicable OR I have not experienced this | 16/313<br>5.11%  |



|    |   |                          |                       |                           |                       |                      |                      |                       |                      |                            |                      |   |                      |
|----|---|--------------------------|-----------------------|---------------------------|-----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------------|----------------------|---|----------------------|
| 41 | I enjoy continuing education that is remote and does not require traveling.                       | Strongly agree OR Always | 87/<br>312<br>27.88%  | Agree OR Most of the Time | 111/<br>312<br>35.58% | Neutral OR Sometimes | 69/<br>312<br>22.12% | Disagree OR Not Often | 28/<br>312<br>8.97%  | Strongly disagree OR Never | 9/<br>312<br>2.88%   | Not Applicable OR I have not experienced this | 8/<br>312<br>2.56%   |
| 42 | I enjoy continuing education that I can access from work or at home by completing remote courses. | Strongly agree OR Always | 124/<br>312<br>39.74% | Agree OR Most of the Time | 100/<br>312<br>32.05% | Neutral OR Sometimes | 56/<br>312<br>17.95% | Disagree OR Not Often | 19/<br>312<br>6.09%  | Strongly disagree OR Never | 6/<br>312<br>1.92%   | Not Applicable OR I have not experienced this | 7/<br>312<br>2.24%   |
| 43 | I like that I can determine the pace at which I finish remote continuing education courses.       | Strongly agree OR Always | 132/<br>312<br>42.31% | Agree OR Most of the Time | 115/<br>312<br>36.86% | Neutral OR Sometimes | 43/<br>312<br>13.78% | Disagree OR Not Often | 11/<br>312<br>3.53%  | Strongly disagree OR Never | 3/<br>312<br>.96%    | Not Applicable OR I have not experienced this | 8/<br>312<br>2.56%   |
| 44 | I am less distracted when completing remote continuing education courses.                         | Strongly agree OR Always | 49/<br>312<br>15.71%  | Agree OR Most of the Time | 46/<br>312<br>14.74%  | Neutral OR Sometimes | 88/<br>312<br>28.21% | Disagree OR Not Often | 81/<br>312<br>25.96% | Strongly disagree OR Never | 38/<br>312<br>12.18% | Not Applicable OR I have not experienced this | 10/<br>312<br>3.21%  |
| 45 | My employer covers the expense of my registration and other costs                                 | Strongly agree OR Always | 44/<br>312<br>14.1%   | Agree OR Most of the Time | 53/<br>312<br>16.99%  | Neutral OR Sometimes | 56/<br>312<br>17.95% | Disagree OR Not Often | 40/<br>312<br>12.82% | Strongly disagree OR Never | 77/<br>312<br>24.86% | Not Applicable OR I have not                  | 41/<br>312<br>13.46% |

|    |   |                          |                  |                           |                  |                      |                  |                       |                  |                            |                  |   |                  |
|----|---|--------------------------|------------------|---------------------------|------------------|----------------------|------------------|-----------------------|------------------|----------------------------|------------------|---|------------------|
|    | to attend remote continuing education courses.  |                          |                  |                           |                  |                      |                  |                       |                  |                            |                  | experienced this                              |                  |
| 46 | I cover the expense of my registration and other costs to attend remote continuing education courses.                                 | Strongly agree OR Always | 113/313<br>36.1% | Agree OR Most of the Time | 83/313<br>26.52% | Neutral OR Sometimes | 60/313<br>19.17% | Disagree OR Not Often | 20/313<br>6.39%  | Strongly disagree OR Never | 21/313<br>6.17%  | Not Applicable OR I have not experienced this | 16/313<br>5.11%  |
| 48 | I do not attend remote continuing education courses that have any personal expense involved.  | Strongly agree OR Always | 20/310<br>6.45%  | Agree OR Most of the Time | 28/310<br>9%     | Neutral OR Sometimes | 30/310<br>9.68%  | Disagree OR Not Often | 85/310<br>27.42% | Strongly disagree OR Never | 102/310<br>32.9% | Not Applicable OR I have not experienced this | 45/310<br>14.52% |
| 49 | My employer provides professional time compensation for my attendance at remote continuing education courses (e.g., paid professional | Strongly agree OR Always | 43/312<br>13.78% | Agree OR Most of the Time | 44/312<br>14.1%  | Neutral OR Sometimes | 34/312<br>10.9%  | Disagree OR Not Often | 47/312<br>15.06% | Strongly disagree OR Never | 89/312<br>28.53% | Not Applicable OR I have not experienced this | 55/312<br>17.63% |

|              |   |                          |                  |                           |                  |                      |                  |                       |                  |                            |                   |   |                  |
|--------------|---|--------------------------|------------------|---------------------------|------------------|----------------------|------------------|-----------------------|------------------|----------------------------|-------------------|---|------------------|
|              | time off, comp time).   |                          |                  |                           |                  |                      |                  |                       |                  |                            |                   |   |                  |
| 50           | I lose work productivity when I attend remote continuing education courses.   | Strongly agree OR Always | 15/311<br>4.82%  | Agree OR Most of the Time | 34/311<br>10.93% | Neutral OR Sometimes | 60/311<br>19.29% | Disagree OR Not Often | 53/311<br>17.04% | Strongly disagree OR Never | 108/311<br>34.73% | Not Applicable OR I have not experienced this | 41/311<br>13.18% |
| 58           | I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of remote continuing education courses. | Strongly agree OR Always | 96/311<br>30.87% | Agree OR Most of the Time | 153/311<br>49.2% | Neutral OR Sometimes | 47/311<br>15.11% | Disagree OR Not Often | 6/311<br>1.93%   | Strongly disagree OR Never | 3/311<br>.96%     | Not Applicable OR I have not experienced this | 6/311<br>1.93%   |
| <b>Costs</b> |   |                          |                  |                           |                  |                      |                  |                       |                  |                            |                   |   |                  |
| 14           | My employer covers the expense of my registration and other costs to attend live, in-person continuing education courses.                       | Strongly agree OR Always | 36/312<br>11.54% | Agree OR Most of the Time | 76/312<br>24.36% | Neutral OR Sometimes | 64/312<br>20.51% | Disagree OR Not Often | 46/312<br>14.74% | Strongly disagree OR Never | 69/312<br>22.12%  | Not Applicable OR I have not experienced this | 21/312<br>6.73%  |
| 15           | I cover the expense of my registration and other costs  | Strongly agree OR Always | 95/311<br>30.55% | Agree OR Most of the Time | 85/311<br>27.33% | Neutral OR Sometimes | 66/311<br>21.22% | Disagree OR Not Often | 26/311<br>8.36%  | Strongly disagree OR Never | 28/311<br>9%      | Not Applicable OR I have not                  | 11/311<br>3.54%  |

|    |  |                          |                  |                           |                   |                      |                  |                       |                  |                            |                   |   |                  |
|----|--|--------------------------|------------------|---------------------------|-------------------|----------------------|------------------|-----------------------|------------------|----------------------------|-------------------|---|------------------|
|    | to attend live, in-person continuing education courses.  |                          |                  |                           |                   |                      |                  |                       |                  |                            |                   | experienced this                              |                  |
| 16 | I feel that the amount of money that I spend on attending live, in-person learning experiences is worth what I pay for it.                     | Strongly agree OR Always | 34/312<br>10.9%  | Agree OR Most of the Time | 129/312<br>41.35% | Neutral OR Sometimes | 91/312<br>29.17% | Disagree OR Not Often | 33/312<br>10.58% | Strongly disagree OR Never | 14/312<br>4.49%   | Not Applicable OR I have not experienced this | 11/312<br>3.53%  |
| 17 | I do not attend live, in-person continuing education courses that have any personal expense involved.  | Strongly agree OR Always | 10/309<br>3.24%  | Agree OR Most of the Time | 30/309<br>9.71%   | Neutral OR Sometimes | 44/309<br>14.24% | Disagree OR Not Often | 75/309<br>24.27% | Strongly disagree OR Never | 105/309<br>33.98% | Not Applicable OR I have not experienced this | 45/309<br>14.56% |
| 18 | My employer provides professional time compensation for my attendance at live, in-person continuing education courses (e.g., paid professional | Strongly agree OR Always | 96/313<br>30.67% | Agree OR Most of the Time | 61/313<br>19.44%  | Neutral OR Sometimes | 42/313<br>13.42% | Disagree OR Not Often | 24/313<br>7.67%  | Strongly disagree OR Never | 62/313<br>19.81%  | Not Applicable OR I have not experienced this | 286/313<br>8.95% |

|    |   |                          |                      |                           |                       |                      |                      |                       |                      |                            |                      |   |                      |
|----|---|--------------------------|----------------------|---------------------------|-----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------------|----------------------|---|----------------------|
|    | time off, comp time).   |                          |                      |                           |                       |                      |                      |                       |                      |                            |                      |   |                      |
| 45 | My employer covers the expense of my registration and other costs to attend remote continuing education courses.  | Strongly agree OR Always | 44/<br>312<br>14.1%  | Agree OR Most of the Time | 53/<br>312<br>16.99%  | Neutral OR Sometimes | 56/<br>312<br>17.95% | Disagree OR Not Often | 40/<br>312<br>12.82% | Strongly disagree OR Never | 77/<br>312<br>24.86% | Not Applicable OR I have not experienced this | 41/<br>312<br>13.46% |
| 46 | I cover the expense of my registration and other costs to attend remote continuing education courses.             | Strongly agree OR Always | 113/<br>313<br>36.1% | Agree OR Most of the Time | 83/<br>313<br>26.52%  | Neutral OR Sometimes | 60/<br>313<br>19.17% | Disagree OR Not Often | 20/<br>313<br>6.39%  | Strongly disagree OR Never | 21/<br>313<br>6.17%  | Not Applicable OR I have not experienced this | 16/<br>313<br>5.11%  |
| 47 | I feel that the amount of money that I spend on attending remote learning experiences is worth what I pay for it. | Strongly agree OR Always | 60/<br>312<br>19.23% | Agree OR Most of the Time | 133/<br>312<br>42.63% | Neutral OR Sometimes | 79/<br>312<br>25.32% | Disagree OR Not Often | 17/<br>312<br>5.45%  | Strongly disagree OR Never | 3/<br>312<br>4.49%   | Not Applicable OR I have not experienced this | 20/<br>312<br>6.41%  |

|                      |   |                          |                       |                           |                       |                      |                      |                       |                      |                            |                      |   |                      |
|----------------------|---|--------------------------|-----------------------|---------------------------|-----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------------|----------------------|---|----------------------|
| 48                   | I do not attend remote continuing education courses that have any personal expense involved.  | Strongly agree OR Always | 20/<br>310<br>6.45%   | Agree OR Most of the Time | 28/<br>310<br>9%      | Neutral OR Sometimes | 30/<br>310<br>9.68%  | Disagree OR Not Often | 85/<br>310<br>27.42% | Strongly disagree OR Never | 102/<br>310<br>32.9% | Not Applicable OR I have not experienced this | 45/<br>310<br>14.52% |
| 49                   | My employer provides professional time compensation for my attendance at remote continuing education courses (e.g., paid professional time off, comp time). | Strongly agree OR Always | 43/<br>312<br>13.78%  | Agree OR Most of the Time | 44/<br>312<br>14.1%   | Neutral OR Sometimes | 34/<br>312<br>10.9%  | Disagree OR Not Often | 47/<br>312<br>15.06% | Strongly disagree OR Never | 89/<br>312<br>28.53% | Not Applicable OR I have not experienced this | 55/<br>312<br>17.63% |
| <b>Interactivity</b> |   |                          |                       |                           |                       |                      |                      |                       |                      |                            |                      |   |                      |
| 9                    | I enjoy networking at live, in-person continuing education courses.   | Strongly agree OR Always | 109/<br>313<br>34.82% | Agree OR Most of the Time | 107/<br>313<br>34.19% | Neutral OR Sometimes | 67/<br>313<br>21%    | Disagree OR Not Often | 24/<br>313<br>7.67%  | Strongly disagree OR Never | 3/<br>313<br>0.96%   | Not Applicable OR I have not experienced this | 3/<br>313<br>0.96%   |
| 10                   | Live, in-person courses facilitate a classroom learning   | Strongly agree OR Always | 120/<br>312<br>38.46% | Agree OR Most of the Time | 100/<br>312<br>32%    | Neutral OR Sometimes | 62/<br>312<br>19.87% | Disagree OR Not Often | 20/<br>312<br>6.41%  | Strongly disagree OR Never | 7/<br>312<br>2.24%   | Not Applicable OR I have not                  | 3/<br>312<br>0.96%   |

|    |   |                          |                  |                           |                   |                      |                   |                       |                 |                            |                |   |                |
|----|---|--------------------------|------------------|---------------------------|-------------------|----------------------|-------------------|-----------------------|-----------------|----------------------------|----------------|---|----------------|
|    | environment with other attendees, which is not provided with remote courses.  |                          |                  |                           |                   |                      |                   |                       |                 |                            |                | experienced this                              |                |
| 20 | Activities are incorporated into the presentations given at live, in-person continuing education courses.   | Strongly agree OR Always | 40/312<br>12.82% | Agree OR Most of the Time | 140/312<br>44.87% | Neutral OR Sometimes | 100/312<br>32.05% | Disagree OR Not Often | 22/312<br>7.05% | Strongly disagree OR Never | 5/312<br>1.6%  | Not Applicable OR I have not experienced this | 5/312<br>1.6%  |
| 21 | Presenter demonstrations are given at live, in-person continuing education courses.   | Strongly agree OR Always | 41/313<br>13.1%  | Agree OR Most of the Time | 150/313<br>47.92% | Neutral OR Sometimes | 94/313<br>30.03%  | Disagree OR Not Often | 20/313<br>6.39% | Strongly disagree OR Never | 2/313<br>.64%  | Not Applicable OR I have not experienced this | 6/313<br>1.92% |
| 22 | I experience interactive learning during live, in-person continuing education courses (i.e., I am participating in discussions, asking and answering questions, | Strongly agree OR Always | 77/311<br>24.76% | Agree OR Most of the Time | 132/311<br>42.44% | Neutral OR Sometimes | 77/311<br>24.76%  | Disagree OR Not Often | 18/311<br>5.79% | Strongly disagree OR Never | 5/311<br>1.61% | Not Applicable OR I have not experienced this | 2/311<br>.64%  |

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|    | sharing real-life cases as examples).   |                          |                   |                           |                  |                      |                  |                       |                  |                            |                  |   |                  |
| 25 | I complete the survey given out by presenters or the conference organizers at the conclusion of live, in-person continuing education courses. | Strongly agree OR Always | 213/312<br>68.27% | Agree OR Most of the Time | 80/312<br>25.64% | Neutral OR Sometimes | 10/312<br>3.21%  | Disagree OR Not Often | 2/312<br>.64%    | Strongly disagree OR Never | 2/312<br>.64%    | Not Applicable OR I have not experienced this | 5/312<br>1.6%    |
| 38 | I enjoy networking during remote continuing education courses.  | Strongly agree OR Always | 16/312<br>5.13%   | Agree OR Most of the Time | 19/312<br>6.09%  | Neutral OR Sometimes | 72/312<br>23%    | Disagree OR Not Often | 66/312<br>21.15% | Strongly disagree OR Never | 81/312<br>25.96% | Not Applicable OR I have not experienced this | 58/312<br>18.59% |
| 40 | I gain as much from web chats and webinars where people are learning together as I do attending a live, in-person conference.                 | Strongly agree OR Always | 38/313<br>12.14%  | Agree OR Most of the Time | 69/313<br>22%    | Neutral OR Sometimes | 89/313<br>28.43% | Disagree OR Not Often | 71/313<br>22.68% | Strongly disagree OR Never | 30/313<br>9.58%  | Not Applicable OR I have not experienced this | 16/313<br>5.11%  |



|    |  |                          |                 |                           |                   |                      |                   |                       |                  |                            |                  |   |                 |
|----|--|--------------------------|-----------------|---------------------------|-------------------|----------------------|-------------------|-----------------------|------------------|----------------------------|------------------|---|-----------------|
| 51 | Activities are incorporated into the presentations given at remote continuing education courses.   | Strongly agree OR Always | 11/311<br>3.54% | Agree OR Most of the Time | 68/311<br>21.86%  | Neutral OR Sometimes | 124/311<br>39.87% | Disagree OR Not Often | 58/311<br>18.65% | Strongly disagree OR Never | 35/311<br>11.25% | Not Applicable OR I have not experienced this | 15/311<br>4.82% |
| 52 | Presenter demonstrations are given at remote continuing education courses.   | Strongly agree OR Always | 25/310<br>8.06% | Agree OR Most of the Time | 121/310<br>39.03% | Neutral OR Sometimes | 113/310<br>36.45% | Disagree OR Not Often | 33/310<br>10.65% | Strongly disagree OR Never | 10/310<br>3.23%  | Not Applicable OR I have not experienced this | 8/310<br>2.58%  |
| 53 | I experience interactive learning during remote continuing education courses (i.e., I am participating in discussions, asking and answering questions, sharing real-life cases as examples). | Strongly agree OR Always | 11/309<br>3.56% | Agree OR Most of the Time | 61/309<br>19.74%  | Neutral OR Sometimes | 103/309<br>33.33% | Disagree OR Not Often | 67/309<br>21.68% | Strongly disagree OR Never | 54/309<br>17.48% | Not Applicable OR I have not experienced this | 13/309<br>4.21% |

|                |  |                          |                       |                           |                       |                      |                       |                       |                      |                            |                     |   |                     |
|----------------|--|--------------------------|-----------------------|---------------------------|-----------------------|----------------------|-----------------------|-----------------------|----------------------|----------------------------|---------------------|---|---------------------|
| 56             | I complete the survey given out by presenters or the conference organizers at the conclusion of remote continuing education courses. | Strongly agree OR Always | 176/<br>312<br>56.41% | Agree OR Most of the Time | 82/<br>312<br>26.28%  | Neutral OR Sometimes | 22/<br>312<br>7.05%   | Disagree OR Not Often | 14/<br>312<br>4.49%  | Strongly disagree OR Never | 2/<br>312<br>.64%   | Not Applicable OR I have not experienced this | 16/<br>312<br>5.13% |
| <b>Quality</b> |  |                          |                       |                           |                       |                      |                       |                       |                      |                            |                     |   |                     |
| 10             | Live, in-person courses facilitate a classroom learning environment with other attendees, which is not provided with remote courses. | Strongly agree OR Always | 120/<br>312<br>38.46% | Agree OR Most of the Time | 100/<br>312<br>32%    | Neutral OR Sometimes | 62/<br>312<br>19.87%  | Disagree OR Not Often | 20/<br>312<br>6.41%  | Strongly disagree OR Never | 7/<br>312<br>2.24%  | Not Applicable OR I have not experienced this | 3/<br>312<br>0.96%  |
| 12             | The best speakers are on the programs at live, in-person courses.  | Strongly agree OR Always | 26/<br>312<br>8.33%   | Agree OR Most of the Time | 73/<br>312<br>23.4%   | Neutral OR Sometimes | 110/<br>312<br>35.26% | Disagree OR Not Often | 68/<br>312<br>21.79% | Strongly disagree OR Never | 29/<br>312<br>9.29% | Not Applicable OR I have not experienced this | 6/<br>312<br>1.92%  |
| 16             | I feel that the amount of money that I spend on attending live, in-person  | Strongly agree OR Always | 34/<br>312<br>10.9%   | Agree OR Most of the Time | 129/<br>312<br>41.35% | Neutral OR Sometimes | 91/<br>312<br>29.17%  | Disagree OR Not Often | 33/<br>312<br>10.58% | Strongly disagree OR Never | 14/<br>312<br>4.49% | Not Applicable OR I have not experienced this | 11/<br>312<br>3.53% |

|    |   |                          |                      |                           |                       |                      |                      |                       |                     |                            |                    |   |                    |
|----|---|--------------------------|----------------------|---------------------------|-----------------------|----------------------|----------------------|-----------------------|---------------------|----------------------------|--------------------|---|--------------------|
|    | learning experiences is worth what I pay for it.  |                          |                      |                           |                       |                      |                      |                       |                     |                            |                    |   |                    |
| 22 | I experience interactive learning during live, in-person continuing education courses (i.e., I am participating in discussions, asking and answering questions, sharing real-life cases as examples). | Strongly agree OR Always | 77/<br>311<br>24.76% | Agree OR Most of the Time | 132/<br>311<br>42.44% | Neutral OR Sometimes | 77/<br>311<br>24.76% | Disagree OR Not Often | 18/<br>311<br>5.79% | Strongly disagree OR Never | 5/<br>311<br>1.61% | Not Applicable OR I have not experienced this | 2/<br>311<br>.64%  |
| 23 | I am satisfied with the quality of the instructional and educational resources provided to me at live, in-person continuing education courses.  | Strongly agree OR Always | 44/<br>310<br>14.19% | Agree OR Most of the Time | 194/<br>310<br>62.58% | Neutral OR Sometimes | 57/<br>310<br>18.39% | Disagree OR Not Often | 8/<br>310<br>2.58%  | Strongly disagree OR Never | 4/<br>310<br>1.29% | Not Applicable OR I have not experienced this | 3/<br>310<br>0.97% |

|    |   |                          |                       |                           |                       |                      |                       |                       |                      |                            |                     |   |                     |
|----|---|--------------------------|-----------------------|---------------------------|-----------------------|----------------------|-----------------------|-----------------------|----------------------|----------------------------|---------------------|---|---------------------|
| 24 | I am satisfied with the challenging and relevant content presented at live, in-person continuing education courses. | Strongly agree OR Always | 40/<br>311<br>12.86%  | Agree OR Most of the Time | 186/<br>311<br>59.81% | Neutral OR Sometimes | 67/<br>311<br>21.54%  | Disagree OR Not Often | 9/<br>311<br>2.89%   | Strongly disagree OR Never | 6/<br>311<br>1.93%  | Not Applicable OR I have not experienced this | 3/<br>311<br>.96%   |
| 26 | I read the learning outcomes for the course before I attend live, in-person continuing education courses.           | Strongly agree OR Always | 154/<br>310<br>49.68% | Agree OR Most of the Time | 114/<br>310<br>36.77% | Neutral OR Sometimes | 22/<br>310<br>7.1%    | Disagree OR Not Often | 11/<br>310<br>3.55%  | Strongly disagree OR Never | 7/<br>310<br>2.26%  | Not Applicable OR I have not experienced this | 2/<br>310<br>.65%   |
| 39 | The best speakers are on the programs at remote courses.  | Strongly agree OR Always | 13/<br>312<br>4.17%   | Agree OR Most of the Time | 57/<br>312<br>18.27%  | Neutral OR Sometimes | 150/<br>312<br>48.08% | Disagree OR Not Often | 53/<br>312<br>16.99% | Strongly disagree OR Never | 19/<br>312<br>6.09% | Not Applicable OR I have not experienced this | 20/<br>312<br>6.41% |
| 47 | I feel that the amount of money that I spend on attending remote learning experiences is worth what I pay for it.   | Strongly agree OR Always | 60/<br>312<br>19.23%  | Agree OR Most of the Time | 133/<br>312<br>42.63% | Neutral OR Sometimes | 79/<br>312<br>25.32%  | Disagree OR Not Often | 17/<br>312<br>5.45%  | Strongly disagree OR Never | 3/<br>312<br>4.49%  | Not Applicable OR I have not experienced this | 20/<br>312<br>6.41% |

|    |  |                          |                  |                           |                  |                      |                   |                       |                  |                            |                  |   |                 |
|----|--|--------------------------|------------------|---------------------------|------------------|----------------------|-------------------|-----------------------|------------------|----------------------------|------------------|---|-----------------|
| 53 | I experience interactive learning during remote continuing education courses (i.e., I am participating in discussions, asking and answering questions, sharing real-life cases as examples). | Strongly agree OR Always | 11/309<br>3.56%  | Agree OR Most of the Time | 61/309<br>19.74% | Neutral OR Sometimes | 103/309<br>33.33% | Disagree OR Not Often | 67/309<br>21.68% | Strongly disagree OR Never | 54/309<br>17.48% | Not Applicable OR I have not experienced this | 13/309<br>4.21% |
| 54 | I am satisfied with the quality of the instructional and educational resources provided to me at remote continuing education courses.  | Strongly agree OR Always | 53/312<br>16.99% | Agree OR Most of the Time | 156/312<br>50%   | Neutral OR Sometimes | 71/312<br>22.76%  | Disagree OR Not Often | 19/312<br>6.09%  | Strongly disagree OR Never | 5/312<br>1.6%    | Not Applicable OR I have not experienced this | 8/312<br>2.56%  |
| 55 | I am satisfied with the challenging and relevant content presented at remote continuing  | Strongly agree OR Always | 54/311<br>16.99% | Agree OR Most of the Time | 153/311<br>49.2% | Neutral OR Sometimes | 75/311<br>24.12%  | Disagree OR Not Often | 17/311<br>5.47%  | Strongly disagree OR Never | 5/311<br>1.61%   | Not Applicable OR I have not experienced this | 7/311<br>2.25%  |

|                    |   |                          |                   |                           |                   |                      |                   |                       |                  |                            |                 |   |                 |
|--------------------|---|--------------------------|-------------------|---------------------------|-------------------|----------------------|-------------------|-----------------------|------------------|----------------------------|-----------------|---|-----------------|
|                    | education courses.  |                          |                   |                           |                   |                      |                   |                       |                  |                            |                 |   |                 |
| 57                 | I read the learning outcomes for the course before I attend remote continuing education courses.  | Strongly agree OR Always | 151/313<br>48.24% | Agree OR Most of the Time | 115/313<br>36.74% | Neutral OR Sometimes | 26/313<br>8.31%   | Disagree OR Not Often | 7/313<br>2.24%   | Strongly disagree OR Never | 8/313<br>2.56%  | Not Applicable OR I have not experienced this | 6/313<br>1.92%  |
| <b>Preferences</b> |   |                          |                   |                           |                   |                      |                   |                       |                  |                            |                 |   |                 |
| 12                 | The best speakers are on the programs at live, in-person courses.   | Strongly agree OR Always | 26/312<br>8.33%   | Agree OR Most of the Time | 73/312<br>23.4%   | Neutral OR Sometimes | 110/312<br>35.26% | Disagree OR Not Often | 68/312<br>21.79% | Strongly disagree OR Never | 29/312<br>9.29% | Not Applicable OR I have not experienced this | 6/312<br>1.92%  |
| 13                 | Live, in-person courses are at convenient geographic locations (locally offered in my area or offered in areas to which I can easily travel). | Strongly agree OR Always | 42/312<br>13.46%  | Agree OR Most of the Time | 74/312<br>23.7%   | Neutral OR Sometimes | 97/312<br>31%     | Disagree OR Not Often | 65/312<br>20.83% | Strongly disagree OR Never | 31/312<br>9.94% | Not Applicable OR I have not experienced this | 3/312<br>0.96%  |
| 39                 | The best speakers are on the programs at remote courses.  | Strongly agree OR Always | 13/312<br>4.17%   | Agree OR Most of the Time | 57/312<br>18.27%  | Neutral OR Sometimes | 150/312<br>48.08% | Disagree OR Not Often | 53/312<br>16.99% | Strongly disagree OR Never | 19/312<br>6.09% | Not Applicable OR I have not experienced this | 20/312<br>6.41% |

|                 |  |  |                       |  |                       |                            |                       |                       |                   |                            |                   |   |                   |
|-----------------|--|--|-----------------------|--|-----------------------|----------------------------|-----------------------|-----------------------|-------------------|----------------------------|-------------------|---|-------------------|
| 66              | Choose ONE response. My preferred medium of instruction for continuing education courses is:   | Live, in-person, as in attending a conference , workshop, or seminar or workplace in-service | 170/<br>316<br>53.8%  | Remote, as in ONLINE webinar, ONLINE continuing education course, video/DVD , CD-ROM | 79/<br>316<br>25%     | I do not have a preference | 67/<br>316<br>21.2%   |                       |                   |                            |                   |   |                   |
| 67              | Choose ONE response. I transfer learning from continuing education courses to my practice more when I have participated in:                              | Live, in-person, as in attending a conference , workshop, or seminar or workplace in-service | 135/<br>316<br>42.72% | Remote, as in ONLINE webinar, ONLINE continuing education course, video/DVD , CD-ROM | 52/<br>316<br>16.46%  | I do not have a preference | 129/<br>316<br>40.82% |                       |                   |                            |                   |   |                   |
| <b>Transfer</b> |  |  |                       |  |                       |                            |                       |                       |                   |                            |                   |   |                   |
| 27              | I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of live, in-person continuing education courses. | Strongly agree OR Always   | 127/<br>311<br>40.84% | Agree OR Most of the Time  | 149/<br>311<br>47.91% | Neutral OR Sometimes       | 28/<br>311<br>9%      | Disagree OR Not Often | 3/<br>311<br>.96% | Strongly disagree OR Never | 1/<br>311<br>.32% | Not Applicable OR I have not experienced this | 3/<br>311<br>.96% |

|    |  |                          |                       |                           |                       |                      |                      |                       |                   |                            |                 |   |                    |
|----|--|--------------------------|-----------------------|---------------------------|-----------------------|----------------------|----------------------|-----------------------|-------------------|----------------------------|-----------------|---|--------------------|
| 28 | I have applied the knowledge that I learned from live, in-person continuing education courses to my practice settings.   | Strongly agree OR Always | 113/<br>311<br>36.33% | Agree OR Most of the Time | 159/<br>311<br>51.13% | Neutral OR Sometimes | 36/<br>311<br>11.58% | Disagree OR Not Often | 1/<br>311<br>.32% | Strongly disagree OR Never | 0/<br>311<br>0% | Not Applicable OR I have not experienced this | 2/<br>311<br>.64%  |
| 29 | I have applied the skills that I learned from live, in-person continuing education courses to my practice settings.      | Strongly agree OR Always | 111/<br>311<br>35.69% | Agree OR Most of the Time | 160/<br>311<br>51.45% | Neutral OR Sometimes | 38/<br>311<br>12.22% | Disagree OR Not Often | 0/<br>311<br>0%   | Strongly disagree OR Never | 0/<br>311<br>0% | Not Applicable OR I have not experienced this | 2/<br>311<br>.64%  |
| 30 | I have applied the attitudes that I developed from live, in-person continuing education courses to my practice settings. | Strongly agree OR Always | 77/<br>311<br>24.76%  | Agree OR Most of the Time | 136/<br>311<br>43.73% | Neutral OR Sometimes | 89/<br>311<br>28.62% | Disagree OR Not Often | 3/<br>311<br>.96% | Strongly disagree OR Never | 0/<br>311<br>0% | Not Applicable OR I have not experienced this | 6/<br>311<br>1.93% |



|    |   |                          |                  |                           |                   |                      |                  |                       |                 |                            |                 |   |                |
|----|---|--------------------------|------------------|---------------------------|-------------------|----------------------|------------------|-----------------------|-----------------|----------------------------|-----------------|---|----------------|
| 31 | I transfer learning because I later make reference to the resources I obtained from the live, in-person continuing education courses. | Strongly agree OR Always | 90/314<br>28.66% | Agree OR Most of the Time | 158/314<br>50.32% | Neutral OR Sometimes | 56/314<br>17.83% | Disagree OR Not Often | 6/314<br>1.91%  | Strongly disagree OR Never | 1/314<br>.32%   | Not Applicable OR I have not experienced this | 3/314<br>.96%  |
| 32 | I transfer learning because the information is presented explicitly at live, in-person continuing education courses.                  | Strongly agree OR Always | 38/311<br>12.22% | Agree OR Most of the Time | 147/311<br>47.27% | Neutral OR Sometimes | 90/311<br>28.94% | Disagree OR Not Often | 22/311<br>7.07% | Strongly disagree OR Never | 10/311<br>3.22% | Not Applicable OR I have not experienced this | 4/311<br>1.29% |
| 33 | I transfer learning because of the direct instruction received from case histories at live, in-person continuing education courses.   | Strongly agree OR Always | 43/313<br>13.74% | Agree OR Most of the Time | 139/313<br>44.41% | Neutral OR Sometimes | 99/313<br>31.63% | Disagree OR Not Often | 19/313<br>6.07% | Strongly disagree OR Never | 9/313<br>2.88%  | Not Applicable OR I have not experienced this | 4/313<br>1.28% |

|    |   |                          |                      |                           |                       |                      |                      |                       |                    |                            |                    |   |                    |
|----|---|--------------------------|----------------------|---------------------------|-----------------------|----------------------|----------------------|-----------------------|--------------------|----------------------------|--------------------|---|--------------------|
| 58 | I transfer learning because I self-reflect on my knowledge and/or my skill set following the completion of remote continuing education courses. | Strongly agree OR Always | 96/<br>311<br>30.87% | Agree OR Most of the Time | 153/<br>311<br>49.2%  | Neutral OR Sometimes | 47/<br>311<br>15.11% | Disagree OR Not Often | 6/<br>311<br>1.93% | Strongly disagree OR Never | 3/<br>311<br>.96%  | Not Applicable OR I have not experienced this | 6/<br>311<br>1.93% |
| 59 | I have applied the knowledge that I learned from remote continuing education courses to my practice settings.                                   | Strongly agree OR Always | 94/<br>311<br>30.23% | Agree OR Most of the Time | 157/<br>311<br>50.48% | Neutral OR Sometimes | 48/<br>311<br>15.43% | Disagree OR Not Often | 3/<br>311<br>.96%  | Strongly disagree OR Never | 2/<br>311<br>.64%  | Not Applicable OR I have not experienced this | 7/<br>311<br>2.25% |
| 60 | I have applied the skills that I learned from remote continuing education courses to my practice settings.                                      | Strongly agree OR Always | 88/<br>312<br>28.2%  | Agree OR Most of the Time | 156/<br>312<br>50%    | Neutral OR Sometimes | 53/<br>312<br>16.99% | Disagree OR Not Often | 7/<br>312<br>2.24% | Strongly disagree OR Never | 2/<br>312<br>.64%  | Not Applicable OR I have not experienced this | 6/<br>312<br>1.92% |
| 61 | I have applied the attitudes that I developed from remote continuing  | Strongly agree OR Always | 61/<br>309<br>19.76% | Agree OR Most of the Time | 131/<br>309<br>42.39% | Neutral OR Sometimes | 90/<br>309<br>29.13% | Disagree OR Not Often | 14/<br>309<br>4.5% | Strongly disagree OR Never | 4/<br>309<br>1.29% | Not Applicable OR I have not experienced this | 9/<br>309<br>2.91% |

|    |  |                          |                  |                           |                   |                      |                   |                       |                 |                            |                 |   |                |
|----|--|--------------------------|------------------|---------------------------|-------------------|----------------------|-------------------|-----------------------|-----------------|----------------------------|-----------------|---|----------------|
|    | education courses to my practice settings.   |                          |                  |                           |                   |                      |                   |                       |                 |                            |                 |   |                |
| 62 | I transfer learning because I later make reference to the resources I obtained from the remote continuing education courses. | Strongly agree OR Always | 75/313<br>23.96% | Agree OR Most of the Time | 147/313<br>46.96% | Neutral OR Sometimes | 71/313<br>22.68%  | Disagree OR Not Often | 9/313<br>2.88%  | Strongly disagree OR Never | 4/313<br>1.28%  | Not Applicable OR I have not experienced this | 7/313<br>2.24% |
| 63 | I transfer learning because the information is presented explicitly at remote continuing education courses.                  | Strongly agree OR Always | 45/309<br>14.56% | Agree OR Most of the Time | 139/309<br>44.98% | Neutral OR Sometimes | 89/309<br>28.8%   | Disagree OR Not Often | 18/309<br>5.83% | Strongly disagree OR Never | 10/309<br>3.24% | Not Applicable OR I have not experienced this | 8/309<br>2.59% |
| 64 | I transfer learning because of the direct instruction received from case histories at remote continuing education courses.   | Strongly agree OR Always | 49/312<br>15.71% | Agree OR Most of the Time | 114/312<br>36.54% | Neutral OR Sometimes | 111/312<br>35.58% | Disagree OR Not Often | 18/312<br>5.77% | Strongly disagree OR Never | 12/312<br>3.85% | Not Applicable OR I have not experienced this | 8/312<br>2.56% |

|    |   |   |                       |   |                      |                            |                       |                       |                     |                            |                    |   |                     |
|----|---|---|-----------------------|---|----------------------|----------------------------|-----------------------|-----------------------|---------------------|----------------------------|--------------------|---|---------------------|
| 65 | Remote courses allow me to replay the information, which helps me carry it over.  | Strongly agree OR Always  | 89/<br>311<br>28.62%  | Agree OR Most of the Time   | 99/<br>311<br>31.83% | Neutral OR Sometimes       | 80/<br>311<br>25.72%  | Disagree OR Not Often | 16/<br>311<br>5.14% | Strongly disagree OR Never | 14/<br>311<br>4.5% | Not Applicable OR I have not experienced this | 13/<br>311<br>4.18% |
| 67 | Choose ONE response. I transfer learning from continuing education courses to my practice more when I have participated in: | Live, in-person, as in attending a conference, workshop, or seminar or workplace in-service | 135/<br>316<br>42.72% | Remote, as in ONLINE webinar, ONLINE continuing education course, video/DVD, CD-ROM | 52/<br>316<br>16.46% | I do not have a preference | 129/<br>316<br>40.82% |                       |                     |                            |                    |   |                     |