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Factors Related to the Selection of a Service Delivery Model: A Survey of School Speech-Language Pathologists

Meredith Ann Egeland
Minnesota State University Moorhead, egelandme@mnstate.edu

Factors Related to the Selection of a Service Delivery Model:

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Thesis Abstract

This research explored various factors school-based speech-language pathologists (SLPs) may consider when deciding which service delivery models to implement. An online cross-sectional quantitative survey was sent, nationwide, to currently employed school-based SLPs. A second round of surveys was provided to SLPs at the American Speech-Language-Hearing Association Convention. A third round of surveys was submitted to the Special Interest Group (SIG) 16: School-Based Issues. The survey was divided into three parts: Demographics, Caseload, and Workplace Characteristics. Responses were collected and analyzed using descriptive analysis to identify attitudes and current practices.

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Chapter One

Introduction

Each year, classroom-based curriculum and supportive services change “due to numerous legislative, regulatory, societal, and professional factors” (American Speech-Language-Hearing Association [ASHA], 2000, p. 250). These changes necessitate clarifications, expansions, and modifications to school-based speech-language pathologists’ (SLPs) current roles and responsibilities (ASHA, 2010).

An official professional issues statement provided by ASHA in 2010 was set in place to support, guide, and define the roles outlining the responsibilities of the school-based SLP. According to this document, SLPs working in a school setting have four crucial roles and responsibilities: critical roles, range of duties, collaboration, and leadership. However, according to Duchan (2010), the policies and procedures that guide SLPs tend to be predetermined and/or limited. The range of an SLP's responsibilities is to "help students meet the performance standards of a particular school district and state" (ASHA, 2010, Roles and responsibilities, para. 3). Further, ASHA (2010) recommended school-based SLP’s consider the following categories: realignment of role and responsibility, reasonable workloads, professional preparation, and lifelong learning. The ASHA policy statement was defined as:

> *"This policy statement serves as a guide to SLPs as well as policymakers and administrators in shaping the practice of speech-language pathology in schools. It also serves to guide pre-service and in-service educators in designing and conducting appropriate coursework and educational experiences for SLPs who*

> *will be or who are working in schools" (ASHA, 2010, Roles and responsibilities section, para. 7).*

All of these factors affect a school-based SLPs choice of service delivery model. The purpose of this study was to examine those variables, namely, workload, caseload, role, and collaboration with other school-based service providers. Specifically, the results provide insight into contributing factors that affect the decision-making process. The study attempted to answer the following research question:

- What variables (i.e., demographics, primary disorder, caseload size, or geographic location) have a significant impact on a school-based SLP's choice of service delivery model?

The hypothesis in this study was that SLP's caseload would be the most influential factor when determining which service delivery model to provide; more specifically, that a student's disability and severity of needs would be the most significant influence on the model of service delivery. The researcher further hypothesized that because general education teacher level of acceptance and time for collaboration is a key to being successful, the SLP's previous experience and exposure to different service delivery model types has an impact on the level of confidence the SLP has when sharing the model background knowledge.

Chapter Two

Review of the Literature

School-based speech-language and hearing services have changed dramatically from the 1870s to 1920s to current day practices (Duchan, 2010). A review of historical documents by Duchan (2010) suggested that a majority of the major cities in the United States hired their first speech clinician between the years of 1895 to 1921. Around 1895, a training institution created by Dr. Edward Hartwell was introduced for local teachers to engage in an experimental “stutterers and stammerers” class (Osgood, 2000, p.161). However, this opportunity was not intended to be permanent, lasting only a few years. It was not until 1912, in Boston Massachusetts, that a public school began to train and hire personnel to serve children with speech problems (Duchan, 2010). Other speech programs were also established to support speech specialists across the country, including “Boston, NY, Cincinnati, OH, Milwaukee, WI, Minneapolis, MN, and Pittsburgh, PA, in 1912; Rochester, NY, and St. Paul, MN, in 1913; San Francisco, CA, in 1916; Cleveland, OH, in 1918; and Los Angeles, CA, in 1921” (Duchan, 2010, p. 153).

With the creation of these training programs, school administrators found themselves conflicted due to the overlap between hiring personnel to serve students who had speech problems and the move towards certified speech specialists (Duchan, 2010). Teachers without prior knowledge or speech expertise were often employed to carry out these speech services. To address this specific need, Walter Swift wrote a book called “*Speech Defects in School Children and How to Treat Them”* to assist teacher training (Swift, 1918). According to Duchan (2010), in 1915, Robert McDonald,

a professor of education at Bates College in Lewiston, ME, defined the three main service delivery models for speech therapy that were currently being used. These service delivery models were as follows: boarding school, itinerant therapy, and self-contained classes.

Of those three service delivery models, only one is in clinical practice today, although it has undergone a slight description and name change. Duchan (2010) reported that the itinerant therapy model, known today as the 'Traditional Model,' occurs when the instructor engages with the student two or three times per week, in accordance to the severity of the speech defect and the total case number of the teacher. A separate room outside of the classroom setting was designed to provide unique environment to meet the students' individual needs (Duchan, 2010). According to the American Speech-Language-Hearing Association (ASHA), "in the most common service delivery method, speech-language pathologists (SLPs) work independently as they pull students out of their regular classrooms for individual or small-group treatment sessions" (ASHA, 1991, Introduction section, para. 1).

An exploration of how the field of Speech-Language Pathology has grown and changed significantly throughout the past couple of decades reveals how the first clinician had to determine the knowledge needed, find ways to gain expertise, identify service criteria, and then create ways to serve and provide therapy for students with speech problems. Today's clinicians have the Scope of Practice in Speech-Language Pathology (2007). This official policy document written by ASHA defines the breadth of practice within the profession of Speech-Language Pathology. Included is a statement of purpose, a framework for research and clinical practice, a list of needed qualifications

for the SLP, and a description of professional roles, activities, and practice settings. Today, in order to provide these clinical services, an SLP is required to obtain a master's degree in Speech-Language Pathology (CCC-SLP) from a university accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) (ASHA, 2007).

SLPs are professionals who provide a variety of services for students to promote efficient and effective outcomes within the academic setting. School-based SLPs work across all levels (i.e., early intervention, pre-kindergarten, elementary, middle, junior high, and high school) serving a range of disorder types (e.g., language, articulation, fluency, voice). Along with their many critical roles, SLPs work in collaboration with other professionals to meet the needs of each student on their caseload (ASHA, 2010). The next sections will provide information regarding SLP partnership and collaboration with other professionals.

Partnership with Other Professionals

Working in partnership with other professionals who have their unique perspectives and skills is essential. It is also essential SLPs collaborate with general education teachers, special education teachers, the principal, parents, and other school professionals to provide the best environment to fit their students' unique needs (ASHA, 2016). Incorporating cooperative partnerships helps ensure that the caseload size does not negatively affect the SLPs ability to meet the needs of the students on their caseload (ASHA, 2002). SLPs may also collaborate with universities within the surrounding area and agencies within the community to promote personal responsibility and ownership (ASHA, 2010).

Archibald (2017) explained the interconnectedness of the relationship between educators and SLPs. Each professional possesses different, but complementary skills and knowledge. These skills aid in the establishment of essential collaborations. However, to achieve these collaborations, educators and SLPs must respect each other's roles and understand the expertise of one another to create an effective partnership (Archibald, 2017). Throneburg, Calvert, Sturm, Paramboukas, and Paul (2000) also stated that if educators lack resources, it becomes more challenging to plan and have sufficient time to carry out team teaching.

For some school-based SLPs, collaboration is not always feasible. Workloads, mandatory duties (e.g., report writing, meetings), and schedules that conflict with those of other professionals often forms barriers for ongoing collaboration. Further, Brandel and Loeb (2011) found that "workload size, caseload size, administrative support, and the IEP team can all be components of the workplace that can influence an SLPs service delivery recommendation" (p. 463). This can create ethical dilemmas according to ASHA's Code of Ethics, Rule A of Principle IV (2016) which stated,

> *"Individuals shall work collaboratively, when appropriate, with members of one's profession and/or members of other professions to deliver the highest quality of care" (ASHA, 2016, Principle of Ethics IV, section A, para. 1).*

Caseload and Workload

According to the Workload Analysis Approach for Establishing Speech-Language Caseload Standards in the School: Position Statement (2002), the term 'caseload' referred to "the number of students with Individualized Education Programs (IEPs) or Individualized Family Service Plans (IFSPs) school SLPs serve through direct and/or

indirect service delivery options" (ASHA, 2002, Overview section, para. 1). However, a specific caseload number alone does not take into account the different supports, accommodations, nor the severity of each student.

The ASHA School Survey (2018) reported the average SLP caseload size to be approximately 48 students. The largest median caseload by state was in Indiana (i.e., 76), and the smallest caseload was in New York (i.e., 31) (ASHA, 2018). The lowest median caseload by facility was in special day/residential schools (i.e., 27) and the highest was in elementary schools (i.e., 50) (ASHA, 2018). A typical caseload included the following areas of intervention: language disorders: semantics, morphology, syntax (i.e., 91%), autism spectrum disorder (i.e., 90%), speech sound disorders (i.e., 90%), and language disorders: pragmatic/social communication (i.e., 85%) (ASHA, 2018). Because of the variability in caseload composition, ASHA encouraged assignment of SLPs based on workload rather than caseload and no longer recommends a caseload number due to insufficient research (ASHA, n.d.).

ASHA referred to ‘workload’ as “all activities required and performed by school-based SLPs” (ASHA, n.d., Overview section, para. 3). The SLPs’ workload may include making accommodations to students’ education programs, facilitating implementation of best practices for speech-language services, and ensuring compliance with the Individuals with Disabilities Education Improvement Act (IDEA) (IDEA, 2004) and other mandates (ASHA, 2002).

IDEA also mandated that services be provided in the least restrictive environment and/or most natural setting (IDEA, 2004). ASHA’s position statement (1996) listed contributing factors (i.e., age, disability, culture, academics, etc.) that

addressed how to determine an individual's needs. An evidence-based systematic review of peer-reviewed articles was published in 2010 that addressed the effect of service delivery models on speech-language intervention for elementary school-age students (Cirrin et al., 2010). The findings indicated the following:

> *"Lacking adequate research-based evidence, clinicians must rely on reason-based practice and their own data until more data become available. School-based SLPs should select service models carefully, monitor students' progress on a regular and frequent basis, and validate the effectiveness of the intervention program for each student on their caseloads" (p. 250).*

The next sections will provide definitions and additional information about the service delivery models from which SLPs can choose.

Service Delivery Models

The term 'service delivery' has been defined as "a dynamic process whereby changes are made to treatment setting (e.g., classroom, therapy room), format (e.g., individual, group), intensity (e.g., duration spent in each session), frequency (e.g., the number of treatment sessions over a period of time), and duration (e.g., length of treatment received)" (ASHA, n.d., para. 2.). There are multiple school-based service delivery models that an SLP may consider when reviewing current students on their caseload. ASHA stated that SLPs have the responsibility to select the most appropriate service delivery using evidence-based decision making (ASHA, n.d.). According to ASHA's *Caseload and Workload* document, (n.d.), there are five school-based SLP service delivery options:

> "*Pull-Out* (i.e., traditional): Direct services are provided in a location outside the general education classroom, typically in the speech-language pathology treatment room. *Classroom Based* (i.e., inclusive): Direct services are provided within the general education setting, using one-on-one, small-group, or large-group models as well as co-teaching and/or co-treatment. *Community-Based*: Direct or indirect services are provided within a community setting (e.g., in the context of transition activities, job coaching, or home-based services). *Combined Service Delivery Models*: These models use more than one of the options listed above. *Service Delivery in Nonacademic and Extracurricular Settings*: Services are provided within the context of clubs, playground activities, lunchroom, art class, and so forth" (ASHA, n.d., Key issues; service delivery section para. 1).

The choice of service delivery model is a complex one. According to a school-based SLP survey conducted by Brandel and Loeb (2011), several outside factors need to be considered (e.g., caseload size, graduate training experience) when determining a service delivery model. McFarland et al. (2018) reported that "in 2015-2016, the number of students ages 3-21 receiving special education services was 6.7 million, or 13 percent of all public-school students" (McFarland et al., 2018, p. 2). The U.S. Department of Education (2017) added, "Among students receiving special education services, 17.3 percent were students with speech or language impairments" (U.S. Department of Education, 2017, Fewer students section, para. 3). The next sections will provide definitions and additional information about the specific service delivery models from which SLPs can choose.

The Traditional Model

The traditional “pull-out” service delivery model is the most common service delivery model. The ASHA School Survey (2016) reported that SLPs provide the traditional “pullout” service delivery model 18 to 19 hours each week within the school setting.

Typically, a traditional service delivery model involves the SLP providing speech-language services to a student either in a group or individually on a weekly basis. The setting for this model is outside of the regular education classroom in either the speech-language resource room, special education room, hallway, or other delegated area for the student to receive direct services (ASHA, 2016). The traditional weekly schedule involves the student receiving services at the same time/day(s) every week (ASHA, n.d.). The duration of time spent with the SLP is approximately twice a week for 30 minutes each day (Mullen & Schooling, 2010).

There are many benefits to implementing this model. The traditional model allows the SLP to control the environment setting, thus allowing for fewer distractions and more one-on-one attention gained from the student. The materials prepared by the SLP can then become more individualized to the student and their specific needs (Brandel & Loeb, 2011).

However, the traditional model does have limitations including that the SLP is commonly unfamiliar and unaware of the students' academic successes and failures (Brandel & Loeb, 2011). This model also does not allow for successful integration, carryover, or classroom application. Also at issue, with the use of traditional models, is that the Individuals with Disabilities Education Act (IDEA) stated that students have the

right to be educated with their non-disabled peers in the least restrictive environment. Therefore, additional supports and/or modifications may need to be provided by the school district to follow this act (IDEA, 2004). The specific necessary supports and/or modifications needed for students who have special needs can be determined when teams meet to develop and discuss each Individualized Education Plan (IEP).

The Inclusive Model

The inclusive model is based on general education teacher collaboration with the SLP. This model is further divided into a variety of in-class models to support specific student needs. Students who have learning disabilities are taught in the regular education classroom for more than 90% of their day (ASHA, 1991). The ASHA School Survey (2016) reported that SLPs provide direct classroom-based intervention four to five hours each week within the school setting. As students participate academically with their peers, they develop positive self-esteem and social skills when provided appropriate supports (ASHA, 1996). The School-Based Service Delivery in Speech-Language Pathology (ASHA, n.d.) practice portals provided six in-class models for SLPs to implement based on assistance and supports when targeting students' goals.

> "The *supportive teaching* model is a combination of pullout services and direct teaching within a general education classroom. A *complementary teaching* model involves the general education teacher conducting formal teaching, and the SLP provides extra support to assist in work completion and understanding made by the student. *Station teaching* occurs when the general education teacher and the SLP divide the curriculum lesson into stations or learning centers for the class to rotate through. These stations are planned to fit the ability level of the students.

> The *parallel teaching* model involves the same lesson being taught simultaneously by the general education teacher and the SLP within different groups. The SLPs' content contains additional modifications and/or supports, allowing for a slower pace, therefore, ensuring content mastery. The *team teaching* model incorporates separate lesson plans created by the general education teacher and SLP to combine instruction and teach the whole class. Use of this model allows students to participate and get an understanding of both professionals' expertise. A *supplemental teaching* model occurs when one person (e.g., usually general education teacher) presents the lesson in a standard format while the other person (e.g., usually the SLP) adapts the lesson" (ASHA, n.d., Integrated/in-class services section, para 2).

Common limitations identified in the literature with the use of this model include scheduling conflicts between the SLP and the classroom teacher when effectively planning and collaborating to implement goals from a student's IEP. It was reported that the SLP might tend to take on a more paraprofessional role within the general education classroom than a specialized service (Elksnin & Capilouto, 1994). This occurs when the teacher's academic curriculum and the speech-language goals are not synonymous, creating less individualization. It was also suggested in the literature that an SLP's work experience, self-doubt, and lack of training to implement an inclusive model is a deciding factor when determining which service delivery model to use (Elksnin & Capilouto, 1994).

Elksnin and Capilouto (1994) reported that the most common advantage of this service delivery model was the speech and language skills carryover provided by the

SLP. When the SLP provided instruction in the regular classroom, it increased language exposure to the entire class. The inclusive model also allows the SLP to serve more than one student within their natural environment (i.e., general education classroom), thus enhancing student learning due to the smaller student to teacher ratio (ASHA, 1996). Students reported not feeling singled out when leaving the classroom, therefore, creating fewer distractions. By having the SLP in the classroom, the general education teacher is exposed to the specialized role of the SLP, which allows for consistent implementation throughout the academic day (Elksnin & Capilouto, 1994).

Archibald (2017) reported on how the use of differentiated instruction (i.e., instruction that meets individual needs within the classroom by providing manipulatives, varying readability levels, and creating choice in the assignment) has increased in the classroom setting. However, educational teams and curriculums may differ in nature and functions across school settings. Therefore, the IEP team should agree upon delivery location, duration of services, and who will provide the agreed-upon services (IDEA, 2004). ASHA (2000) further stated, “a student’s achievement is enhanced when SLPs and school administrations cooperatively team up for effective planning, coordination, and implementation of speech-language programs as part of the total education system” (p. 291).

Issues

A survey consisting of school-based SLPs, by Siegel, Maddox, Ogletree, and Westling (2010), found that best practice services may not always be provided to individuals with severe disabilities. One reason for that may be that an SLPs professional scope of practice within the school setting seems to broaden each year

while professional preparation struggles to keep pace (Siegel et al., 2010). Siegel et al. (2010) reported that there are, "significant gaps in the value and implementation of the quality indicators by SLPs working in school settings" (p. 156).

There is minimal evidence-based research related to school-based SLP intensity, duration, and service delivery. According to an evidence-based systematic review conducted by Cirrin et al. (2010), there were a limited number of studies available to assist SLPs in making a recommendation on service delivery models. Cirrin et al. (2010) also suggested that SLP's trust their clinical-based judgments when gathering data to guide decisions based on service delivery. This systematic review included literature from the past 30 years; however, most studies included in this review did not meet the inclusion criteria. In fact, having insufficient evidence eliminated all but five studies. In terms of disorder areas, vocabulary was addressed in three studies conducted by Boyle, McCartney, Forbes, & O'Hare, (2007); Kohl, Wilcox, & Karlan, (1978); and Throneburg et al., (2000). Functional communication was addressed in one study conducted by Howlin, (1981). Finally, language was addressed in three studies conducted by Bland and Prelock, (1995); Boyle et al., (2007); and Howlin (1981). Another systematic review was conducted by Archibald (2017). This review summarized 49 papers that discussed the impact of classroom-based speech-language services on the following: vocabulary, oral language, phonological awareness, curriculum-based language, and writing (Archibald, 2017).

Meline and Kauffman (2010) concluded in their systematic review that collaborative and pull-out methods were slightly more effective than collaborative models, but the lack of controls limited the strength of the conclusions. This systematic

review suggested that there was minimal support for that use of a collaborative service delivery type over the pull-out method when addressing language literacy. The reviewers concluded that SLPs should combine service delivery model types to fit each students' unique and individual needs (Meline & Kauffman, 2010). Since the limited evidence-based research has suggested that the type of disorder affects the selection of a service delivery model, the next section will address some of the specific disorder types seen by school-based SLPs.

Vocabulary

A single-subject design conducted by Kohl et al. (1978) compared traditional 'pullout' vocabulary therapy to direct classroom-based group therapy. Results from that study indicated that preschool children receiving classroom-based intervention demonstrated a greater ability to generalize the new vocabulary words that were learned to their home setting (Kohl et al. 1978).

The effects on curricular vocabulary skills in the school-age setting were examined by Throneburg et al. (2000). The four service delivery models under investigation in this study were classroom-based collaborative, classroom-based teacher (i.e., SLP is independent), traditional "pullout," and a control (i.e., vocabulary exposure from the curriculum in the classroom taught from the teacher). In the collaborative setting, speech-language impaired students achieved test gains significantly higher than those in classroom-based and pullout settings did. In both the collaborative and classroom-based environments, school-age students without speech-language impairments made test gains markedly higher than did those receiving vocabulary exposure in the classroom from the stand-alone teacher (Throneburg et al.,

2000). However, when specifically looking at the preschool age students who qualified for speech-language services, data obtained in the studies conducted by Valdez and Montgomery (1997) and Wilcox, Kouri, and Caswell (1991) revealed that collaborative classroom-based and pull-out treatment service deliveries were equally effective.

A systematic review conducted by McGinty and Justice (2006) examined students' vocabulary in the preschool and early education settings. The results from their study indicated that of the three experimental studies under review, two suggested advantages in regards to collaborative classroom-based services compared to pull-out services. Throneburg et al. (2000) and Wilcox et al. (1991) discussed how the classroom-based approach provides students with a more naturalistic emphasis allowing for skill generalization. The authenticity of a student's natural environment often promotes generalization skills to be acquired at a faster rate (McGinty & Justice, 2006).

Language and Literacy

A study conducted by Bland and Prelock (1995) examined students' language and literacy in classroom-based direct services versus a pullout direct control group. The findings revealed that students receiving classroom-based services produced more "intelligible and complete" utterances than did the students receiving pullout services. It was shown that from year two to year three, students who received classroom-based services continued to increase in the number of "intelligible and complete" utterances produced (Bland & Prelock, 1995). According to Borsch and Oaks (1992), students who received services benefitted greatly when the school incorporated interdisciplinary collaboration. School collaboration allowed students to stay within their classrooms being with their same-aged peers, which plays a vital role in student achievement.

Roberts, Prizant, and McWilliam's (1994) exploratory study investigated the differences between interactions and discourse in clinician-client interactions based on the environment of service delivery model chosen. This study revealed that during in-class services, the SLP and student interacted differently based on the setting characteristics. Children tended to comply with the SLPs requests during pull-out interventions at a higher rate than they did in the classroom. These findings could have been influenced by a student who was having a bad day causing distractions within the classroom. An area that did not appear to change with service delivery type was topic maintenance or sharing information. However, in this study, the SLP was revealed to take more turns during pull-out which could have been due to the SLPs predilection to use conversation fillers (e.g., "uh-huh," "yeah") (Roberts et al., 1994).

Conclusion

Much of today's evidence-base regarding service delivery is inconclusive as a tool for identifying the perfect solution for school-based speech-language pathologists. Archibald's (2017) results were consistent with those of Cirrin et al. (2010) and McGinty and Justice (2006) showing "there is reasonably compelling evidence that targeted vocabulary and phonological awareness can be effectively taught through SLP-educator collaboration in the classroom. For oral language, evidence for an overall benefit from direct classroom teaching of narrative skills is highly suggestive, although weaker outcomes for specific expressive language targets suggests a hybrid approach involving both small group/individual intervention and classroom support might be most beneficial" (p. 14).

The literature corresponds with a study by Roberts, Prizant, and McWilliam (1994) in which the authors stated, “the results suggest that because in-class and out-of-class models have differential effects only on some aspects of clinician and child behavior, selection of service delivery models must be determined by a myriad of factors. Furthermore, these findings suggest that, in the absence of more conclusive data, it is premature to equate a particular mode of service delivery with greater degree of treatment efficacy” (p. 87).

The purpose of this study was to examine different variables that influence a school-based SLP’s use of specific service delivery model. This study strived to determine the perceptions and implementation of traditional and inclusive service delivery models used by ASHA-certified school-based SLPs.

A 23-item survey consisting of quantitative statements using various response formats (i.e., yes or no, open-ended, multiple choice, and rating scales) was administered to ASHA-certified school-based SLPs. The survey was intended to provide insight into contributing factors that affect the decision-making process when determining a service delivery model. The survey questions were also designed to determine if there was a correlation between the SLP’s demographics, current caseload, and work characteristics when deciding which service delivery model they implement. Additional specifics of the methodology used are presented in the next chapter.

Chapter Three

Methodology and Data Analysis

Purpose of the Study

This study was designed to examine different variables that influence a school-based SLP's use of a specific service delivery model. The purpose of this study was twofold. A survey was distributed to first, gather information on the students, SLP, and workplace characteristics that may influence an SLP's recommendations and, second, to determine if there is consistency nationwide in the factors considered by the SLP in terms of what specific service delivery model they currently use (i.e., traditional service delivery or inclusive service delivery).

Participants

This project was funded by the Minnesota State University Moorhead (MSUM) Speech-Language-Hearing Sciences research department. Approval for the completion of the study was obtained from the MSUM Institutional Review Board prior to starting data collection. The first round of survey participants in this study were randomly selected from the American-Speech-Language-Hearing Association (ASHA)-certified school-based speech-language pathologists (SLPs) membership directory. A postcard (Appendix A and B) was sent out to 1,000 ASHA school-based SLP members providing the purpose of this study. The postcard included a URL link and QR code for the participants to access the survey at their convenience. Due to a very low return rate, a second round of data collection was attempted by handing out 50 business cards (Appendix C) at the ASHA Convention. The business cards included a URL link and QR

code for the participants to access the survey at their convenience. The return rate from this round of data collection was zero. Finally, a third round of data collection consisted of surveys submitted through the Special Interest Group 16 (SIG 16), School-Based Issues member's forum. Convenience sampling was used during the second and third waves of data collection to select participants who were readily available and easily accessible. Before beginning the online survey, information about the intent of the study, potential risks, and the participant's rights was provided in writing (Appendix D). To begin the survey, the participant gave their consent by selecting the appropriate button.

Procedures/Data Collection

As previously mentioned, a 23-item survey was administered via postcard, business card, and the SIG 16 member's forum to ASHA-certified school-based SLPs. The survey was created through MSUM Qualtrics and took approximately 10 to 15 minutes to complete. The survey contained various questions regarding demographic information of the SLP (e.g., birth year, gender, previous experience with service delivery, etc.) and several questions about the school setting, workload, service delivery exposure, student severity level, and team collaboration. Participants were asked to respond to questions with various response formats that included yes or no, open-ended, multiple choice, and rating scales (Appendix E). The link to the survey posted in the SIG 16 community was shown to be the most effective in terms of response rate.

Research Design

This quantitative cross-sectional survey study was designed to help the researcher gather information from school-based SLPs. The survey questions were

designed to determine if there was a relationship between the SLP's demographics, current caseload size, and work characteristics when deciding which service delivery model they implement. The survey contained a variety of question types (e.g., multiple choice, rating scales, etc.) and it was designed to collect primarily quantitative data.

Data Analysis

The results were analyzed quantitatively using descriptive statistics to summarize, condense, and organize the data. The MSUM survey tool, Qualtrics, collated the data for analysis and review.

The findings are represented through narratives and visuals in chapter four. An interpretation of the meaning of the results is presented in chapter five, which also provides a conclusion with a reflection about the significance of the data and suggestions for further research.

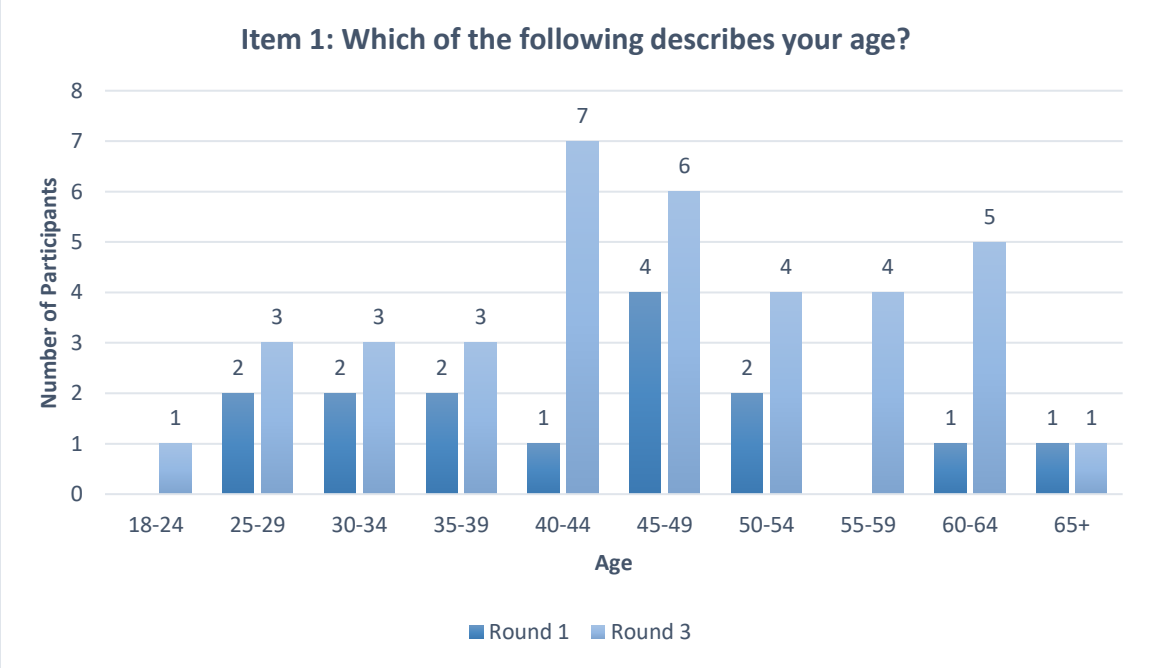
Chapter Four

Results

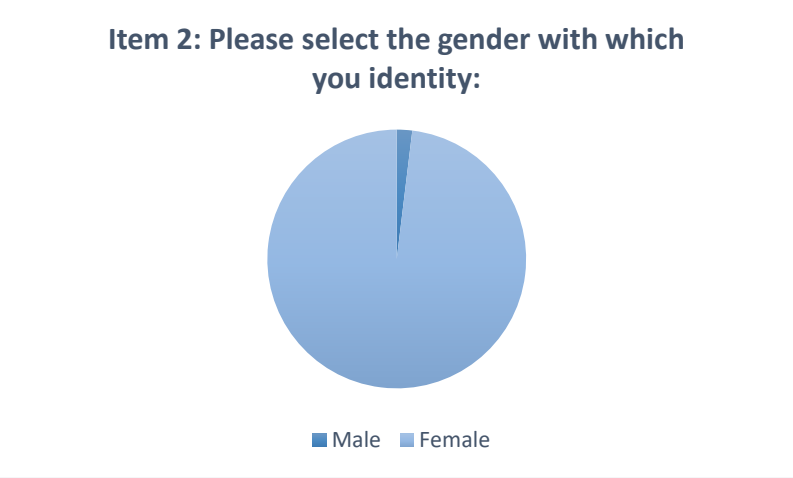
The school-based survey was sent to speech-language pathologists (SLPs) affiliated with the American Speech-Language-Hearing Association (ASHA)-certified school-based SLPs membership directory and to members of the Special Interest Group 16, school-based issues, community. 52 surveys were completed; however, the number of responses for each item varied. This survey consisted of 23 items, all of which contained quantitative components to collect and apply descriptive statistics. The data from the study is presented in three segments: Demographic Information, Caseload Information, and Workplace Characteristics.

Demographic Information

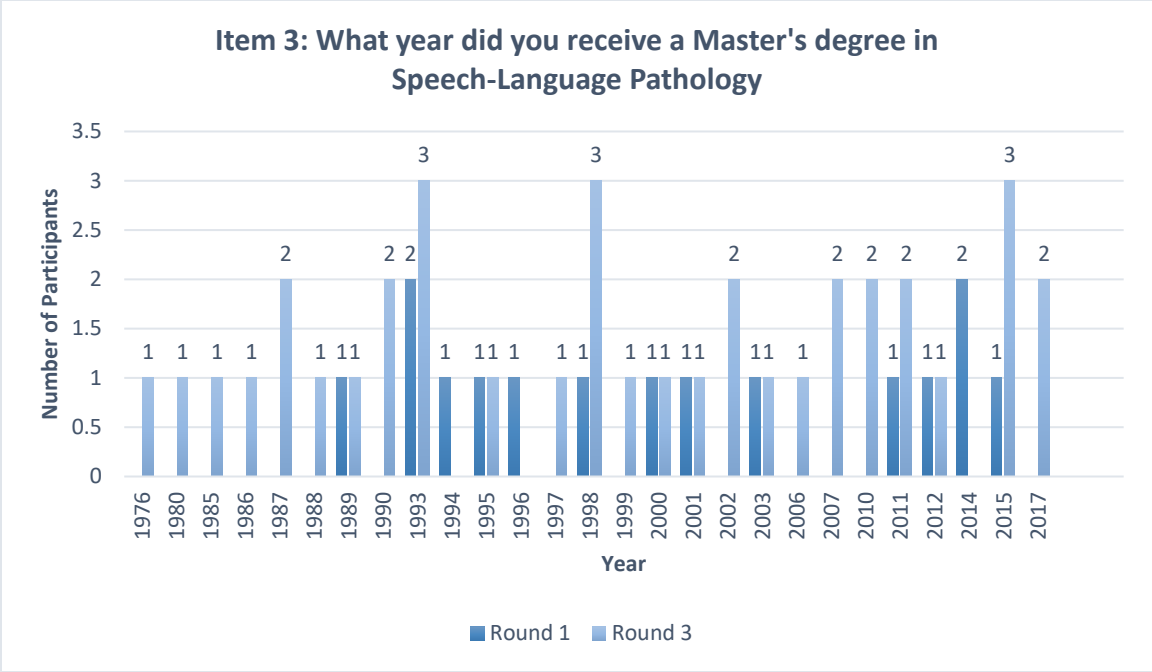
The questions in this section were designed to determine the demographic characteristics among school-based SLPs who participated in the survey.



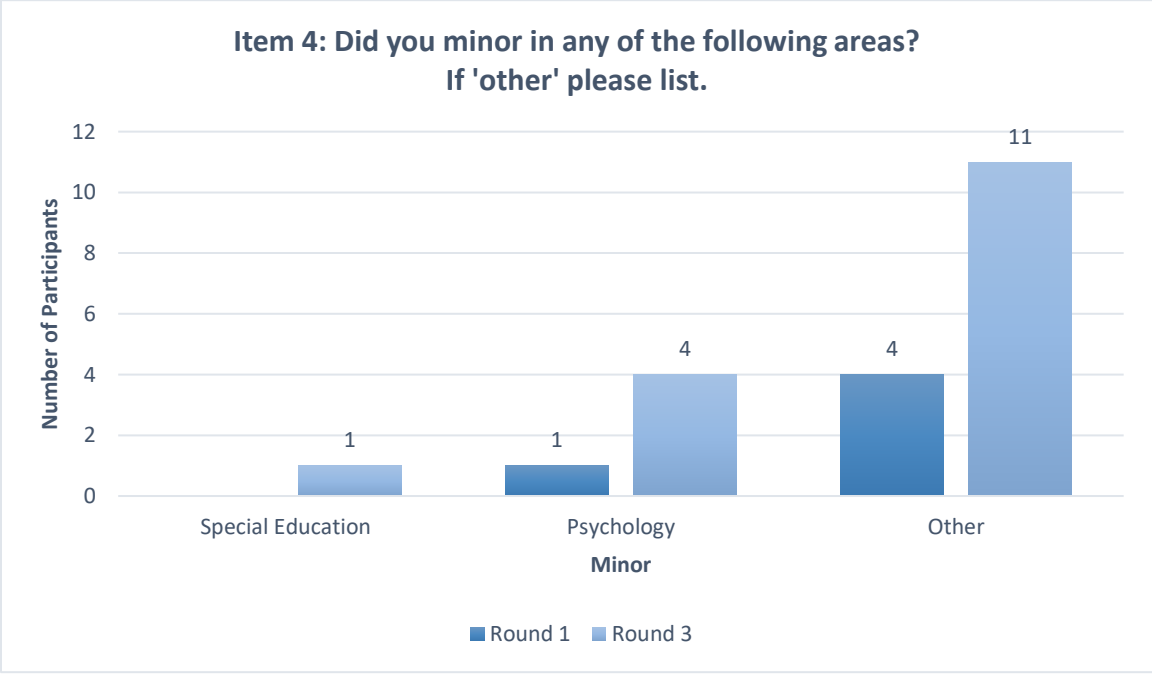
The results indicated that item one consisted of SLPs who ranged in age from 18 to 65 or more years. The first round of surveys administered via postcard resulted in a total of 15 participants, the second round via business card resulted in zero participants, and the third round via SIG 16 community resulted in a total of 37 participants. In the first round, 27% of the participants were between the ages of 45 and 49. In the third round, 35% of the participants were between the ages of 40 and 49.



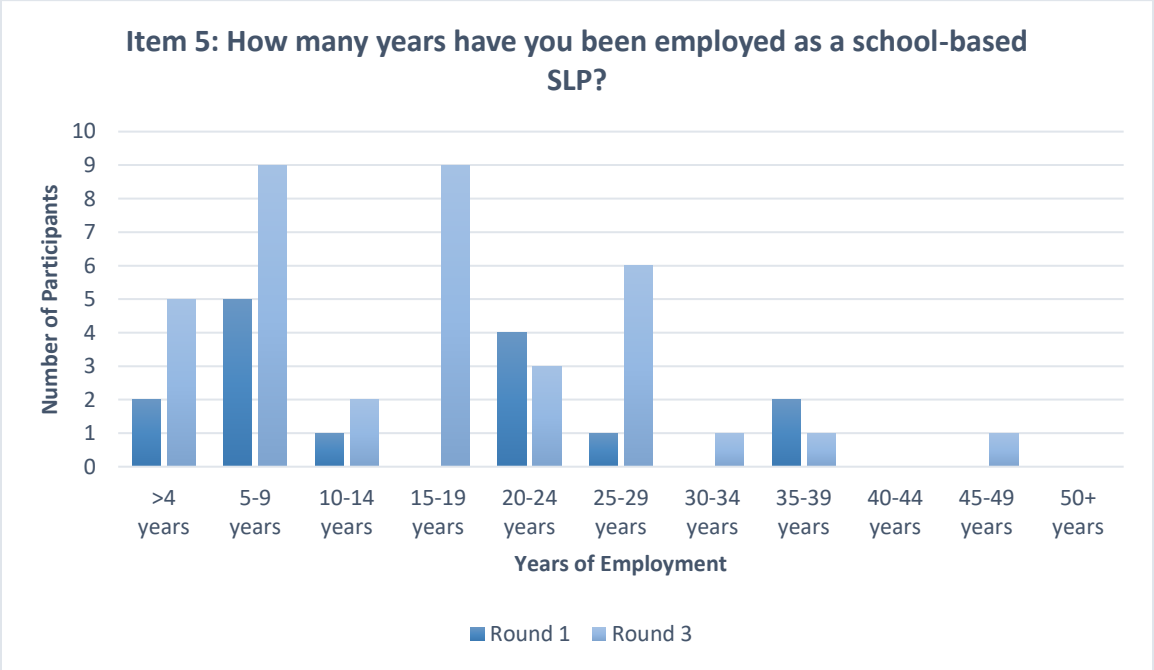
Of the participants in this study, 98% identified as female and 2% identified as male.



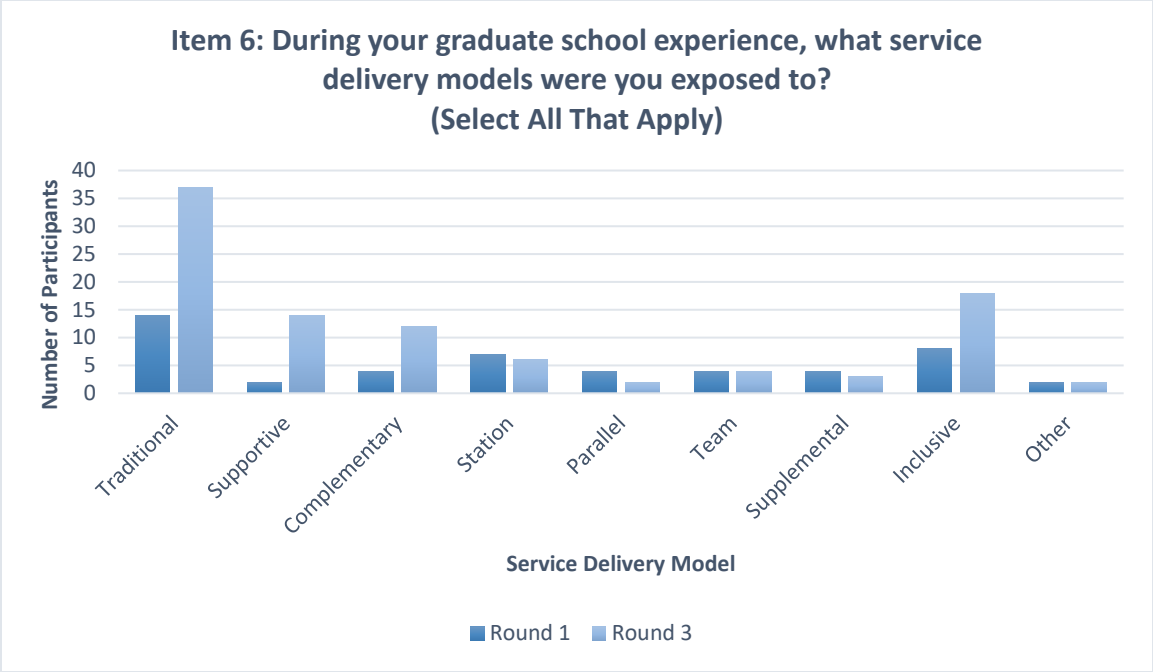
SLPs were asked to select the year in which they earned their Master's degree in Speech-Language Pathology. Overall, when combining the two survey rounds, the year with the most respondents was 1993, with five participants identifying that year as when they received a Master's degree.



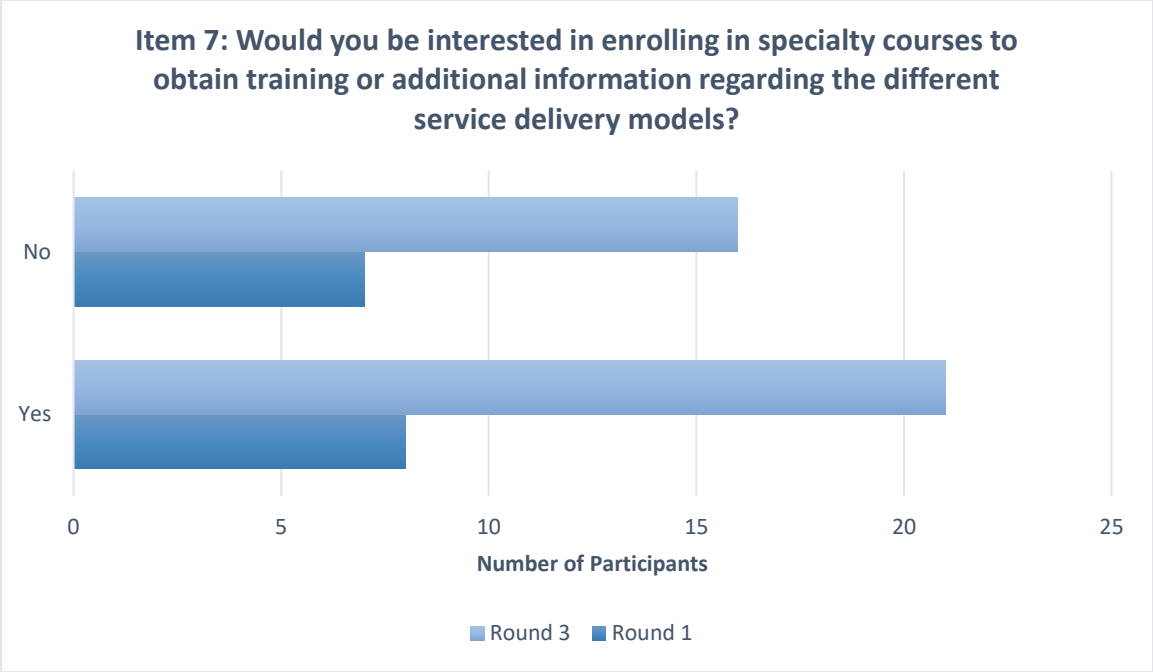
When asked if a minor degree was received in special education, psychology, or other areas, the response rate was decreased to 21 participants as compared to 52 total participants. This low response rate could be due to a lack of an option stating 'no minor' therefore, confusing participants as to how to respond. Of the SLPs who responded 'other,' approximately 26.6% of the SLPs minored in Audiology, 20% in Communication Disorders, 20% in Social Sciences, 13.3% in English, and 20% stated that they did not have a minor.



Of the 52 participants who responded to the survey, the SLPs years of experience employed as a school-based SLP ranged from five to nine years of experience (e.g., 26.9%) and 15 to 19 years of experience (e.g., 17.3%).



During graduate school, 98% of the SLPs indicated that they were exposed to the traditional “pull-out” model. Approximately 50% of the SLPs also were exposed to the inclusive "classroom-based" model, with further breakdown as follows, 30.7% in supportive teaching, 30.7% in complementary teaching, 25% in station teaching, 15.4% in team teaching, 13.5% in supplemental teaching, 11.5% in parallel teaching, and 7.7% in other. Approximately 50% of the SLPs were exposed to Self-Contained Classrooms-Complementary Teaching, 25% to Team Teaching in Early Childhood, and 25% did not receive any exposure to the school setting. A noteworthy response from one SLP was, *None, I attended a medical based program and did not complete a school rotation*. The terms used for each service delivery model used in this survey were selected from the School-Based Service Delivery in Speech-Language Pathology (ASHA, n.d.) practice portal.



In addition to completing the online questionnaire, all SLPs were asked if they would be willing to enroll in a specialty course regarding different service delivery models. Of the 52 SLPs who participated, 55.7% responded they would be interested.

Caseload Information

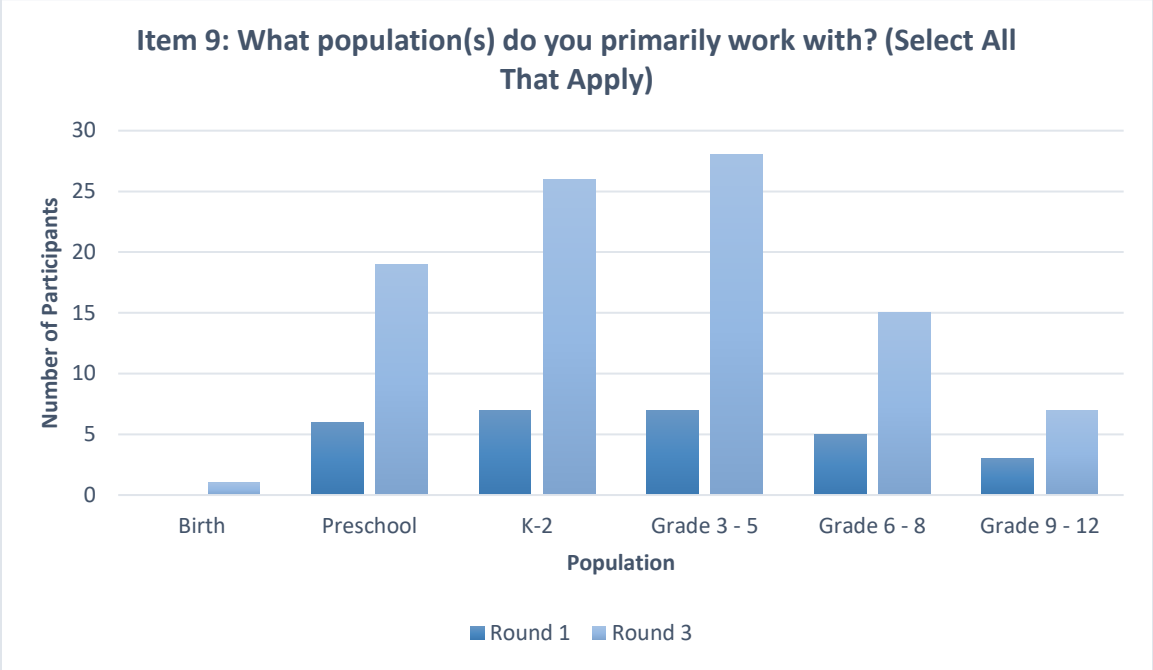
The questions in this section were designed to determine what caseload information is pertinent when deciding on a service delivery model.

Item 8: What is the total number of students on caseload?

Survey	**Minimum**	**Maximum**	**Mean**	**Std Deviation**	**Variance**	**Count**
Round 1	16	100	46.64	20.35	414.23	14
Round 3	18	88	47.67	18.19	330.95	33

Of the 52 participating SLPs, 47 (90%) participants responded to item eight. The SLPs average caseload size in the first round of surveys was 46.64 students (SD =

20.35). Contrastingly, SLP's average caseload size in the third round was 47 students (SD = 18.19).



For the total number of students participating in speech and language services, SLPs reported the greatest percentage as being 3rd through 5th grade (28.2%). Kindergarten through 2nd grade was second (26.6%), and preschool (20.2%) was the third most common rating.

Item 10: How many students do you serve directly on your caseload?

Survey	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Round 1	16	67	42.71	15.57	242.49	14
Round 3	17	85	45.09	16.31	265.96	33

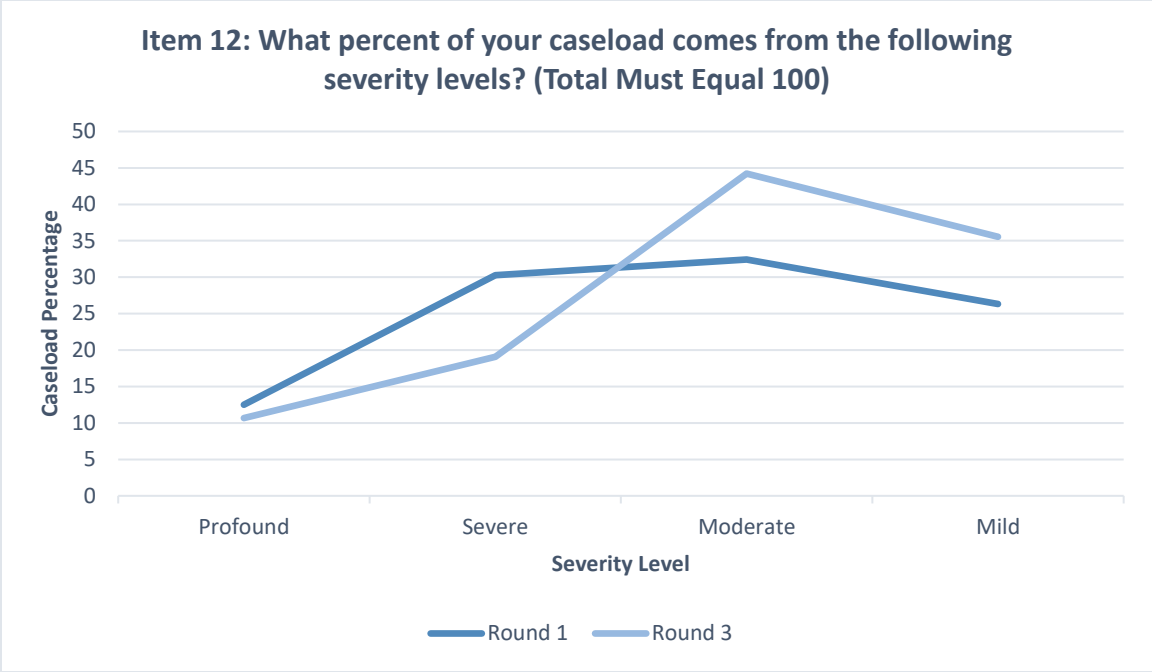
Of the 52 participating SLPs, 47 (90%) participants responded to item ten. The number of students that the SLP in the first round served directly was 42.71 students

(SD = 15.57). Contrastingly, in the third round of data collection, the SLPs reported serving 45.09 (SD = 16.31) students directly.

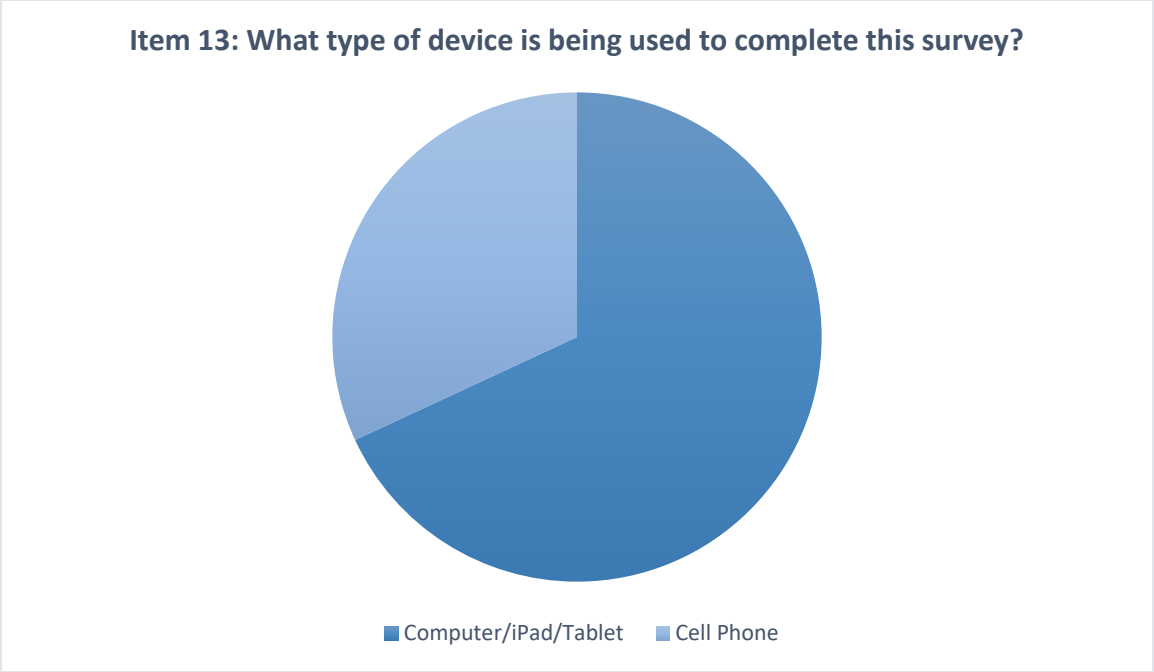
Item 11: How many students do you serve indirectly on your caseload?

Survey	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Round 1	1	43	5.29	10.61	112.63	14
Round 3	1	28	4.18	5.91	34.88	33

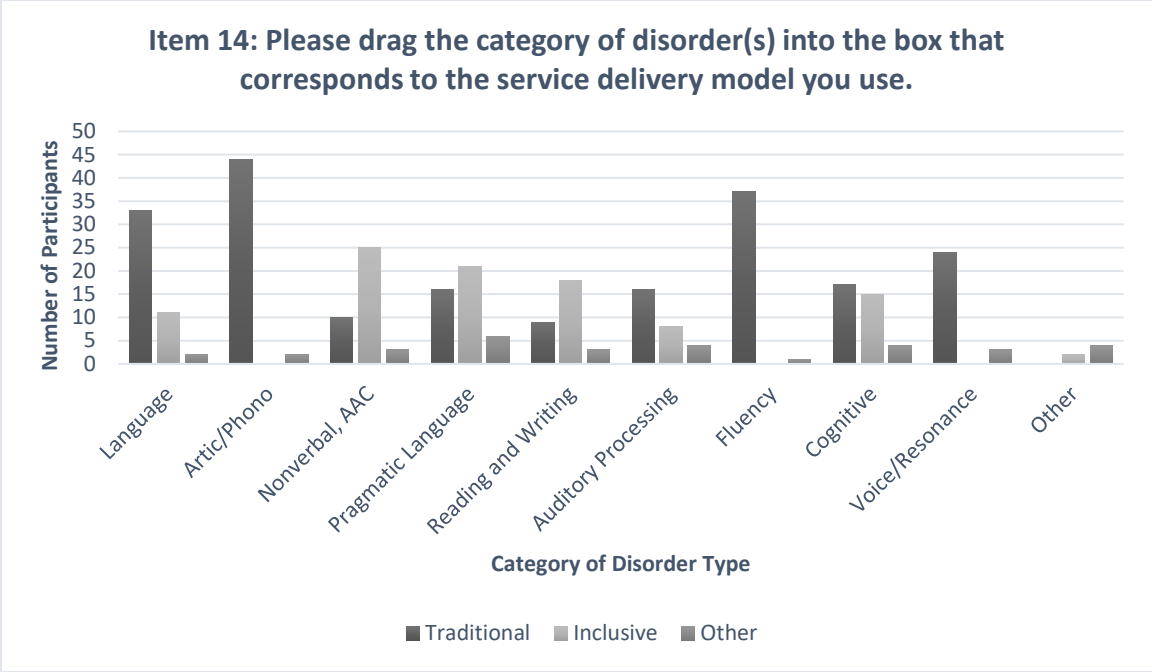
Of the 52 participating SLPs, 47 (90%) participants responded to item eleven. The number of students that the SLP served indirectly, calculated from the first round of surveys, was 5.29 students (SD = 10.61), while, in the third round the SLPs reported serving 4.18 (SD = 5.91) students indirectly.



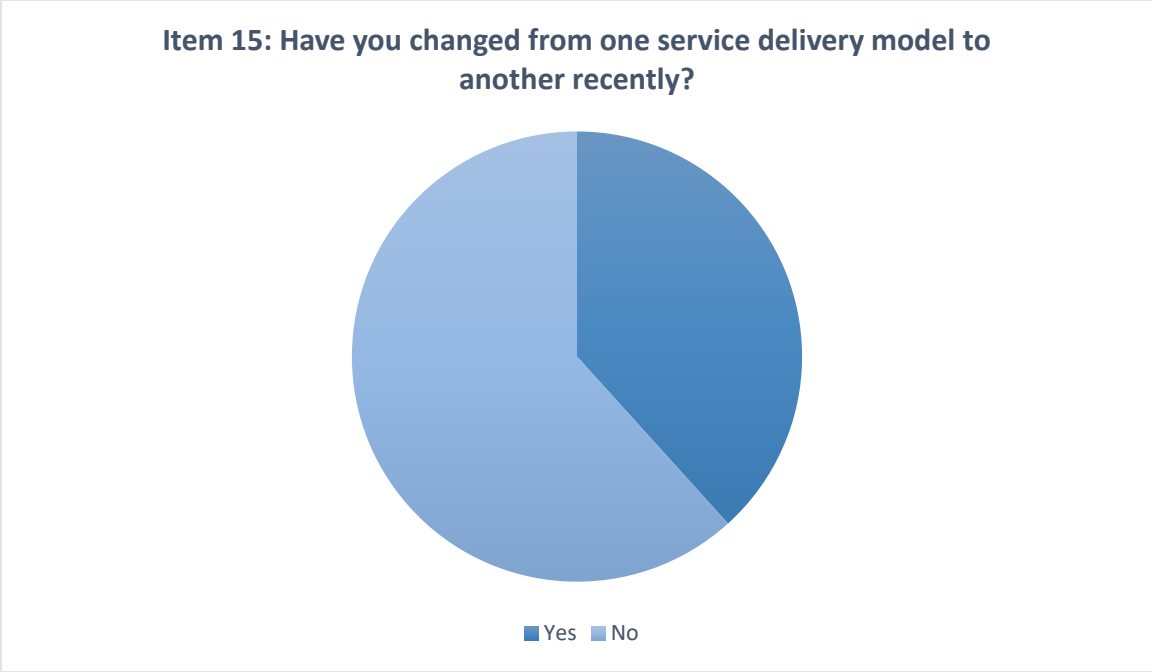
The majority of participants indicated that the most common level of impairment of students on their caseload was ‘Moderate.' The SLPs average severity level types were as follows: profound (12.5%), severe (30.29%), moderate (32.43%), and mild (26.31%). When reviewing the SLPs who responded to the third survey, the SLPs average severity level types were as follows: profound (10.67%), severe (19.06%), moderate (44.22%), and mild (35.54%).



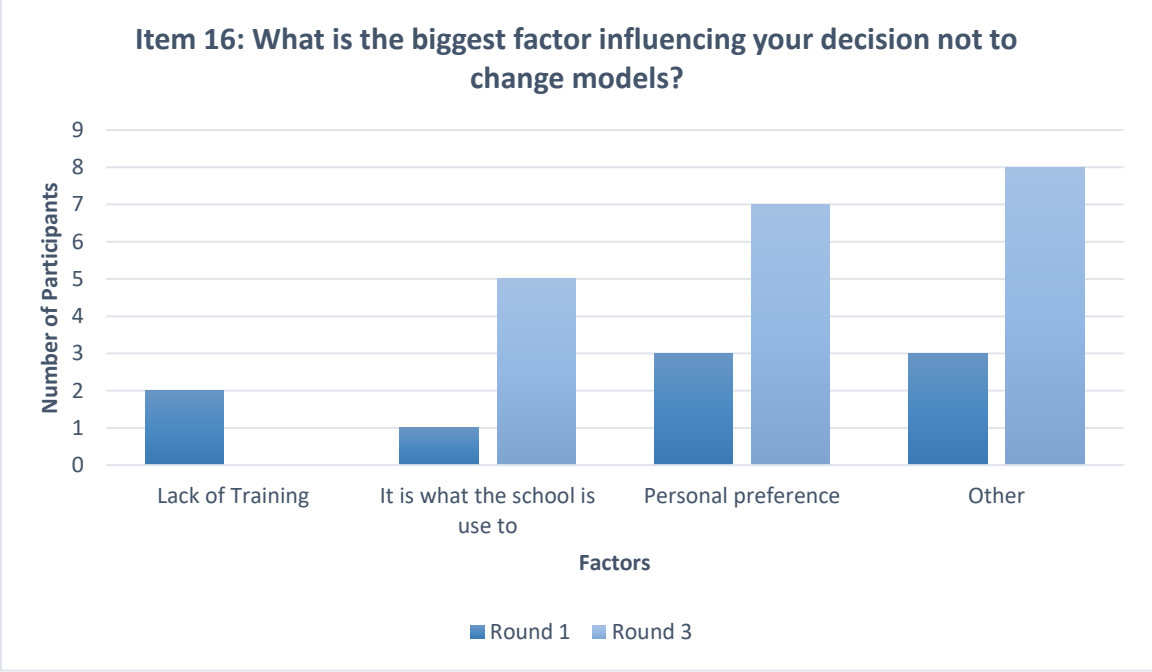
41 (78%) SLPs completed this question, which asked them on what device they completed this survey. This question was added due to limitations to the survey platform that was used (i.e., Qualtrics). 32 SLPs reported that they took the survey on their computer/iPad/Tablet and 15 reported taking it on their cell phone.



SLPs were asked to select the disorder type and place it with the corresponding service delivery model they currently use. The areas identified by SLPs as the ones they used the traditional approach with were language, artic/phono, and fluency. The areas where SLPs use the inclusive approach more frequently were nonverbal/AAC, pragmatic language, and reading/writing.



A majority of SLPs reported that they have not recently changed from one service delivery model to another. This could be due to no current recommendations to change an individual's IEP and to continue to maximize the current plan in progress.



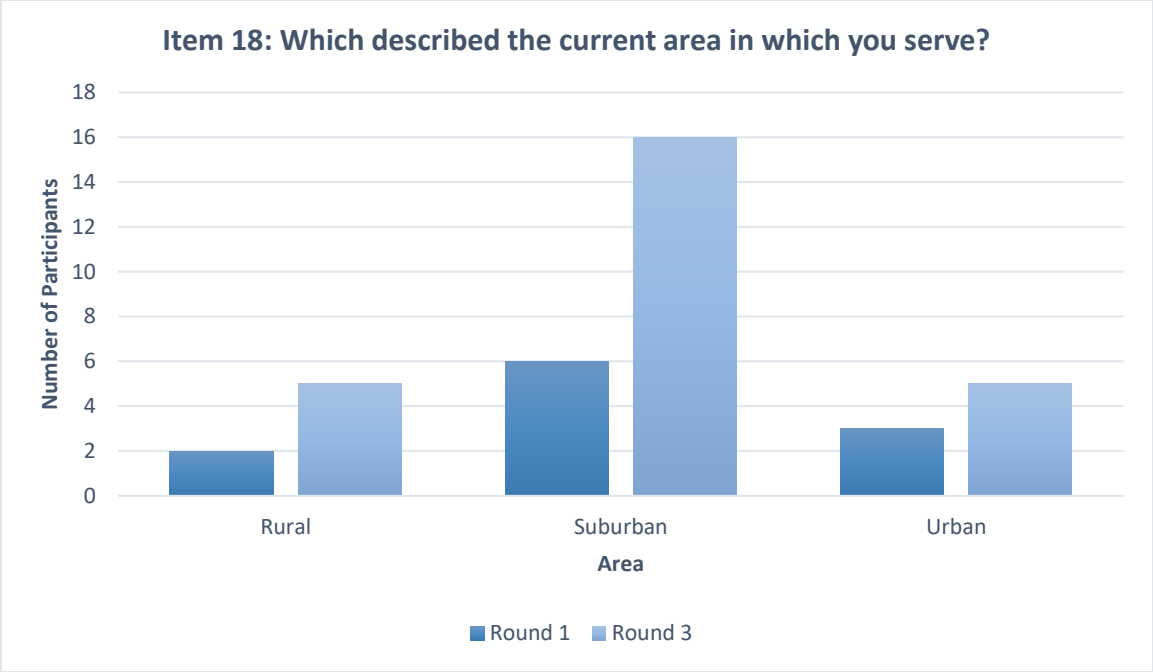
Many participants indicated that the biggest factor influencing their decision not to change models was ‘other' (38%). Of the 38% that responded ‘other,' 73% specified that they do what is best for each student. One SLP stated, “*I choose the delivery service model that will benefit the student. I also provide support for the teachers by modeling and providing support to assist teachers to help students on my caseload achieve his/her goals*.”

Item 17: Please complete the following Statement:
“I changed from ___(model) service delivery model to ___(model) service delivery model ___ (number) years ago.”

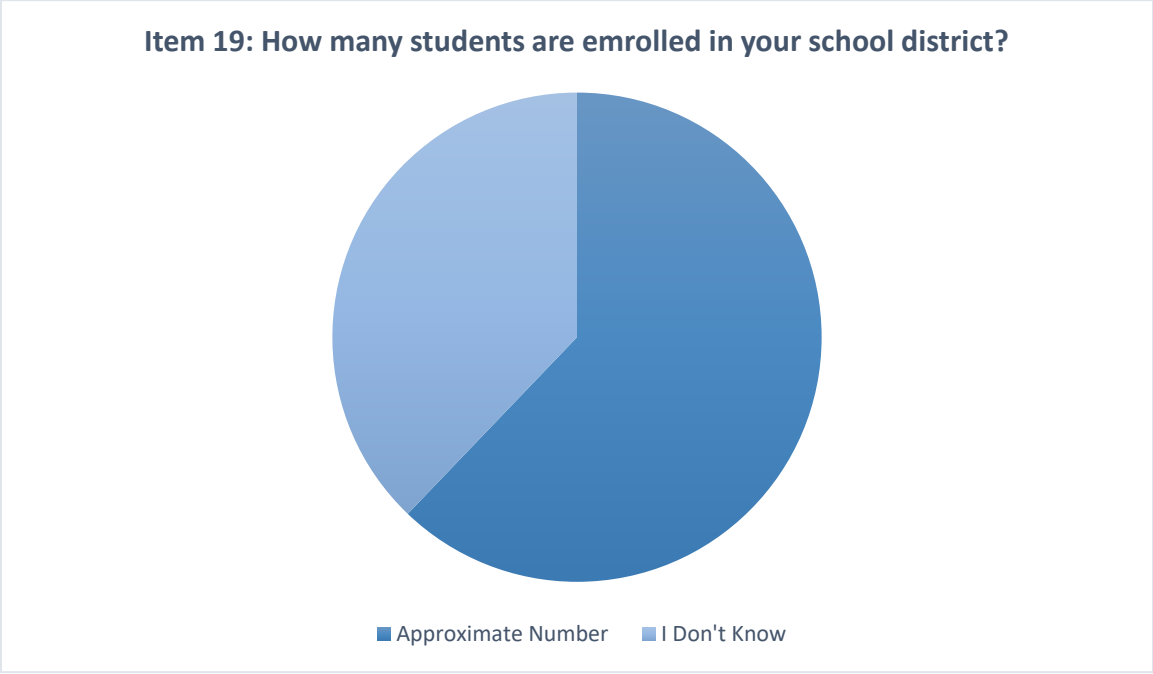
When participants were asked to complete a statement, the response rate decreased from 41 to four SLPs. One SLP indicated, *“I changed from traditional service delivery to inclusive service delivery for some students on my caseload this year*.” Another SLP stated, “*I changed from push-in to pull-out for one year*.”

Workplace Characteristics

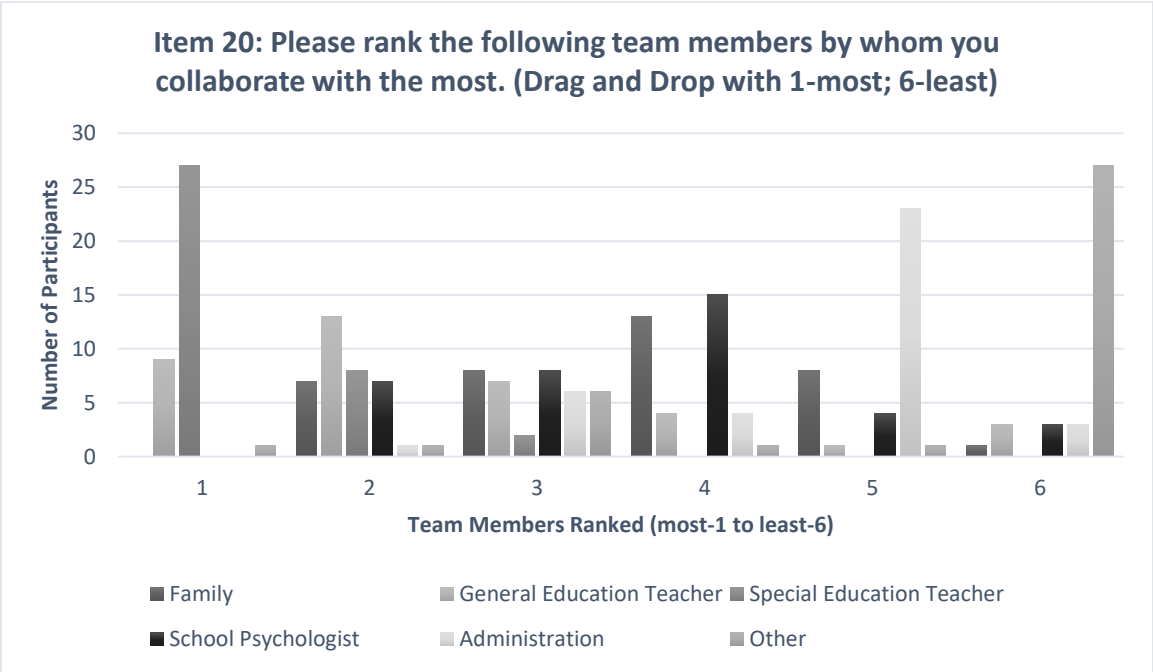
The questions in this section were designed to determine what caseload information is pertinent when deciding on a service delivery model.



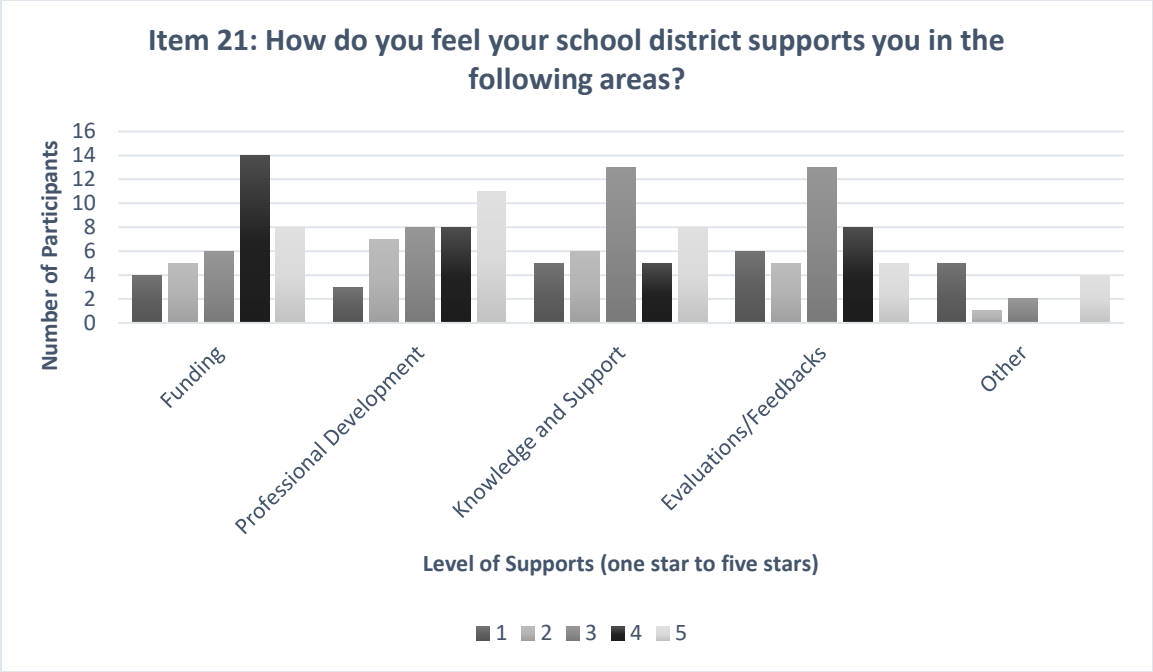
Of the 52 participating SLPs, 37 (71%) participants responded to item eighteen. Approximately 19% of the SLPs worked in rural schools, 59% in suburban schools, and 22% in urban schools. These terms were not defined within the survey but were left for the SLPs completing the survey to determine.



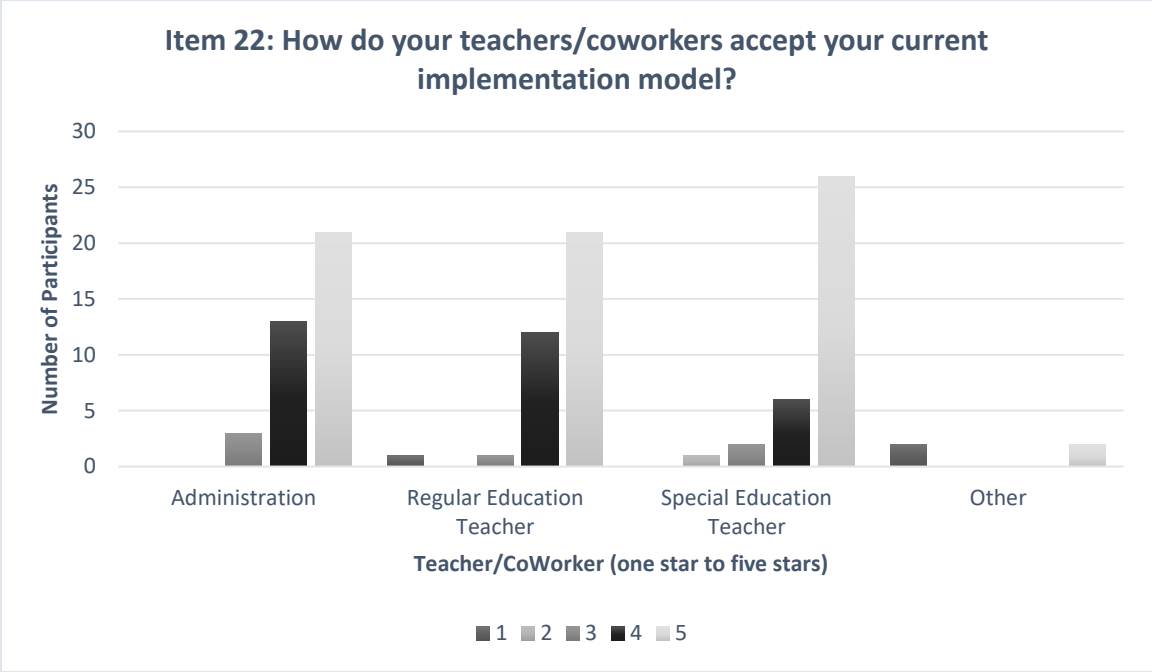
Of the 52 participating SLPs, 20 participants responded to item nineteen. Of the SLPs taking this survey, the average number of students enrolled in their districts was 19,500.



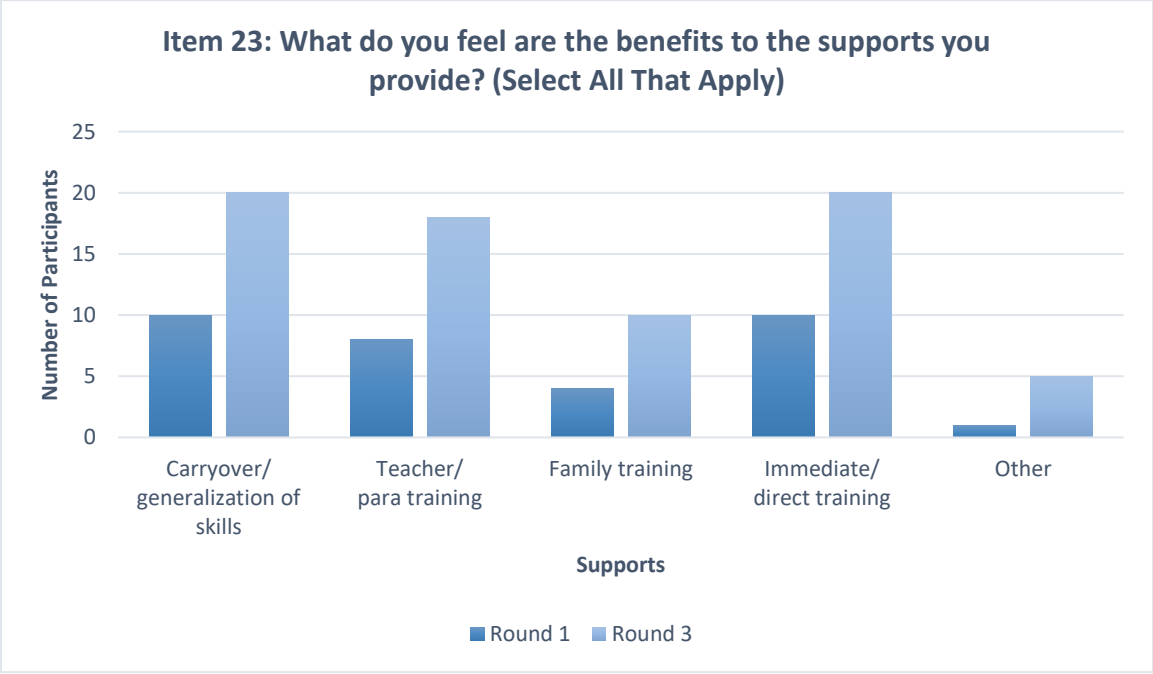
The SLPs in this study reported the team members with whom they collaborate from the most-1 to the least-6. Results are as follows: 1- special education teacher (27), 2- general education teacher (13), 3- family (8), 4- school psychologist (15), 5- administration (23), and 6- other (27).



The SLPs in this study rated how their school districts support them in the following areas (one star to five stars): four stars in funding (testing and therapy materials) (14), five stars in professional development opportunities (11), three stars in knowledge and support of services provided (13), three stars in evaluations/feedbacks (13), and a one star in other (five).



The SLPs in this study rated how they feel the teachers/coworkers accept the current model they implement. The following items were rated on a star rating scale (one star to five stars): five stars in administration (21), five stars in regular education teacher (21), five stars in special education teacher (26), and five stars in other (two).



The participants in this study indicated that the main benefits to the support they provide were split between two categories: 28% of SLPs chose ‘carryover/generalization of skills' and 28% chose ‘immediate/direct training.' Of those SLPs who reported ‘other,' one SLP stated, “*Obtaining insurance funding for communication devices*.” Another SLP reported, “*Consistency in communication strategies and AAC offered*.”

In the following chapter, the results of the survey will be compared to the literature. Explanation of themes, implications of the possible impact on the field of Speech-Language Pathology, and identification of further areas of research needed are also discussed.

Chapter Five

Discussion

The purpose of this study was to examine and understand the factors that influence a school-based speech-language pathologists' (SLPs) use of a specific service delivery model when providing intervention. The first overarching theme that emerged from this study was that providing further graduate school coursework addressing service delivery models across all grades, as well as identifying program intensity and effective treatment size for each population, is needed. The second major theme was that providing information for working SLPs on what they will have to do to complement their administration and fellow educational staff would be beneficial. The results of this study suggested that a school-based SLPs' choice of service delivery model depended on graduate school experience/exposure to service delivery models and the category of disorder type. However, there were limited studies in the literature to support the findings.

Demographic Information

The majority of school-based SLPs who responded to the survey were between the ages of 40 and 49 and identified as female (98%). The year with the most respondents was 1993, with five participants identifying the year as when they received a Master's degree. When asked how many years employed as a school-based SLP the responses ranged from five to nine years (e.g., 27%) and 15 to 19 years (e.g., 17%). According to Katz, Maag, Fallon, Blenkarn, and Smith (2010), SLPs with fewer years'

experience perceive their caseload to be unmanageable, however; their study did not look at program intensity nor service delivery models.

During graduate school, 98% of the SLPs reported that they had been exposed to the traditional model and 50% had been exposed to the inclusive model. This appears to suggest that college courses and seminars should incorporate such information and methods into their training courses; however, it was not evident that graduate school curricula helped prepare school-based SLPs for working in this type of setting. Brandel and Loeb (2011) stated that additional education might be a valid tool if it includes an expectation that SLPs will have to use different service delivery models within the school setting among an array of disorder types. The results of the current study revealed that 56% of the participating school-based SLPs would be interested in enrolling in specialty courses to obtain specific service delivery model training.

The need for additional education in this area was identified by both the participants in this study and in the literature, which may suggest that ASHA, the governing body that certifies SLPs in the United States, should actively promote and advocate for more service delivery model education and training in graduate program curricula. Further, continuing education programs should be offered to provide service delivery model training to specific disorder types within the school setting. This will prevent recently graduated school-based SLPs from feeling unprepared to serve this population, due to limited knowledge or experience with service delivery models.

Caseload Information

In terms of the average caseload size, the results of the first survey revealed an average caseload size of 46 (SD = 20.35), and the third round of surveys revealed 47

(SD = 18.19). The caseload size of the participating SLPs reported a mean caseload that was lower than the national level of 48, reported by ASHA School Survey (2018).

The data from this survey also revealed the following regarding specific caseload services: 14 participants in the first round reported providing direct services to 43 students and indirect services to five students. In the third round data collection, 33 participants reported directly serving 45 students and indirectly serving four students. The limited number of students receiving indirect services suggests that a traditional model was being utilized. These indirect services include but are not limited to the following: meeting with teachers, parents, or other specialists, developing treatment materials, reviewing and writing IEP goals, etc. (ASHA, 1991). According to Brandel and Loeb (2011), when a traditional model is implemented the SLP can become unfamiliar or unaware of the students' academic successes and failures.

When asked what percentage of the caseload comes from a specific severity level, the majority of participants indicated that the most common level of impairment was 'moderate.' According to Siegel, Maddox, Ogletree, and Westling (2010), who surveyed school-based SLPs, students who have severe disabilities may not be receiving best practice. Improved in-service training and intervention practices were suggested for SLPs and team members who work with individuals with severe disabilities.

When examining disorder type that corresponds with a specific service delivery model, participants were not in agreement as to what model they would use. The traditional model was most commonly used with the following disorder types: language,

artic/phono, and fluency. The areas where SLPs use the inclusive model more frequently are nonverbal/AAC, pragmatic language, and reading/writing.

The SLPs in this study reported that they had not recently changed from one service delivery model to another. This may be due to school-based SLPs limited experience in working with different service delivery models since ASHA (n.d.) does not recommend the use of one service delivery model over another. However, this response could be due to no current recommendations to change an individual's IEP.

McGinty and Justice (2006) reported that the authenticity of a student's natural environment stimulates overall skill generalization at a faster rate and Throneburg et al., (2000) stated that of the speech/language impaired students in their study, those in the collaborative setting made test gains significantly higher than those in both classroom-based and pullout settings. Students without speech/language impairment in both collaborative and classroom-based settings made test gains significantly higher than those receiving exposure to vocabulary in the classroom from teachers alone (Throneburg et al., 2000). The results from this survey support the premise that the inclusive service delivery model is most effective when looking at exposure to vocabulary. When breaking disorder types into specific service delivery models, 29.6% of participants chose the inclusive service delivery model when looking at reading and writing (literacy) disorders (18%).

When examining language and literacy, Bland and Prelock (1995) reported that students receiving classroom-based services produced more "intelligible and complete" utterances and increased the number of utterances throughout the next year than those receiving the services following the traditional approach did, as well as. Archibald's

(2017) results suggested that oral language (e.g., narrative skills) be taught from direct classroom instruction and taking on a hybrid approach when it comes to expressive language. However, when looking at the results from this survey of the 60.9% of traditional pullout services 16% tend to be language disorders (e.g., semantics, morphology, syntax).

The results are concerning due to the large number of school-aged children with special education services need. According to McFarland et al. (2018), 13% of all public-school students receive special education services. Among the students receiving special educations services, the U.S. Department of Education (2017) added that 17.3% are specific to speech-language impairments.

Workplace Characteristics

The results of this study indicated that approximately 19% of the SLPs worked in rural schools, 59% in suburban schools, and 22% in urban schools. According to Bakker and Schaufeli (2000), retention and recruitment of teachers and public school personnel is more difficult in rural areas where job satisfaction is reported to be lower than in suburban and urban areas. Various authors have suggested that increasing social support from peers, coworkers, or administrators may assist in reducing stress and burnout in education personnel (Bakker & Schaufeli, 2000). Interestingly, limited studies attempt to identify the relationship among job stress, geographic location, and social support in school-based SLPs.

When asked to rank team members with whom they collaborate with the most, participants in the study reported that they work most closely with the special education teacher, followed by the general education teacher, the family, school psychologist,

administration, and other personnel. Roberts, Prizant, and McWilliam (1994) reported that within the classroom context, the SLP could collaborate more easily with the student's teachers and other team members in planning and carrying out the intervention program. Borsch and Oaks (1992), also suggested that students who received services benefit greatly when the school incorporated interdisciplinary collaboration. However, a survey conducted by Elksnin and Capilouto (1994) found that scheduling planning time was a major obstacle to collaboration.

The participating SLPs who participated in this study rated how their school district supports them. Interestingly, a majority of the SLPs rated four stars when it came to ‘funding.' The school districts have seen, according to Meline and Kauffman (2010), a 25% revenue reduction due to reduced funding. The next highest rated option was ‘professional development,' followed by ‘knowledge and support of services provided,' and ‘evaluations and feedback.' When the participants were asked to rate how they feel the teachers/coworkers accept the current model they implement, five stars were given to all as follows (arranged from most to least): special education teacher, administrative, regular education teacher, and other professional.

The participants in this study also commented on the main benefits they felt they provided, which were split between two options ‘carryover/generalization of skills' and ‘immediate/direct training.' These findings correlate with Elksnin and Capilouto (1994), who reported the most common advantage to speech and language services were a student’s carryover skills. ASHA (2000) further stated enhancement is achieved when teams collaborate, implement, and provide carryover for continuous skill development, which supports this study finding of ‘immediate/direct training.’

Limitations

It is imperative to respect the limitations of this study. A significant limitation of this study was the sample size. This survey contained only a small percentage of school-based SLPs working in the United States. In addition, the sample size was further reduced for various survey items, due to internet connections. An additional limitation could be that the survey questions that offered an "other" choice did not always allow the participant to elaborate on why they chose ‘other.’ There is no doubt that there are more characteristics to explore that were not considered within this study. Therefore, this means that there could be variables that did influence the school-based SLPs choice of service delivery model that were not controlled for.

Directions for Future Research

In conclusion, there is a limited amount of research in the area of speech-language pathology and the variables that affect which service delivery model practitioners choose. Further research should include surveying graduate school programs to determine how much of the curriculum addresses service delivery models. ASHA’s Council on Academic Accreditation (CAA) may then consider exploring the need for graduate school curricula to provide instruction related to service delivery models used in the schools. Also, a larger sample of school-based SLPs should be surveyed to evaluate the efficacy of varying program intensities and service delivery models for students with different disabilities, at varying grade levels, and with different severity levels.

The literature review discussed some studies that focused on program intensity and service delivery models. Future researcher could focus on surveying school-based

SLPs to evaluate the impact of workload factors (e.g., technology, paperwork, etc.) and ensure that specific training is provided to address these issues.

Conclusion

In summary, the purpose of this research was to examine and understand what factors influence a school-based speech-language pathologists' (SLPs) use of a specific service delivery model to use when providing school-based intervention. Although the number of participants was small, it appeared that graduate school experience/exposure and category of disorder has an impact on which service delivery model was implemented. The effects of large caseload size, as well as the amount of intervention that takes place outside of the classroom, are topics beyond the scope of this study, which require explanation. Finally, there is also a need for efficacy studies to evaluate whether students who are currently receiving speech services in the schools make more progress when they receive services inside versus outside of the general education classroom.

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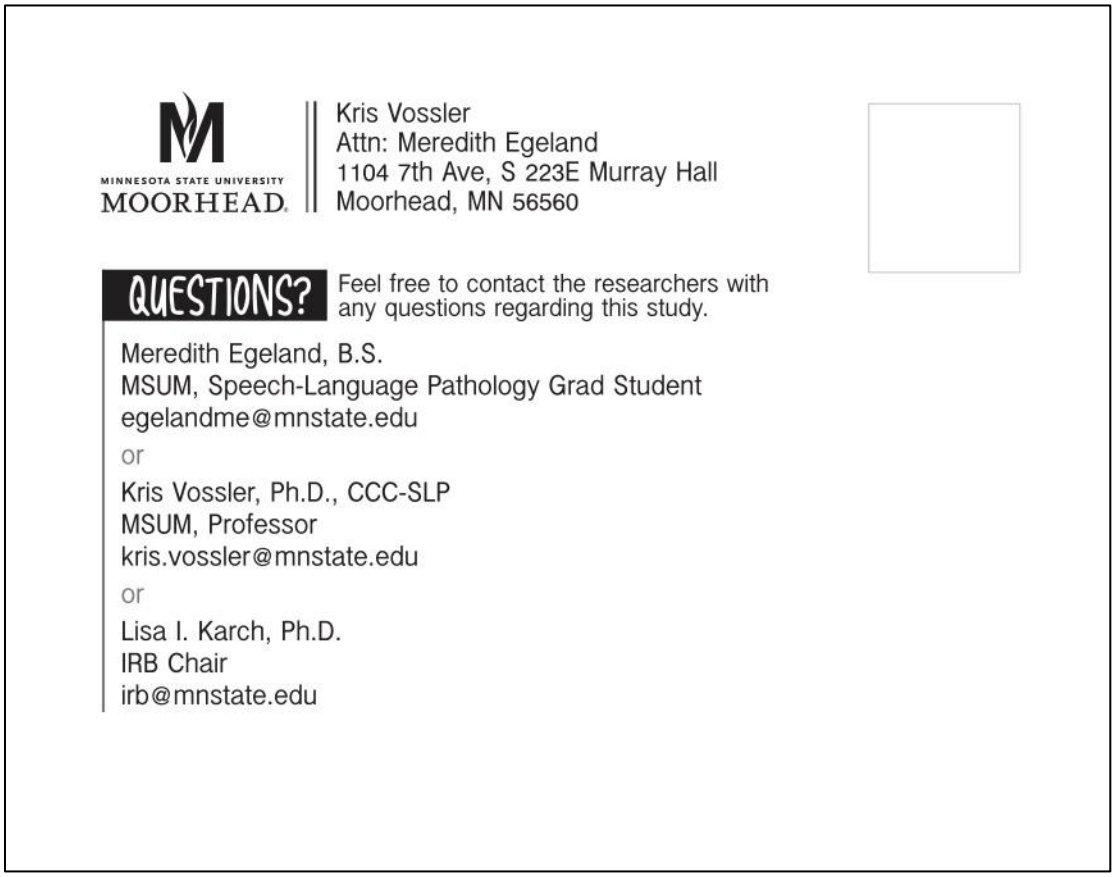
Appendix A

Postcard Front Side

Appendix B

Postcard Back Side



Appendix C

Business Card Front/Back Side(s)

Appendix D

School-Based SLP Informed Consent Letter

Welcome to the research study!

You are invited to participate in a graduate research study that inquires how a school-based Speech-Language Pathologist (SLP) determines what factors play a role in their service delivery model. You were selected as a possible participant in this study because of your membership with the American Speech-Language-Hearing Association (ASHA). The only requirements to participate in this study are current or previous employment in a school setting and the clinical competence certification for speech-language pathology (CCC-SLP).
The survey will take approximately 10-minutes to complete. You will not receive any benefits for completing the survey. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any prejudice.
Any information that is obtained in connection with this study will remain confidential and will not be disclosed. The information obtained from the survey will be kept electronically in a secured database. The survey will take approximately 10-minutes to complete. You will not receive any benefits for completing the survey. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any prejudice.

Any information that is obtained in connection with this study will remain confidential and will not be disclosed. The information obtained from the survey will be kept electronically in a secured database.

Please feel free to ask questions regarding this study. You may contact Meredith Egeland, co-investigator, at a later date if you have additional questions at (218)791-6800 or by email at: egelandme@mnstate.edu or Dr. Vossler, chair-investigator, at (218)477-4200 or by email at: kris.vossler@mnstate.edu. Any questions about your rights may be directed to Dr. Lisa L. Karch, Chair of the MSUM Institutional Review Board at (218)477-2699 or by email at: irb@mnstate.edu.

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

Thank you for your time and participation.
Sincerely,

Meredith Egeland, B.S.
MSUM, Speech-Language Pathology Graduate Student

Kris Vossler, Ph.D., CCC-SLP
MSUM, Professor

- ○ I consent, begin the study
- ○ I do not consent, I do not wish to participate

Appendix E

School-Based SLP Survey

Instruction: Please select the answer that best describes your experience.

Demographics:

1. Which of the following describes your age?
    a. 18-24
    b. 25-29
    c. 30-34
    d. 35-39
    e. 40-44
    f. 45-49
    g. 50-54
    h. 55-59
    i. 60-64
    j. 65 or older

2. Please select the gender you identify with:
    a. Male
    b. Female

3. What year did receive a Master's degree in Speech-Language Pathology? ___

4. Did you minor in any of the following areas? If 'other' please list.
    a. Special Education
    b. Psychology
    c. Other _____

5. How many years have you been employed as a school-based speech-language pathologist?
    a. Less than 4 years
    b. 5-9 years
    c. 10-14 years
    d. 15-19 years
    e. 20-24 years
    f. 25-29 years
    g. 30-34 years
    h. 35-39 years
    i. 40-44 years
    j. 45-49 years
    k. 50 or more years

6. During your graduate school experience, what service delivery models were you exposed to? (Select All That Apply)
    a. **Traditional "pull-out" model:** the SLP pulls the student out of their regular education classroom for individual one-on-one or small-group treatment sessions.
    b. **Supportive teaching:** a combination of "pull-out" services and direct teaching within the general education classroom.
    c. **Complementary teaching:** general education teacher conducting formal teaching while SLP provides extra support to students on caseload.
    d. **Station teaching:** general education teacher and SLP divide up curriculum lesson into stations or learning centers for the class to rotate to.
    e. **Parallel teaching:** same lesson being taught simultaneously by the general education teacher and the SLP within different groups.
    f. **Team teaching:** separate lesson plans created by the general education teacher and SLP to combine instruction and teach to the whole class.
    g. **Supplemental teaching:** one person (usually general education teacher) presents the lesson in a standard format while the other person (usually SLP) adapts the lesson.
    h. **Inclusive "classroom-based" model:** the SLP providing speech-language services to a student within the general education classroom.
    i. **Other:** _____

7. Would you be interested in enrolling in specialty courses to obtain training or additional information regarding the different service delivery models?
    a. Yes
    b. No

Caseload:

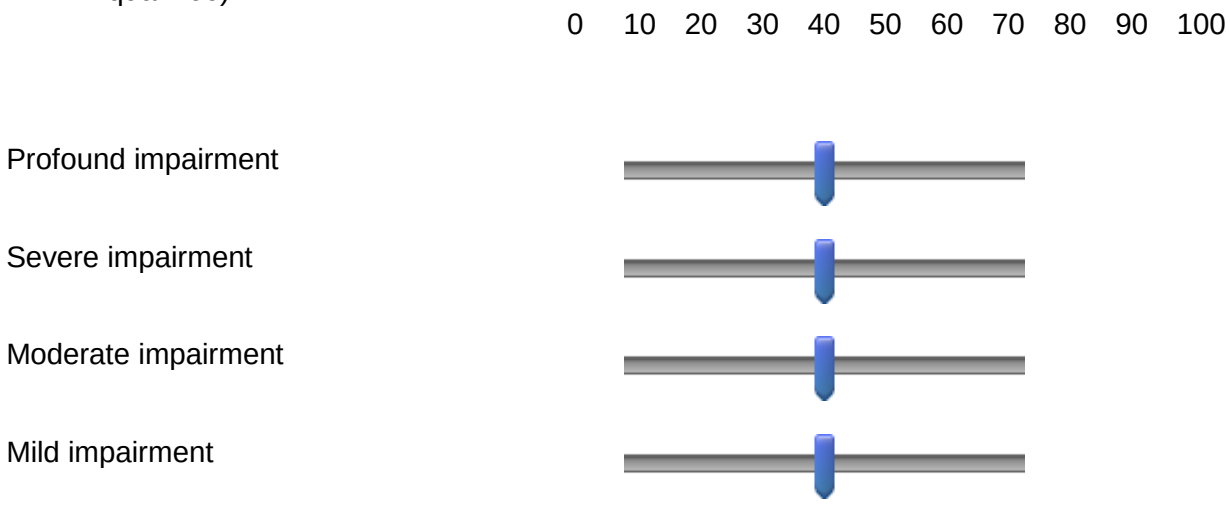
8. What is the total number of students on caseload:
    a. 0 – 100+

9. What population(s) do you primarily work with? (Select All That Apply)
    a. Birth
    b. Preschool
    c. Kindergarten- Grade 2
    d. Grade 3- Grade 5
    e. Middle School/Junior High (Grade 6- Grade 8)
    f. High School (Grade 9- Grade 12)

10. How many students do you serve directly on your caseload?
    a. 0-1 – 100

11. How many students do you serve indirectly on your caseload?
    a. 0-1 – 100

12. What percent of your caseload comes from the following severity levels? (Total Must Equal 100)



13. What type of device is being used to complete this survey?
    a. Computer/iPad/Tablet
    b. Cell Phone

14. Please drag the category of disorder(s) into the box that corresponds to the service delivery model you use.

Traditional "pull-out" model: the SLP pulls the student out of their regular education classroom for individual one-on-one or small-group treatment sessions.

Inclusive "classroom based" model: the SLP providing speech-language services to a student within the general education classroom.

	Service Delivery Model		
Category	Traditional	Inclusive	Other
Language Disorder (semantics, morphology, syntax)			
Articulation/Phonology Disorder			
Nonverbal, AAC			
Pragmatic Language Disorder			
Reading and Writing (Literacy) Disorder			
Auditory Processing Disorder			
Fluency Disorder			
Cognitive Communication Disorder			
Voice/Resonance Disorder			
Other			

15. Have you changed from one service delivery model to another recently?
    a. Yes
    b. No

16. What is the biggest factor influencing your decision not to change models?
    a. Lack of training ___
    b. It is what the school is use to ___
    c. Personal preference ___
    d. Other ___

17. Please complete the following statement:

“I changed from ___1(model)___ service delivery model to ___2 (model)___ service delivery model ___3 (number)___ years ago.”

    a. 1
    b. 2
    c. 3

Workplace Characteristics:

18. Which describes the current area in which you serve?
    a. Rural
    b. Suburban
    c. Urban

19. How many students are enrolled in your school district?
    a. Approximate number: _____
    b. I Don't Know

20. Please rank the following team members by whom you collaborate with the most. (Drag and Drop with 1-most; 6-least)
    a. Family ___
    b. General Education Teacher ___
    c. Special Education Teacher ___
    d. School Psychologist ___
    e. Administration ___
    f. Other ___

21. How do you feel your school district supports you in the following areas?

Funding (testing and therapy materials)	☆	☆	☆	☆	☆
Professional Development Opportunities	☆	☆	☆	☆	☆
Knowledge and Support of Services Provided	☆	☆	☆	☆	☆
Evaluations/Feedback	☆	☆	☆	☆	☆
Other:	☆	☆	☆	☆	☆
Other:	☆	☆	☆	☆	☆

22. How do your teachers/coworkers accept your current implementation model?

Administration	☆	☆	☆	☆	☆
Regular Education Teachers	☆	☆	☆	☆	☆
Special Education Teachers	☆	☆	☆	☆	☆
Other:	☆	☆	☆	☆	☆

23. What do you feel are the benefits to the supports you provide? (Select All That Apply)
    a. Carryover/generalization of skills
    b. Teacher/para training
    c. Family training
    d. Immediate/direct training
    e. Other ___
    f. Other ___