Job Satisfaction Among School-Based Speech Language Pathologists

by Chelsea Thompson

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Dedication

I dedicate this work to my children, Parker, Eli, and Madalyn. Because of you, I am stronger and more fulfilled than I ever imagined. I wish you a life full of love, peace, happiness, confidence, and balance. I hope the sacrifices you have endured for me to pursue this dream will be repaid to you with countless opportunities for joy and success in your future. I love you to the moon and back.

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Abstract

Background: Increased awareness of K-12 student success and liability in education has been a heated topic in educational and government agencies. Consequently, several mandates have been delineated to ensure that school districts implement action plans to better accommodate student achievement. Among these mandates is the provision of highly qualified service providers to deliver free and appropriate education (FAPE) to all students. Research Questions: The purpose of this study identifies common perceptions of speech-language pathologists in public education in various demographic settings throughout Texas to determine which factors increase or decrease the relationship between job stress, satisfaction, and workplace retention. **Methods:** A descriptive survey research design utilizing causal-comparative techniques and correlational techniques investigated major factors influencing job satisfaction of speech-language pathologists employed within Texas public-schools. The utilization of stratified random sampling permitted the distribution of participants across school district settings. Characteristics of the population include full-time speech-language pathologists with a Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP). A total of 521 surveys were distributed electronically to speech-language pathologists, and 44 surveys were not delivered due to delivery failure. A total of 477 speech-language pathologists were provided the electronic survey. Of the 477 participants, 64 completed the survey, providing a completion rate of 13%. **Results:** The purpose of this study was to determine the factors that impact the overall job satisfaction of speech-language pathologists in the state of Texas. The most significant influences of job satisfaction include caseload average, workload average, quality of services provided to students, annual salary, stress level, and appreciation level. Additionally, it appears overall job satisfaction impacts the intention to retire within a public-school setting. **Conclusion:** In line with the

literature review, decreased job satisfaction may contribute to a reduction in the quality of services provided to students and increased resignation of SLPs (Kalkhoff & Collins, 2012). This study assessed the associations between demographic variables, workload variables, and overall job satisfaction of SLPs. Overall, findings suggest that job satisfaction can lead to the retention of school-based SLPs and impact the critical shortage of SLPs in organizations if the abovementioned factors are not addressed.

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Chapter I

Increased awareness of K-12 student success and liability in education has been a heated topic in educational and government agencies. Consequently, several mandates have been delineated to ensure that school districts implement action plans to better accommodate student achievement. Among these mandates is the provision of highly qualified service providers to deliver free and appropriate education (FAPE) to all students. Subsequently, educational agencies struggle to recruit and retain qualified individuals, giving rise to numerous organizational issues (Edgar & Rosa-Lugo, 2007; Katz, Maag, Fallon, Blenkarn, & Smith, 2010; Mitchem, Kossar, & Ludlow, 2006).

The shortage of specialized education personnel has numerous repercussions in the state of Texas. Failed attempts to recruit and retain highly qualified service providers contribute to state policies in which there is a decrease in the qualifications for SLPs, which could lead to unsatisfactory educational opportunities, ill-equipped staff, and a decrease in student achievement (Billingsley, 2004; Deppe & Boswell, 2005).

SLPs participate in and contribute to committees, fulfill procedural compliance paperwork, and provide support for all students in achieving progress. The role of the speech-language pathologist, especially in the educational setting, has transformed radically throughout the years. SLPs have evolved from the designation of "speech correctionist" into being considered integral members of a multidisciplinary team. As educational resources decline, the solution to decreased SLPs within the educational setting is not as simple as hiring more individuals with the necessary qualifications; instead, it requires school districts to reduce costs so that securing certified SLPs is feasible (Paul-Brown & Goldberg, 2001). Furthermore, the financial enticement of the private sector, approximately double that of educational

organizations, along with improved benefits detracts new SLPs from the academic forefront (Edgar & Rosa-Lugo, 2007). However, factors leading to the turnover of SLPs are more convoluted than salary or any other single factor influencing the attrition of SLPs (Billingsley, 2004). Consequently, the critical shortage of SLPs within the educational realm remains unchanged.

Available research proposes variables such as organizational commitment, job satisfaction, career dedication, and job overload as influencing factors in an employee's retention. Evidence has shown that job satisfaction can affect employee functioning and production as well as retention with a specific company. Recent research has determined that job satisfaction correlates with a speech-language pathologist's longevity at an organization (Blood, Ridenour, Thomas, Qualls, & Hammer, 2002; Gersten, Keating, Yovanoff, & Harniss, 2001). With an increase of caseloads and robust workloads, the recruitment and retention of qualified SLPs to provide mandated special education services to an expanding base of students with diverse needs is at a critical low (Coombs, Arnold, Loan-Clark, Bosley, & Martin, 2009; Edgar & Rosa-Lugo, 2007; Kalkhoff & Collins, 2012; Katz et al., 2010).

Increasing demands that influence the quality of therapy and job satisfaction continue to bombard SLPs within the school setting. These demands include caseloads surpassing the American Speech-Language-Hearing Association's (ASHA) recommendation of 40 students as well as, low compensation, paperwork, and general lack of support from school administration (Katz et al., 2010). More recently, the caseload recommendation was discarded by ASHA in the state of Texas, as there was a lack of significant research to support a specific caseload size. Student needs vary immensely, and the caseload cap was interpreted as a minimum rather than a maximum by several states and school districts (ASHA, 2014). Though ASHA's organization

provides recommended guidelines regarding caseload size, the establishment is limited in yielding legislation to mandate a caseload cap.

Possible Solutions

Though ASHA's organization is unable to provide legislative mandates to ease the everincreasing caseload crisis, the organization offers several solutions to the school-based speechlanguage pathologist to ease workload management.

First, ASHA has transitioned in support of workload vs. caseload model. According to the ASHA 2016 Schools Survey, the caseload for school-based SLPs, providing services full time to students with a speech impairment ranged from 31-64 (ASHA, 2016). ASHA school surveys report that the roles and responsibilities of the school-based speech-language pathologist have increased significantly. Factors impacting the workload of a school-based speech-language pathologist include changes in student population, diverse student backgrounds, increased planning and collaboration, legal mandates, new requirements for literacy-based services, documentation requirements, obligatory staff development, increased accountability, and responsibilities supporting students in multi-tiered systems support. In this model, however, 81% of clinical providers continue to utilize the caseload approach (ASHA, 2016).

The description of language has broadened significantly since the 1970s. SLPs provide services to students with deficits in vocabulary, grammar, pragmatics, and phonemic awareness, to name a few components. Recently, written language skills and dyslexia has been incorporated under the umbrella of services school-based SLPs provide to students with a speech impairment. With the implementation of the Response to Intervention (RTI) program in Texas schools, SLPs may see a transition from conventional articulation students to students with more language-based needs, such as literacy and phonological awareness. Therefore, SLPs will deliver early

intervention at various levels requiring innovative and functional-based therapy (Rudebusch, 2008).

Subsequently, the scope of practice of SLPs has increased. However, ASHA does not provide guidelines on separating the responsibilities between the classroom teacher and speech-language pathologist. Formerly, the division between teachers and service providers created a sense of isolation and futile therapy. Consequently, clinicians have implemented an integrated service-delivery method to alleviate negative feelings and increase the collaboration between clinician and teacher. In the integrated service-delivery method, the speech-language pathologist includes language development whereas the teacher focuses on the curriculum and classroom content. Providing evidenced-based practices influenced by the No Child Left Behind Act impacts the literacy training provided by SLPs.

Furthermore, a 3:1 Cycles Approach has been recommended by ASHA to assist with expanding workloads and increased caseloads of school-based SLPs. In this model, the SLPs utilized three weeks for interventions with students and planned a 4th week for work, including assessments, observations, consultations, and meetings to ensure compliance. This methodology has permitted the speech-language pathologist the ability to consult and support teachers and students, reduce service cancellations, and increase morale of the SLPs, contributing to the retention of service providers in districts who utilize this technique.

Finally, the propagation of information and the shift towards technology have impacted students and educators in academia. Globalization, demographic changes, and society are critical elements shaping learning in this century. ASHA has accepted the implementation of Telepractice to service students in areas of need. Telepractice is the application of technology which permits service providers the capability of assessing, intervening, and consulting with

students at a distance (ASHA, 2016). The U.S. Census Bureau stated approximately 80% of households access the internet daily either through the internet via personal computer or a mobile device. To encourage mindset growth and with the ease of digital access, a greater demand for elearning exists. Learning in the digital age has created different platforms for teaching such as blended learning and online classrooms. Communication and connecting with others have never been more accessible with platforms such as Facebook, text, and email.

E-learning in a digital age provides opportunities for asynchronous teaching and learning.

E-learning affords learners the flexibility to create a schedule that is acceptable to their educational responsibilities and still meet goals. Student instruction integrates current technology resources as a tool for learning. Technology is changing how learners and educators think, communicate, and learn. It is critical to learn the essential skills to access necessary web technology and apply those strategies with resources to aide with the future of learning.

The educational success of children is tied to the early development of school readiness, reasoning skills, and social growth. Researchers in the fields of communication disorders, psychology, and education concur that the first five years of a child's life are crucial to the development of cognitive and social skills necessary for future academic success. As shown in Tables 1 and 2, SLPs within the school setting provides services for students ages 3 years through 21 years. The most prevalent disability category for students ages 3 to 5 years is a speech or language impairment (SI).

Table 1
Demographic Breakdown by Disability for Students Ages 3-5 in Texas

	<u>2015-2016</u>		<u>2016-2017</u>		<u>2017-2018</u>	
Disability	Count	Percent	Count	Percent	Count	Percent
Auditory Impairment	840	1.9%	836	1.8%	815	1.6%
Autism	8,030	18.3%	9,120	19.5%	10,408	20.9%
Deaf/Blind	18	0.0%	17	0.0%	24	0.0%
Emotional Disturbance	139	0.3%	156	0.3%	179	0.4%
Intellectual Disability	3,967	9.1%	4,257	9.1%	4,612	9.3%
Learning Disability	69	0.2%	51	0.1%	44	0.1%
Multiply Disabled	493	1.1%	484	1.0%	459	0.9%
Orthopedic Impairment	378	0.9%	369	0.8%	389	0.8%
Other Health Impairment	2,707	6.2%	2,737	5.9%	2,868	5.8%
Speech Impairment	26, 664	60.90%	28, 116	60.3%	29,382	59.1%
Traumatic Brain Injury	58	0.1%	69	0.1%	80	0.2%
Visual Impairment	424	1.0%	440	0.9%	421	0.8%
Total	43,787	100%	46,652	100%	49,681	100%

Note. From "The Special Education Databook: Demographic Data-Disability," by Texas Education Agency, n.d.

(https://tea4avwaylon.tea.state.tx.us/Tea.DataBook.Web/Forms/Default.aspx). Copyright 2019 by Texas Education Agency.

Students ages 6 through 12 years who qualified with SI are secondary in number only to students with a specific learning disability (SLD; U.S. Department of Education, 2002; 2016).

ASHA, the national governing body for certified SLPs, defines eight domains for speech-language pathology service delivery: collaboration; counseling; prevention and wellness; screening; assessment; treatment; modalities, technology, and instrumentation; and population and systems. Moreover, within a speech-language pathologist's scope of practice, nine disorders are targeted (fluency, articulation, language, voice, cognition, augmentative communication, auditory habilitation, speech, and feeding and swallowing). With numerous etiologies targeted by

SLPs, the roles and responsibilities for school-based SLPs become ambiguous to administrators and staff.

Table 2

Demographic Breakdown by Disability for Students Ages 6-21 in Texas

	<u>2015-2016</u>		<u>2016-2017</u>		<u>2017-2018</u>	
Disability	Count	Percent	Count	Percent	Count	Percent
Auditory Impairment	6,089	1.5%	6,064	1.4%	6,090	1.4%
Autism	47,570	11.3%	51,576	12.0%	56,366	12.6%
Deaf/Blind	114	0.0%	126	0.0%	137	0.0%
Emotional Disturbance	26,558	6.3%	27,233	6.3%	28,884	6.4%
Intellectual Disability	42,795	10.2%	46,325	10.8%	49,522	11.0%
Learning Disability	159,225	38.0%	157,016	36.4%	157,617	35.1%
Multiply Disabled	6,522	1.6%	6,660	1.5%	6,704	1.5%
Orthopedic Impairment	3,004	0.7%	2,915	0.7%	2,814	0.6%
Other Health Impairment	58,240	13.9%	61,516	14.3%	65,676	14.6%
Speech Impairment	65,222	15.5%	67,358	15.6%	70,990	15.8%
Traumatic Brain Injury	1,106	0.3%	1,057	0.2%	1,083	0.2%
Visual Impairment	3,006	0.7%	3,028	0.7%	3,024	0.7%
Total	419,451	100%	430,874	100%	448,907	100%

Note. From "The Special Education DataBook: Demographic Data - Disability," by Texas Education Agency, n.d.

(https://tea4avwaylon.tea.state.tx.us/Tea.DataBook.Web/Forms/Default.aspx). Copyright 2019 by Texas Education Agency.

In the state of Texas, there are 1,031 public school districts with a total of 59,610 SLPs employed in the public education setting. Each district has specified guidelines on the eligibility of students who qualify with SI. School-based SLPs can provide services directly through a

district within the special education department, while others may serve students through contract agencies and cooperatives.

According to the national school-based survey distributed by ASHA, more than half (54%) of school-based clinicians conveyed that job openings surpassed job seekers in their employment facility (ASHA, 2016; Bureau of Labor Statistics, 2018). Moreover, according to the Bureau of Labor Statistics (2018), 29,270 SLPs are employed in offices of another health practitioner, 15,060 SLPs are engaged in general hospitals, and 6,340 SLPs are employed in skilled nursing facilities. Table 3 depicts the number of SLPs used in various industries in Texas, while Table 4 illustrates the states with the highest number of SLPs applied. The expected growth for the employment rate is predicted to grow exponentially through the year 2026. Furthermore, an 18% increase in job openings will be needed to fill the growing demand (an added 25,400 SLPs).

Table 3

Industries with the Highest Number of SLPs Employed

	Sum of	Sum of percent of
Industry	employment	industry employment
Elementary and Secondary Schools	58,640	0.69
General Medical and Surgical Hospitals	15,850	0.29
Home Health Care Services	6,380	0.46
Nursing Care Facilities	6,560	0.40
Offices of Other Health Practitioners	32,310	3.69
Grand Total	119,740	5.53

Note. Adapted from "Occupational Employment Statistics: Occupational Employment and Wages, May 2018. 29-1127 SLPs," by Bureau of Labor Statistics, 2019 (https://www.bls.gov/oes/current/oes291127.htm#st). In the public domain.

Table 4
States with the Highest Number of SLPs

		Employment per	Location	Hourly mean	Annual mean
States	Employment	thousand jobs	quotient	wage	wage
Texas	14,660	1.23	1.23	39.24	81,630.00
New York	12,090	1.31	1.31	42.03	87,420.00
California	11,550	0.69	0.69	44.37	92,280.00
Florida	7,280	0.86	0.86	38.31	79,680.00
Illinois	6,430	1.08	1.08	37.87	78,760.00

Note. Adapted from "Occupational Employment Statistics: Occupational Employment and Wages, May 2018. 29-1127 SLPs," by Bureau of Labor Statistics, 2019 (https://www.bls.gov/oes/current/oes291127.htm#st). In the public domain.

Legislative Demands

This country's leaders have declared that the remaining and continuing education gap in achievement must be eradicated. Educational reform insists upon increased graduation rates of highly literate citizens to compete in the global market and a reduction in dropout rates. This educational reform has provided a force for legal mandates and the advancement of professional practices. Legislation shapes the daily practices of the school-based speech-language pathologist. Legislative actions such as the Individuals with Disabilities Education Act (IDEA, 2004) redefined the role of school-based SLPs. Subpart B of IDEA requires schools to educate all children with a disability, regardless of severity. SLPs must work with a team of educational specialists to determine if a child meets eligibility with SI and whether SI is the primary disability, or a disability associated with another category under IDEA. Children with complex disabilities require intensive services. SIs' and communication disorders secondary to other disabilities have expanded the caseload and workload for the school-based speech-language

pathologist. Students with SI account for 20% of the disabilities in children ages 3 to 17 serviced under IDEA, performing as the second most prevalent IDEA disability category (IDEA, 2004).

Additionally, Subpart B of IDEA mandated that children with disabilities should be educated in the least restrictive environment (LRE) alongside peers who do not have disabilities. The Individualized Education Program (IEP) is a multidisciplinary plan on how to reach the goal of LRE while providing the services the students need to work on specific disability-related skills. Given the team approach, the workload activities have increased as SLPs collaborate with general education teachers to comprehend the curriculum at all grade levels and incorporate interventions that will benefit the curriculum standards.

The Elementary and Secondary Education Act of 1965 (ESEA), as amended by the Every Student Succeeds Act (ESSA) is the governing body of law that guides public education. This new federal regulation, which was signed into public law in December 2015 by President Obama, replaced the No Child Left Behind Act (NCLB). The purpose of ESSA is to ensure that public schools provide quality education for all students. As the latest iteration of the original law, ESSA permits greater flexibility in designing accountability systems, reporting, and educational goals at the state level and provides states more involvement with how schools describe student achievement. A contributing factor to the deficit of school-based SLPs has been a lack of support for professional development. ESSA implemented new focused professional learning opportunities for specialized instructional support members. However, ESSA has delegated SLPs to provide professional development in literacy within their schools. SLPs can collaborate with administrators and staff on their knowledge of early literacy; however, training, team building, and goal development for students all contribute to the growing demands placed on school-based SLPs.

To support academic achievement, ESSA established a new literacy program that allows schools to use all professional staff, including SLPs, to assist with literacy instruction, which includes professional development opportunities and consulting with teachers to plan comprehensive literacy instruction. The action plan to support literacy can include using evidence-based screening assessments for early identification of literacy deficits and implementing evidenced-based instruction to support individualized needs. To support student learning, decision-makers at the state level can utilize a grant supporting the use of technology. SLPs are uniquely qualified to suggest and oversee technology needs for students with hearing loss or other communication disorders.

American Speech-Language-Hearing Association (ASHA)

ASHA is the national credentialing association for SLPs. ASHA envisions communication as a human right that should be accessible and attainable for all individuals. ASHA supports SLPs in improving science, setting standards, cultivating professional practice, and advocating for members (ASHA, 1997-2018). ASHA is committed to following a framework of standards of practice and principles to safeguard the welfare of the individuals serviced and to protect the integrity of the profession. The Code of Ethics consists of four principles, including providing professional evidenced-based practices, maintain the highest level of professional competence and performance, provide accurate and credible sources of information, and maintain collaborative relationships (ASHA, 2016).

The 2019 Public Policy Agenda, created by ASHA's Government and Relations and Public Policy Board, works in collaboration with lawmakers, policymakers, and decision-makers to provide critical priorities impacting SLPs and discover solutions (ASHA, 2019). Survey results have demonstrated critical priorities that must be resolved through decision making at the

state and federal levels including reducing caseload/workload burdens, streamline documentation, increase funding, and maintain roles in the federal and state governments.

Although biannual surveys are distributed to SLPs nationally to determine demographic and workload characteristics of SLPs employed in public education systems, the number of SLPs who contribute to Texas is minimal. According to the school survey completed by ASHA (2018), only 117 respondents perform speech services in Texas. Currently, there are 58,790 SLPs employed at the elementary and secondary levels throughout Texas, and only .20% of the population is represented on the national survey.

This study aims to increase the respondent numbers to achieve better representation of demographic and workload characteristics of SLPs employed in public education facilities as well as to gauge job satisfaction and turnover rate.

State Context

State education standards. Texas Department of Licensing & Regulation requires individuals to obtain a "Master's degree from a program accredited by a national accrediting organization approved by the Board and recognized by the U.S. Secretary of Education in an accredited college or university" (ASHA, 2018). Additionally, individuals seeking to achieve certification must obtain 400 hours of supervised clinical practicum during the graduate program to demonstrate mastery of a variety of communication disorders.

State law. The Texas Commission of Licensing and Regulation adopted amendments to existing rules at 16 Texas Administrative Code (TAC), Chapter 111 to implement House Bill 4007 (H.B. 4007), 85th Legislature, Regular Session (2017). The three categories of adopted rules were united into one adoption. The purpose of the adopted amendments was to revoke

provisional certification of SLPs, remove the residency requirements for advisory board membership, and exclude requirements concerning the PRAXIS Exam. Moreover, the changes created reorganized the structure of supervision requirements (Texas Register, 2019).

State guidelines. Transitioning the SLPs program from the Department of State Health Services (DSHS) to the Texas Department of Licensing & Regulation (TDLR) transpired in 2015 when Texas Legislature passed Senate Bill 202. After obtaining educational standards, to procure an initial license with the Texas Department of Licensing & Regulation, an individual must achieve a passing score of the Praxis Examination in Speech-Language Pathology (ASHA, 2018). Finally, an applicant must complete 1,260 hours of supervised professional experience, Clinical Fellowship, and successfully complete the jurisprudence examination. SLPs are expected to renew their state license every two years. During the two years, SLPs must procure 20 clock hours of continuing education, with two hours completed in ethics (ASHA, 2018).

Furthermore, Texas school districts are implementing strategies to decrease the number of unfilled speech-language pathologist positions by providing a variety of retention and recruitment incentives as a strategy to employ certified SLPs. These enticements include human resource incentives (i.e., TRS participation, stipends, benefits), departmental incentives (licensure reimbursement, budget for supplies, professional development), and other incentives impacting the quality of the profession (e.g., support, collaboration, advancement opportunities). However, increasing caseloads, growing workload demands, and the expansion of responsibilities are contributing to the pressures placed on SLPs and ultimately to burnout (Coordinating Committee of the Vice President for Speech-Language Pathology Practice, 2009).

Shortages of qualified SLPs in educational settings results in underserved students requiring evaluations and interventions (Boisvert, Lang, Andrianopoulos, & Boscardin, 2010).

SLPs have evolved into integral members of the education system; they provide evaluations and interventions for a diverse population while addressing an array of disorders and impairments in a variety of settings. The growing career opportunities permit SLPs to choose preferred client population and work setting, as well as favored employment facilities. These opportunities allow competent certified SLPs the option to depart with settings that no longer provide job satisfaction with the assurance that a new position is readily obtainable within a different employment setting or provider (Leonard, Plexico, Plumb & Sandage, 2016).

Statement of the Problem

Recruitment and retention of SLPs within the school setting remain a priority for ASHA. ASHA has conducted surveys on professional issues regarding speech-language pathologist related services biannually since 2004 (ASHA, 2014). However, minimal effort is made to assess the quality of life for school-based SLPs. If job satisfaction is present, employees are more likely to yield productivity, fruitful work, aspiration to remain in the profession, and inspiration toward others who enter the field (Edgar & Rosa-Lugo, 2007; Kalkhoff & Collins, 2012). As the number of students who qualify with a speech impairment continues to increase, the demand for school-based SLPs will continue to grow.

Shortages in school-based SLPs produce high financial stress for school districts.

Moreover, school districts paid contracted SLPs a median of \$20 more per hour than full-time employees (Janota, 2004). Moreover, increased shortages expand the caseload responsibilities for existing professionals, continuing the cycle of burnout and attrition. Consequently, students in the public education system may suffer the price for the shortage in SLPs in educational facilities, deserving the attention of stakeholders to provide free and appropriate services to the students in Texas's schools.

The negative perception of high caseloads, paperwork, and low compensation continue to be deterrents for qualified SLPs in the education setting. Even with the surge in the shortage of SLPs working in the educational settings, no study to date has examined retention factors and job satisfaction throughout the state of Texas. Despite findings from several national surveys conducted over the past decade, SLPs in educational settings are generally satisfied; however, as the demands continue to intensify, this growing dissatisfaction may be related to the currently documented shortages.

Purpose of the Study

The purpose of this quantitative study is to investigate common themes in the perceptions of SLPs throughout Texas public education to determine factors that affect the relationship between job stress, satisfaction, and retention of placement within the education setting.

Examining the overall job satisfaction of participating SLPs licensed and employed by the public school districts within Texas could provide correlations between specific aspects of the work experience and how job satisfaction and retention factors contribute to the overall retainment of SLPs in the educational setting. Public school districts, including administrators, the board of education members, our governing body (ASHA), and policymakers may benefit from understanding potential relationships between the specific job facets and overall job satisfaction. A more conclusive understanding of the shortage of SLPs within the educational setting may provide valuable feedback from working clinicians to assist schools in the development of recruitment, hiring, and retention practices for the school-based speech-language pathologist.

Research questions. The following research questions guided the study.

- 1. How do demographic variables (income, ethnicity, district location) correlate with job satisfaction for speech-language pathologists in each TEA classified public school setting as measured by the completed job satisfaction survey?
- 2. How do workload characteristics (case size, documentation, other duties) correlate with job satisfaction for speech-language pathologists in each TEA classified public school setting as measured by the completed job satisfaction survey?
- 3. To what extent, if any, does job satisfaction impact the retention rate of speech-language pathologists within the public school setting as measured by completed job satisfaction survey?

Operational Definitions

American Speech-Language-Hearing Association (ASHA): The nationally recognized professional, research, and credentialing body for the field with a vision of ensuring communication as an accessible and attainable human right for all (ASHA, 2014).

Burnout: A dynamic process impacting employee effectiveness and capability of performing employment obligations due to frustration and job value.

Caseload: In this study, caseload signifies the number of students with Individualized Education Programs (IEPs) serviced by school-based SLPs through direct and indirect service delivery options.

Dependent variable: The dependent variable is classified as job satisfaction.

Independent variables: The independent variables represent the demographic variables (income level, gender, educational level, location) and workload characteristics (case size, documentation, other duties) within the study.

Job satisfaction: Job satisfaction defines the level at which employees like their career positions and the various aspects within their professional scope (Kalkhoff & Collins, 2012).

Motivation: Motivation defines the driving force, which reinforces SLPs' efforts to achieve and complete work goals within the educational context.

Recruitment: In this study, recruitment defines the ability to procure SLPs in Texas school districts.

Retention: In this study, retention is the ability to maintain qualified SLPs for a prolonged period in Texas school districts.

SLPs: According to the American Speech-Language-Hearing Association (ASHA, 2014), a speech-language pathologist works "to prevent, assess, diagnose, and treat speech, language, social communication, cognitive-communication, and swallowing disorders in children and adults."

Workload: In this study, workload refers to all activities required and performed by SLPs within the educational setting, including time for direct services to students, as well as time spent executing other pursuits necessary to support student IEPs and guarantee conformity to IDEA and other mandates.

Chapter II

Review of Literature

SLPs operate through specialized education departments and cooperatives while serving in elementary and secondary schools. The recruitment and retainment of SLPs in the educational setting have been a critical national issue for an extended period, primarily due to factors such as job overload and decreased job satisfaction. This study will compare and examine the effective factors related to the retention rate of SLPs employed in educational facilities in Texas.

Roles and Responsibilities

SLPs within the educational setting are required to be competent in a range of clinical diagnoses. Research suggests that heavy workloads, unrealistic expectations, and a lack of support from administration decrease the overall satisfaction of school-based professionals and increase the burnout rate (Sevier-Alston, 2017; Ukrainetz & Fresquez, 2003). School-based SLPs are unique in the education setting as the roles and responsibilities are clearly defined compared to special educators. The overall perception of "language disabilities" has transformed dramatically since the 1970s from vocabulary and grammar treatment to include components such as pragmatics (social-language), oral-language, and phonemic awareness. Additionally, written language skills and dyslexia have recently been encompassed under the umbrella of language skills that SLPs must address (Ukrainetz & Fresquez, 2003). Although new guidelines established by ASHA for the scope of practice of SLPs include language and literacy in addition to the other areas of practice, a clear distinction has yet to be made for what constitutes a classroom teacher's responsibility versus a speech-language pathologist's responsibility.

Consequently, identifying elements that influence a SLPs' job satisfaction is imperative for both the employer and employee. SLPs maintain essential roles in education and are integral

members of school facilities. SLPs provide a range of roles and responsibilities as an integral member of the educational facility, including prevention, assessment, intervention, program design, data collection and analysis, and compliance. SLPs provide speech services for students ages 3 to 21 or across all educational levels. Furthermore, as outlined in the ASHA Scope of Practice and Speech-Language Pathology and federal regulations, SLPs provide services to students presenting with the full range of communication disorders, often with multiple etiologies involved. SLPs address all needs (personal, social/emotional, academic, and vocational), which may impact a student's educational success. Furthermore, SLPs must provide a distinct set of specialized services focused on addressing linguistic, metalinguistic, and supralinguistic foundations for curriculum learning. Also, SLPs contribute to the increasing diversity demands by providing culturally competent services to formulate appropriate identification of student needs and promoting educational growth.

Though the intervention and design of a students individualized education program are necessary to ensure academic success, the speech-language pathologist further contributes to student success through collaboration with other school professionals, universities, the community (i.e., social service agencies, private schools, physicians) families, and with the student. Student involvement in their education process is essential to promoting self-advocacy. SLPs provide leadership and direction to ensure the delivery of appropriate speech services. SLPs advocate for appropriate programs and services for children, supervise and mentor new professionals and paraprofessionals, provide valuable resources through professional development, create a language-enriched environment by offering parent training, and utilize research-based practices through the incorporation of assessments and service practices.

Theoretical Framework

Job satisfaction is addressed through the theories of motivation. Therefore, it is crucial to define job satisfaction and motivation to consider the correlation between these variables. In industrial/organizational behavior, job satisfaction has been extensively researched. According to Spector (1997), job satisfaction is defined as the level of contentment for various aspects of an individual's job. Decreased job satisfaction can contribute to a decline in the quality of services provided to students and increased resignation for qualified professionals (Kalkhoff & Collins, 2012). The global attitude deems job satisfaction as a single, inclusive feeling toward the job. Conversely, the facet outlook emphasizes other contributing factors such as wage and work environment.

Theories of motivation. Motivation has been analyzed through multiple theorists to explain the perception of motivation. Motivation denotes the dynamics that force an individual to perform in a goal-directed manner (Roh, Moon, Yang, & Jung, 2015).

Examining the humanistic approach, Maslow's hierarchy of five needs is a conceptual framework utilized to describe job satisfaction and the motivating factors that drive individuals to work hard and stay loyal to a company. The hierarchy of needs is a pyramid in which the physiological and security needs are classified into the lower order; of needs while the affiliation, esteem, and self-actualization needs are placed within the higher-order. The most primal needs occur at the base, with the needs becoming multifaceted as they progress toward the top of the pyramid. The five tiers of the hierarchy are as follows: physiological, safety, belonging, esteem, and self-actualization (Stewart, Nodoushani, & Stumpf, 2018). According to Stewart et al. (2018), as an individual's essential needs are sustained, the individual seeks to fulfill the next

tier. However, not all needs are mandatory before seeking to satisfy more advanced tiers, as more needs will be located within the lower tiers when compared to the higher tiers.

Furthermore, needs may be reorganized according to the individual's values, or; the culture's morals, or they may adjust as the individual develops through life (Stewart et al., 2018). The most basic tier requires the individual to maintain homeostasis. In this tier, the individual satisfies the needs of the body required to preserve standard processes such as digestion, respiration, excretion, and metabolism. The second tier is comprised of safety needs, which could be somatic, psychological, or economical (Stewart et al., 2018). An individual's sense of belonging describes the needs of the third tier; these could be the love of family and friends, or alternatively, membership on a team or in an organization. In the fourth tier, the individual concentrates on self-esteem, seeking to earn respect and acknowledgment and increase one's confidence in abilities. Lastly, the fifth and most challenging tier to achieve is self-actualization, which represents an individual's desire to seek a secular experience with a resonating sense of harmony and connection of an individual's dependence and link to the world. This can be achieved by performing music, landscaping, or exploring life for the reason of being (Stewart et al., 2018).

Maslow posited that leaders in the professional setting create the climate necessary for an employee's potential to be reached and utilized. Within a conducive environment, individuals are better able to demonstrate independence, recognition, and responsibility. Conversely, a poor working environment leads to personal frustration, a lack of job satisfaction, and increased turnover.

Following Maslow's hierarchy of needs theory, the job characteristics theories concentrate on creating an enriched workplace by centering on critical characteristics of

occupations (Spector, 1997). Herzberg's two-factor theory is highly regarded in the job characteristics model (Perrachione, Peterson, & Rosser (2008). Herzberg postulated motivation is in the form of satisfaction instead of productivity outcomes. The fundamental assumption, therefore, is a satisfied individual will be a productive individual. Figure 1 illustrates Herzberg's two-factor theory.

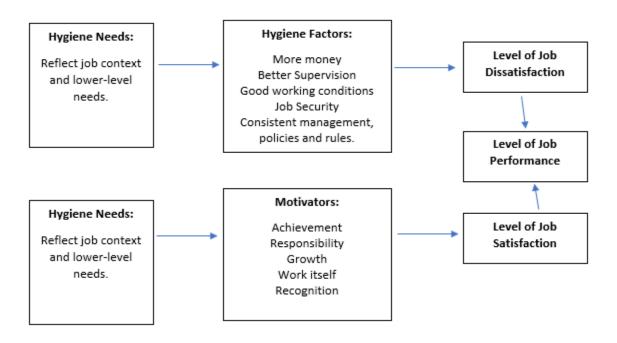


Figure 1. Herzberg's two-factor theory.

According to Perrachione et al. (2008), job satisfaction and the psychological construct of motivation are comprised of both intrinsic and extrinsic characteristics. Intrinsic characteristics are a result of an individual's relationship to a job and include job interest, responsibility, autonomy, and achievement. Extrinsic factors such as salary, work setting, job security, supervision, and policy are the rewards needed for satisfaction within an organization; for example, an individual may choose to work overtime to gross more money. According to Randolph (2005), however, external motivators are not the sole factor in determining motivation.

Through his research, Herzberg (1964) hypothesized that the elements involved in creating job satisfaction were divergent from the issues that led to job dissatisfaction. In other words, Herzberg predicted that instead of being opposites on a binary scale, satisfaction and dissatisfaction occur on two different continuums. Herzberg confirmed his hypothesis by interviewing 200 accountants and engineers on their perceptions about their current work setting. He discovered that dissatisfaction (or lack thereof) within their practice was accompanied by the following factors: salary and benefits, company policy, working conditions, administration, interpersonal relationships, supervision, status, and security. These factors were referred to as "hygiene factors" as they were used to help prevent dissatisfaction within the workplace (Perrachione et al., 2008).

During his examination, Herzberg discovered a distinctive set of features while looking at job satisfaction. These factors included advancement, achievement, responsibility, recognition, and work task. These concepts were defined as "motivators" as individuals perceived these factors as essential in order to believe that satisfaction and motivation exist in daily tasks. Much of Herzberg's hygiene factors exist as extrinsic motivators; whereas, several motivation factors exist with intrinsic motivators.

Herzberg (1964) hypothesized that most organizations focus on hygiene factors, but it is the motivation factors that determine an individual's happiness as they function as basic needs to become more knowledgeable. Nevertheless, critics of this theory argue that the workplace is multifaceted and cannot only be explained through satisfaction and dissatisfaction.

Research completed by Blood et al. (2002) compared results of a survey among occupational therapists, physical therapists, and SLPs regarding intrinsic and extrinsic factors that contribute to overall job satisfaction and retention of professionals in their respective fields.

The results of this study revealed that extrinsic factors such as productivity expectations negatively correlated with job satisfaction, whereas adequate support staff and realistic workloads contributed to increased career satisfaction. Furthermore, intrinsic factors such as professional growth and stable work environment produced a positive correlation with career satisfaction.

Additionally, the humanitarian perspective and utilitarian perspective are two constructs related to job satisfaction founded by Rowden (2002). Regarding the humanitarian perspective, individuals should be treated justly and respectfully. Conversely, the utilitarian perspective states that job satisfaction can influence an individual's behaviors, which affect the performance of an organization. A recent survey in the *ASHA Leader* reported that the top three reasons for SLPs to remain in their current setting are challenging work, positive relationships with peers, and commute. In contrast, the top three reasons for leaving an establishment consist of poor leadership, lack of work-life balance, and lack of recognition and appreciation (Gersten et al., 2001; Blood et al., 2002; Edgar & Rosa-Lugo, 2007).

Recruitment theory. According to the Expectancy Theory, the behavior of an individual is a consequence of conscious choices (Chiang, Jang, Canter, & Prince, 2008). This model is based on three principles: valence, expectancy, and instrumentality. Valence is described as the emotional magnitude an individual places on the prospective rewards an organization may offer. Expectancy refers to an individual's confidence in completing a specific task. Additionally, instrumentality represents the individual's perception of whether desired outcomes will be achieved. Furthermore, Rynes, Bretz, and Gerhart (1991) suggest that an individual will seek employment with a specific company if he or she perceives both high valence and expectancy.

Sevier-Alston (2017) is a speech-language pathologist in the administration who has dramatically increased the job satisfaction rate and decreased the burnout rate among facility SLPs by using growth factors such as requiring the SLPs in her establishment to provide motivating goals utilizing the SMART (specific, measurable, attainable, relevant, and timely) principle. Also, Sevier-Alston (2017) requested goals to encourage team cooperation as well as adjusted personnel work-life balances. This increased efficiency with administrative tasks as well as clinical services. Furthermore, the staff was rewarded with salary increases based on professional objectives (hosting in-service presentations, for example) instead of solely on years of service. SLPs demonstrated increased satisfaction due to the recognition of accomplishments and additional workload that was demanded before. Utilizing a few of these techniques inside the public education system could improve the satisfaction and retention rate of SLPs in Texas.

Significance of Job Satisfaction

Kinicki, Mckee-Ryan, Schriesheim, and Carson (2002) examined the relationship between job satisfaction and organizational variables such as job motivation, organizational loyalty, performance, resignation, and employee absenteeism directly impact an organization's effectiveness. In a meta-analysis of nine studies, they discovered a positive relationship between job satisfaction and motivation. Additionally, Kinicki et al. revealed a strong relationship between job satisfaction and loyalty to an organization. When an employee feels satisfied with their job, the employee is more committed to the organization; consequently, higher devotion facilitates increased productivity.

Spector (1997) discovered two contrasting arguments concerning job satisfaction and job performance. The first claim provides the contention that satisfaction within a job will direct performance, suggesting that individuals who are satisfied with a company will demonstrate

increased effort and perform more efficiently. Conversely, the second allegation insists upon increased performance produces improved job satisfaction.

Through multiple studies, it has been established that both personal and work-related factors could affect job satisfaction either positively or negatively. The lack of job satisfaction is capable of producing dire consequences for an organization. Therefore, supervisors and administrators should ensure employee satisfaction to maintain a successful organization.

Job Satisfaction and Demographic Variables

Demographic variables including age, gender, race, and duration of service are common determinants in job satisfaction studies (Spector, 1997; Luthans, 2011).

Age. Studies have demonstrated inconsistencies in the effect that age has on job satisfaction. Spector (1997) suggests that older workers are more satisfied than younger colleagues, whereas other studies found U-shaped relationships as evidenced by the high satisfaction rating of younger employees, decreased satisfaction for middle-aged employees, and increased satisfaction in older employees. Thirty percent of SLPs are aged 34 years or younger. Twenty-eight percent of SLPs are between the ages of 35-44. Twenty percent of SLPs are between the ages of 45-54. Twenty-three percent of SLPs are 55 years and older (ASHA, 2016).

Gender. Literature has established discrepancies between gender and workplace satisfaction (Edgar & Rosa Lugo, 2007; Luthans, 2011; Veiga, Baldridge, & Markoczy, 2014). With the increasing expectations for women in the workforce, results will differ among the genders. Research suggests that workplace relations and working conditions are more critical factors compared to men. According to ASHA (2016), males currently encompass 3.7% of working SLPs with ASHA certification.

Race. The workforce comprises of complex, technological, and multicultural societies. It is necessary to look at the job satisfaction of a diverse workforce to ensure the optimum performance of employees. Exponential growth and the changing demographics in the United States poses new demands for socially proficient clinical services in speech-language pathology. The decreased supply of culturally competent service providers exists within the workforce, as evidenced in the level of diversity in the current supply of SLPs and the academic student pipeline. Overall, 7.9% of ASHA members occur in the racial minority; 1.3% have self-identified as multiracial, and 5.0% have identified as Hispanic (ASHA, 2016).

Location. Few studies in the field of speech-language pathology have concentrated on the factors related to SLPs' work environment and workplace, known as workplace conditions. Grant and Dziadkowiec (2012) linked organizational factors within the job satisfaction and found that overall job satisfaction was significantly related to variables regarding the SLPs' job setting.

Blood et al. (2002) further examined the working conditions between SLPs employed in urban and rural settings. The study compared the attrition rate and job satisfaction among SLPs in the two different demographics. Results indicated that although rural SLPs achieved higher attrition rates, both groups reported high levels of job satisfaction. Additionally, rural SLPs had less access to peers, traveled further between schools, and reported limitations among resources. Conversely, urban SLPs serviced more students and obtained higher caseloads resulting in increased paperwork. Furthermore, utilizing demographic analysis, SLPs in the rural setting were more predisposed to job stress and burnout due to work overloads and performance constraints.

Job Satisfaction and Workplace Conditions

The most common determinants of job satisfaction in the work environment subsist in two groups, reward structure and work environment (Luthans, 2011). The reward structure is

defined as pay and promotion, whereas the job itself and the support system defines the work environment.

Reward structure. Employees expect a reasonable income and promotion for their contribution to an organization. Satisfaction and dissatisfaction of employees result from the perceptions of their inputs in correlation to their outputs and by comparisons with other colleagues of similar professions and organizations. In this study, income remains the only variable evaluated.

Income. The most basic need in an organization is pay according to Maslow's theory (Luthans, 2011). Furthermore, Herzberg states that income is a hygiene factor and does not motivate the individual but prevents dissatisfaction. Income rates as one of the top five rewards in a reward structure. Dependent upon the level of career; however, growth and status may impact satisfaction more. Spector (1997) reports that pay satisfaction influences the fairness of distribution, rather than a monetary amount. Increased responsibilities and static income may demonstrate an adverse effect on the job satisfaction of school SLPs.

Work environment. An organization's environment defines this work-related factor. Numerous studies have examined the influences of the workplace on the individual in education and job satisfaction. Reaves and Cozzens (2018) directed a study on the perceptions regarding the workplace for teachers. In the study, teachers demonstrated strong motivation to remain within the field due to teacher perception of self-efficacy. However, by the third-year, job satisfaction began to diminish due to the deficiency in autonomy and empowerment. Further research completed by Bryant and Constantine (2006) reported decreased job satisfaction and burnout among school counselors due to diminished supervisory support and immense workloads. Moreover, a study performed by Perrachione et al. (2008) investigated the

association between leadership and job satisfaction among educators and discovered that the connection between teacher job satisfaction and leadership of administrators were positively correlated.

Caseloads. A caseload is the number of students serviced by a speech-language pathologist with an IEP through direct or indirect service delivery options. Difficult caseload issues afflict SLPs nationally. Large caseloads impact a speech-language pathologist's stress level and job satisfaction. Larger caseloads negatively impact the efficiency of speech-language therapy resulting in lower student achievement and unwanted behaviors with increased group sizes (Chiang et al., 2008).

Workloads. The workload refers to all activities performed by the speech-language pathologist, including direct services to students. Armstrong, White, Moorer-Cook, and Gill (2012) reviewed the workload status of school-based SLPs in Texas. Results indicated that efforts should continue to enhance the quality of treatment for students and retention of school SLPs.

Demand for Speech-Language Pathologists

Demand continues to exceed supply in special education-related professions. The scarcity of SLPs within the educational setting continues to be a concern (Edgar & Rosa-Lugo, 2007). According to the ASHA (2016) Schools Survey, 54% of school-based SLPs reported that the demand for job seekers exceeds the supply of available SLPs. The U.S. Bureau of Labor Statistics (2018) states that the employment rate of SLPs will experience a growth rate of 18% through the year 2026. The current number of jobs as of 2016 is 145,100, with an employment change from 2016-2026 of 25,900. Only about two out of five SLPs worked in the school setting while the majority worked in healthcare facilities.

The upsurge in demand for SLPs has been influenced by several elements including an increase in the number of students diagnosed with speech impairments, newly enforced legislative guidelines, and high turnover rates both due to job satisfaction and voluntary resignation (Blood et al., 2002; Edgar & Rosa-Lugo, 2007). Increasing and challenging caseloads afflict SLPs nationally. According to ASHA, the caseload refers strictly to the number of students with IEPs serviced by the school-based speech-language pathologist. Moreover, a relationship between caseload size, caseload manageability, and overall job satisfaction is consistently linked (Blood et al., 2002; Edgar & Rosa-Lugo, 2007; Katz et al., 2010; Armstrong et al., 2012).

Influential Recruitment and Retention Factors

Dowden, Alarcon, Vollan, Cumley, Kuehn, & Amtmann, (2006) conducted a survey that was mailed to SLPs in educational facilities in Washington state. The study aimed to assess the caseloads across the state and identify the regions with predominately high and low caseloads. The mean caseload size in Washington was 55 students; however only 14% of the respondents were serving caseloads at or below the size suggested by ASHA.

Blood et al. (2002) conducted a national study on the job satisfaction of school-based SLPs. Respondents included 1,207 SLPs indicated that age and number of years in the speech-language pathologist's current position were positive predictors of job satisfaction. Conversely, caseload size was a negative predictor of job satisfaction. Demographical information did not impact job satisfaction.

Caseload size has been described as one of the most significant predictors in overall job satisfaction and retention of SLPs. Based on the ASHA (2016) school survey, 81% of SLPs utilized a caseload approach, while only 15% a workload approach. The most substantial median

caseload was listed at 64 students in Florida, while the smallest caseload size was reported at 31 students in New York. For Texas, reported 51 as the median caseload size. Forty-three percent of SLPs surveyed identified "compromising quality of services as an ethical challenge."

Troubleshooting

Since 2004, ASHA has distributed surveys to school-based SLPs to gather insight into the profession. Barriers that impact recruitment and retention of school-based SLPs have been documented through the years in multiple studies (ASHA, 2016). The rise in paperwork has been revealed to be one of the most significant challenges impacting SLPs. Paperwork includes IEPs, progress reports, evaluation reports, and data collection within therapy logs (ASHA, 2014). Other negative factors that influence a speech-language pathologist's decision to leave the educational setting include low salaries, insufficient planning and meeting time, limited resources available, and inadequate professional support. Often, new graduates prefer to enter the health care setting versus public schools.

Consequently, ASHA has recommended strategies and solutions to resolve the issue of the shortage of SLPs in the educational setting and retaining qualified SLPs who do enter the education workforce. ASHA recommends that organizations:

- Provide exposure to actual work settings while in a university
- Develop service-learning models
- Provide early mentoring
- Provide competitive salaries
- Provide financial incentives
- Educate decision-makers
- Reduce paperwork

- Establish licensing reciprocity across states
- Permit out-of-state applicants with national certification licenses

In response to increasing caseloads, a caseload/workload solution was proposed by ASHA. Workload includes direct services, as well as activities to support student's academic needs to ensure successful outcomes. In this approach, the workload should not be regarded as the same as caseload since students vary in severity and can create significant changes in the amount of work for a speech-language pathologist. According to the ASHA (2016) School Survey, "students with severe impairments were a majority (67%) of cases in day/residential schools." Additionally, 90% of SLPs serviced students with language disorders, including deficiencies in semantics, morphology, syntax, and pragmatics/social communication.

Demographic and geographic variables contribute to overall job satisfaction. Each geographic variable presents a unique challenge; for example, in a rural setting, SLPs often experience larger caseloads, lower incomes, and social and professional isolation. In the urban setting, student diversity, lower socioeconomic status, and increased dropout rates for students with disabilities contribute to challenges (Blood et al., 2002). This study will examine the demographic and geographic challenges that distress SLPs in various Texas locations.

According to the ASHA (2016) School Survey, the average age of SLPs was 45 years, with an average of 16 years of experience. Additionally, 45% of SLPs worked in a suburban area, and only 31% were more likely to work in the South. The most likely retirement year was 2025.

School District Categories in Texas

The Texas Education Agency (TEA) organizes public school districts into eight major categories, including major urban, major suburban, other central city, other central city-suburban, independent town, non-metropolitan: fast-growing, non-metropolitan: stable, and rural (TEA,

2017). For this study, charter schools will not be included in the sample. School districts are categorized by community factors such as enrollment growth and economic status.

The Major Urban district classification is composed of 11 districts. Major Urban is defined as a district "(a) located in a county with a population of at least 950,000; (b) its enrollment is the largest in the county or at least 70 percent of the largest district enrollment in the county; and (c) at least 35 percent of enrolled students are economically disadvantaged. A student is reported as economically disadvantaged if he or she is eligible for free or reduced-price meals under the National School Lunch and Child Nutrition Program" (TEA, 2017).

Seventy-nine districts form the Major Suburban category. Major Suburban is defined as a district if "(a) it does not meet the criteria for classification as major urban; (b) it is contiguous to a major urban district; and (c) its enrollment is at least 3 percent that of the largest contiguous major urban district or at least 4,500 students" (TEA, 2017).

Forty-one districts create the Other Central City district classification. Eligibility criteria is met by "(a) it does not meet the criteria for classification in either of the previous subcategories; (b) it is not contiguous to a major urban district; (c) it is located in a county with a population of between 100,000 and 949,999, and (d) its enrollment is the largest in the county or at least 75 percent of the largest district enrollment in the county" (TEA, 2017).

The Other Central City-Suburban classification is formed by 161 districts. Eligibility criteria is met by "(a) it does not meet the criteria for classification in any of the previous subcategories; (b) it is located in a county with a population of between 100,000 and 949,999; and (c) its enrollment is at least 15 percent of the largest district enrollment in the county" (TEA, 2017).

Sixty-eight districts construct the classification, Independent Town. This category is defined as a district if "(a) it does not meet the criteria for classification in any of the previous subcategories; (b) it is located in a county with a population of 25,000 to 99,000; and (c) its enrollment is the largest in the county or is at least 75 percent of the largest district enrollment in the county" (TEA, 2017).

Thirty-one districts create the Non-Metropolitan: Fast Growing classification, which is defined as "(a) does not meet the criteria for classification in any of the previous subcategories; (b) it has an enrollment of at least 300 students; and (c) its enrollment has increased by at least 20 percent over the past five years" (TEA, 2017).

The Non-Metropolitan: Stable classification, formed by 174 districts is defined as "(a) it does not meet the criteria for classification in any of the previous subcategories, and (b) its enrollment is equal to or greater than the median district enrollment for the state" (TEA, 2017).

Finally, 459 districts create the Rural category. Districts within this category are defined as rural if "(a) an enrollment of between 300 and the median district enrollment for the state and an enrollment growth rate over the past five years of less than 20 percent; or (b) an enrollment of less than 300 students" (TEA, 2017).

Chapter III

Research Methodology

The purpose of this study was to identify common perceptions of SLPs in public education in various demographic settings throughout Texas to determine which factors increase or decrease the relationship between job stress, satisfaction, and workplace retention.

Furthermore, this study recognized factors that influence the retention of SLPs.

ASHA sends biannual surveys through the post office to SLPs working full time and with ASHA certification (clinical competencies) within the school setting throughout the United States. The national survey distributed by ASHA randomly mailed out surveys to 4,000 SLPs, and only 94 participants were from Texas (2016). However, school districts in Texas are growing faster than any other state in the nation.

The Institutional Review Board (IRB) at the University of Houston reviewed and approved the survey utilized in this study (see Appendix A for the IRB Approval letter; Appendix B for Survey Questions). The survey consisted of a modified version of the ASHA (2016) school survey and the Job Satisfaction Survey created by Spector (1997) to increase validity. Participants were provided with a consent statement approved by the University of Houston Institutional Review Board for Human Subjects. Participants gave consent by clicking agree on the provided electronic survey and moving forward with completing the survey.

Research Design

A descriptive survey research design utilizing causal-comparative techniques and correlational techniques investigated major factors influencing job satisfaction of SLPs employed within Texas public-schools. The survey questionnaire mailed electronically to SLPs employed in Texas public-school settings, measured levels of overall, intrinsic, and extrinsic job satisfaction. The dependent variable is classified as job satisfaction rating, and the independent variables are characterized as demographic variables (income level, gender, educational level, location) and workload characteristics (case size, documentation, other duties). Threats to internal validity include experimental mortality, i.e., a poor completion rate of survey. Additionally, threats to external validity include population validity.

The utilization of stratified random sampling permitted the distribution of participants across the sample. By combining the eight different school district types into three subgroups (urban, suburban, and rural), a more significant proportion of each subgroup is included in the sample to permit statistical analysis (Ruel, Wagner, & Gillespie, 2016). Each district was condensed based on population size and category description.

Participants

Characteristics of the population include full-time SLPs with a Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP) who are employed in a percentage of each TEA category of all 1,031 public schools in the state of Texas during the 2019-2020 school year. A total of 521 surveys were distributed electronically to SLPs, and 44 surveys were not delivered due to delivery failure. A total of 477 SLPs were provided the electronic survey. Of the 477 participants, 64 completed the survey, providing a completion rate of thirteen percent. Of the 64 participants who completed the study, one did not possess the certificate of clinical

competence obtained from ASHA, and three were not considered a clinical service provider, and one was employed part-time; therefore, these results were not utilized in the study. Respondents include three SLPs from rural school districts, 25 SLPs from suburban school districts, and 31 SLPs from urban school districts. Moreover, several SLPs emailed in the rural school districts serve on a co-op and span several school districts.

According to the Bureau Labor of Statistics (2018), 59,610 SLPs are employed in the Texas public school setting. The district type data set classifies Texas public school districts into the following nine categories of: major urban, major suburban, other central city, other central city-suburban, independent town, non-metropolitan: fast-growing, non-metropolitan: stable, rural, and charter school districts (TEA, 2017). A random stratified sample of 10% from three major subgroups (urban, suburban, rural) provided the district SLPs utilized for the study. Subgroups were created based on district type classifications and population size provided by TEA (2017).

The urban subgroup consists of 13 school districts from the Major Urban, Major Suburban, and Other Central City classifications. The suburban subgroup consists of 43 school districts from the Other Central City Suburban, Independent Town, Non-Metropolitan: Fast-Growing, and Non-Metropolitan: Stable. The rural subgroup consists of 46 school districts from the rural classification.

Survey Development

A 67-item questionnaire about job satisfaction was developed combining the ASHA biannual school survey and Job Satisfaction Survey created by Spector (1997). Demographic variables, workload characteristics, and job satisfaction will all be measured by an electronic survey containing multiple-choice questions, short-answer questions, and Likert scales.

The continuity of information is essential for making general statements. Each speech-language pathologist received the same survey and through manipulation of settings, will only be allowed to submit the survey once. The survey is broken into four major components to ensure the validity of the survey: participant qualifications (questions 1-6), demographic information (questions 7-15), workload characteristics (questions 16-39), and overall job satisfaction (questions 40-67).

Procedure

First, an introductory e-mail was sent to all prospective participants that explained both the nature of the survey and informed consent and also contained an embedded link to the survey. A 10-calendar day deadline was issued for the SLPs to complete the survey. Appendix C contains the e-mail sent to each speech-language pathologist. Information obtained from the TEA website identified districts located in Texas and school websites provided staff email addresses.

All individual responses were kept confidential, with no personal identifiers disclosed.

Only group data were summarized. Once the group data was collected and reliability measures completed, the individual responses from the questionnaire website were deleted.

Data-Analysis Procedures

Standard numerical statistics, such as frequencies, means, and standard deviations, were computed to describe the results. Univariate ANOVAs will be conducted to understand if job satisfaction differs by classification of school districts and to determine if a relationship exists between demographic variables and job satisfaction and workload characteristics and job satisfaction. A Pearson Chi-Square was utilized to determine if there was a difference between age and demographic location. A correlational analysis was conducted between composite job satisfaction scores and various job characteristics to determine the significance of a relationship between job satisfaction and job setting characteristics.

Chapter IV

Results

The primary objectives of this study were to determine the factors that impact job satisfaction of SLPs employed in the public-school setting and how these variables related to their projected retention as a school-based speech-language pathologist.

Participant Qualifications

The results of the survey begin with qualifying factors for participants. Of the 64 participants, one did not possess their certificate of clinical competence, three were not considered clinical service providers, and one was employed part-time. However, 92% of the participants did possess their ASHA certificate of clinical competence and were employed full-time as clinical service providers.

Demographic Profile of Participants

Age. The demographic profile of qualifying participants is depicted utilizing frequencies. Table 5 provides information regarding the age of the participants. The most-reported age range is 30-39 years of age (39%) followed by 40-49 years of age (30.5%), whereas the minority of respondents were identified between the ages of 20-29 and between the ages of 60-69, accounting for 6.8% and 10.2% of the sample respectively. As evidenced by the results, the bulk of participants are in their mid-career path between ages 30 and 49, and there are disproportionately more SLPs who are approaching the latter part of their career than entering the field.

Table 5

Age Frequencies of SLPs and District Type

District Type		Total				
	20-29	30-39	40-49	50-59	60-69	
Rural	0	1	1	0	1	3
Suburban	3	14	4	3	1	25
Urban	1	8	13	5	4	31
Total	4	23	18	8	6	59

To determine the impact of the age of the participants and the district type, a chi-square test of independence was performed. No significant difference (X^2 (8, N=59) = 11.46, p =.166) was detected. Therefore, SLPs of various ages are employed in rural, suburban, and urban districts.

Years of experience. Tables 6 and 7 provide information concerning years employed as a speech-language pathologist the school setting. The average length of time all SLPs have been employed in public schools is 13 years (Table 6). The minimum number of years employed in public schools is two years and the maximum number of years employed in public schools is 37 years. The most frequently reported lengths of time are 5 years, 8 years, and 10 years within the school setting.

When years of employment is compared by district type (Table 7), the average years of experience for SLPs in rural schools is higher at 21 years with a minimum of nine years and a maximum of 37 years. Clearly, SLPs in rural schools tend to remain. SLPs in suburban schools

have the lowest average years of experience, however, given the continued expansion and creation of suburban campuses this may be an artefact of context rather than will of the SLPs.

Table 6

Frequencies of SLPs Experience in the Public-School Setting

	N	Minimum 1	Maximum	Mean	SD
Years of employment as an SLP in the school setting? Round to the nearest full year.	59	2	37	13.14	8.842

Table 7
Frequencies of SLPs Experience by District Type

District Type	N	Minimum	Maximum	Mean	SD
Rural	3	9	37	21.0	14.42
Suburban	25	2	37	11.20	8.68
Urban	31	3	30	13.94	8.19

Educational degree. The educational degree achieved by each SLP was characterized into two distinct groups. These groups were classified as master's degrees and doctorate. Table 8 depicts information regarding the educational level of each participant. Most respondents reported a Master's degree as the highest level of education obtained (98%); whereas, one participant from a suburban school setting indicated a doctorate of speech-language pathology.

Table 8

Frequencies of SLPs' Educational Degree

	Frequency	Percent
Master's	58	98.3
SLP.D	1	1.7
Total	59	100.0

Performance evaluation. Table 9 provides information regarding the completion of performance evaluation. The majority of SLPs are evaluated by the supervisor of the speech-language program (37.3%) or by the special education director (28.8%). Fewer are evaluated by a building administrator (15.3%) or an evaluator (8.5%) while the balance are evaluated through a collaborative effort by some combination of these individuals.

Table 9

Frequencies and Percentages of SLPs' Performance Evaluators

Performance Evaluator	Frequency	Percent
Supervisor of the speech-language program	22	37.3
Special education director	17	28.8
Building Administrator	9	15.3
Evaluation Coordinator	5	8.5

Calendar work year. Table 10 provides information regarding the SLPs' work year. The majority of SLPs reported a work calendar year of 9-10 months per year (96.6%), whereas two SLPs from suburban districts reported a work calendar year of 11-12 months per year.

Table 10

Frequencies and Percentages of SLPs' work year

Work Calendar Year	Frequency	Percent
9-10 months per year	57	96.6
11-12 months per year	2	3.4
Total	59	100.0

Employment setting. Table 11 provides information regarding the SLPs' employment setting within the school district. The majority of SLPs reported an employment setting at an elementary school (84.7%) followed by a secondary school (middle school, high school). The least reported setting was an administrative office and combination of elementary and secondary schools, each respectively 1.7%.

Table 11

SLPs' Employment Facility

Facility Type	Frequency	Percent	Cumulative Percent
Elementary	50	84.7	84.7
Secondary	5	8.5	93.2
Pre-elementary	2	3.4	96.6
Administrative	1	1.7	98.3
Elementary and Secondary	1	1.7	100
Total	59	100.0	

Annual salary. Table 12 provides information regarding the SLPs' district setting along with a reported annual salary. The majority of SLPs reported an annual salary of \$61,000 - \$70,000. In this reported range, 100% of the participants were employed in a rural district, 40% of the participants were employed in a suburban district, and 42% of the participants were employed in an urban district. The least reported salary range of \$41,000 - \$50,000 contained 8% of participants employed in a suburban district, and 3% of participants employed in an urban district. Overall, 5.1% of SLPs make less than the median annual salary for teachers in the state of Texas, \$51,850 (BLS, 2018). Moreover, 22% of SLPs (each with a master's degree) earn between \$51,000 and \$60,000 in line with the median salary for teachers.

Table 12

SLPs Annual Salary

Salary Range	Frequency	Percent	Cumulative Percent
\$61,000 - \$70,000	26	44.1	44.1
\$51,000 - \$60,000	13	22.0	66.1
\$71,000 - \$80,000	12	20.3	86.4
\$81,000 +	5	8.5	94.9
\$41,000 - \$50,000	3	5.1	100.0
Total	59	100.0	

Salary supplements. K-12 public instructional settings offer salary supplements as an extension of traditional compensation to attract and retain high quality professionals. Typically, salary stipends are comparable to the bonuses received by teachers from the National Board for Professional Teaching Standards to recompense ASHA certification and for increased paperwork, specifically Medicaid billing (National Board for Professional Teaching Standards, 2009). These salary upgrades have been reported as being in line with Master's level SLPs being

compensated on a doctoral level scale; higher starting salaries; and change in pay for achieving ASHA Certificate of Clinical Competence.

Tables 13-15 provide information regarding the SLPs' district setting along with reported stipends received for maintaining ASHA certification, performing extra job duties, recruitment or retention, providing bilingual services, and annual performance. Overall, 79.7% of SLPs receive an ASHA certification stipend, 89.8% of SLPs do not receive a stipend for performing extra duties, 83.1% of SLPs do not receive a stipend for performing extra duties, 84.7% of SLPs who participated in the study do not receive a stipend for providing bilingual services, and 98.3% of SLPs do not receive a stipend based on performance evaluations.

Table 13

Frequencies and Percentages of SLPs' salary supplements

ASHA CCC's?		Frequency	Percent	Valid Percent
Frequency	No	12	20.3	20.3
	Yes	47	79.7	79.7
	Total	59	100.0	100.0
Extra work (Medicaid billing, supervision, etc.)?		Frequency	Percent	Valid Percent
Frequency	No	53	89.8	89.8
	Yes	6	10.2	10.2
	Total	59	100.0	100.0
Recruitment/retention bonus?		Frequency	Percent	Valid Percent
Frequency	No	49	83.1	83.1
	Yes	10	16.9	16.9
	Total	59	100.0	100.0
Bilingual services?		Frequency	Percent	Valid Percent
Frequency	No	50	84.7	84.7
	Yes	9	15.3	15.3
	Total	59	100.0	100.0
Performance Evaluation results?		Frequency	Percent	Valid Percent
Frequency	No	58	98.3	98.3
	Yes	1	1.7	1.7
	Total	59	100.0	100.0

All SLPs in a rural setting (Table 14) receive an ASHA certification stipend as well as a stipend for performing extra duties (i.e., Medicaid billing). SLPs in the rural districts do not receive a stipend for recruitment or retention, bilingual services, or performance evaluations.

Table 14

Frequencies and Percentages of SLPs' salary supplements in the Rural District Types

ASHA CCC's?		Frequency	Percent	Valid Percent
Frequency	Yes	3	100.0	100.0
Extra work (Medicaid billing, supervision, etc.)?		Frequency	Percent	Valid Percent
Frequency	Yes	3	100.0	100.0
Recruitment/retention bonus?		Frequency	Percent	Valid Percent
Frequency	No	3	100.0	100.0
Bilingual services?		Frequency	Percent	Valid Percent
Frequency	No	3	100.0	100.0
Performance Evaluation results?		Frequency	Percent	Valid Percent
Frequency	No	3	100.0	100.0

As results indicate (Table 15), in the suburban setting, 16 SLPs receive an ASHA certification; 2 SLPs in a suburban setting receive a stipend for performing extra duties; and 4 SLPs receive a stipend for providing bilingual services. SLPs in the suburban setting do not receive a stipend for recruitment or retention or based on performance evaluations.

Table 15

Frequencies and Percentages of SLPs' salary supplements in the Suburban District Type

ASHA CCC's?		Frequency	Percent	Valid Percent
Frequency	No	9	36.0	36.0
	Yes	16	64.0	64.0
	Total	25	100.0	100.0
Extra work (Medicaid billing, supervision, etc.)?		Frequency	Percent	Valid Percent
Frequency	No	23	92.0	92.0
	Yes	2	8.0	8.0
	Total	25	100.0	100.0
Recruitment/retention bonus?		Frequency	Percent	Valid Percent
Frequency	No	25	100.0	100.0
Bilingual services?		Frequency	Percent	Valid Percent
Frequency	No	21	84.0	84.0
	Yes	4	16.0	16.0
	Total	25	100.0	100.0
Performance Evaluation results?		Frequency	Percent	Valid Percent
Frequency	No	25	100.0	100.0

As results indicate (Table 16), in the urban setting, 28 SLPs receive an ASHA certification, 1 SLP receives a stipend for performing extra duties, 10 SLPs receive a stipend for recruitment or retention, 5 SLPs in an urban setting receive a stipend for providing bilingual services, and 1 SLP receives a stipend based on performance evaluations results. Overall, it appears urban districts provide more financial incentives to SLPs through various salary supplements.

Table 16

Frequencies and Percentages of SLPs' salary supplements in the Urban District Type

Salary Supplement Type	Response	Frequency	Percent
ASHA CCC's?			
	No	3	9.7
	Yes	28	90.3
	Total	31	100
Extra work (Medicaid, supervision, etc.)?			
	No	30	96.8
	Yes	1	3.2
	Total	31	100
Recruitment/retention bonus?			
	No	21	67.7
	Yes	10	32.3
	Total	31	100
Bilingual services?			
	No	26	83.9
	Yes	5	16.1
	Total	31	100
Performance evaluation results?			
	No	30	96.8
	Yes	1	3.2
	Total	31	100

A univariate ANOVA was computed to determine the impact of salary on job satisfaction. A significant difference (F=5.21; df_{4,54}; p=0.001) was detected. Specifically, the post hoc analyses in Table 17 show that higher salary levels are related to higher levels of job satisfaction for SLPs.

Table 17

Post Hoc Analysis: Salary Satisfaction

Tukey Ba,b,c

		Subset		
How satisfied are you with your salary?	N	1	2	
1	5	2.20		
3	23	2.35		
2	10	2.40		
4	18	3.33	3.33	
5	3		4.67	

Caseload and Workload Profile of Participants

Caseload/workload approach. Tables 18 and 19 provide information regarding the SLPs' district setting along with the reported approach to the provision of services for students with SI. Overall, most respondents (59.3%) reported a service model utilizing a caseload approach only. This pattern continues to be observed in both the suburban and urban district type. While this approach reports only the caseload size, the other duties required of SLPs are not incorporated into the students serviced. Tables 20 and 21 provide an overview of all caseload and workload characteristics as determined by district type utilizing a multivariate analysis, followed by descriptions of each characteristic that include the number of hours SLPs spend providing direct interventions in-class and pullout; support to section 504; documentation; Medicaid billing; indirect activities; MTSS/RT; diagnostics; technology support; and supervision by district type. Finally, a multivariate analysis was computed but failed to identify any significant differences in these ten outcomes by district type. Subsequent to these analyses, outcomes are graphed for the overall sample and by district type for each of the 10 characteristics.

Table 18
Frequencies and Percentages of Service Approach

	Frequency	Percent
Caseload approach only	35	59.3
Both caseload and workload	19	32.2
Workload approach only	5	8.5
Total	59	100.0

Table 19

Frequencies and Percentages of Services Approach and District Types

District Type	Frequency	Percent	
Rural			
Both caseload and workload	2	66.7	
Caseload approach only	1	33.3	
Total	3	100	
Suburban			
Both caseload and workload	14	56	
Caseload approach only	9	36	
Workload approach only	2	8	
Total	25	100	
Urban			
Both caseload and workload	20	64.5	
Caseload approach only	8	25.8	
Workload approach only	3	9.7	
Total	31	100	

Table 20

Caseload and Workload Characteristics for each district type

	Hours per Week				
	Direct	Direct	Services	Documentation	Medicaid
	Intervention:	Intervention:	to 504	Paperwork	Billing
District Type	Classroom	Pullout	Students		
Rural					
Mean	.00	13.00	0.33	17.33	2.00
SD	.00	14.11	0.58	15.70	1.73
Median	.00	11.00	0.00	12.00	1.00
Suburban					
Mean	3.18	20.00	0.00	14.44	3.42
SD	3.58	9.80	0.00	14.56	4.94
Median	2.00	20.00	0.00	10.00	2.00
Urban					
Mean	1.89	24.98	0.97	9.55	3.45
SD	2.68	8.07	5.34	8.28	2.98
Median	1.00	30.00	0.00	7.00	2.00
Total					
Mean	2.34	22.25	0.53	12.02	3.36
SD	3.12	9.53	3.91	11.79	3.86
Median	1.00	25.00	0.00	10.00	2.00

Table 21

Caseload and Workload Characteristics for each district type

	Hours per Week				
	Other Direct	MTSS	Diagnostic	Technology	Supervision
District Type	Services	RtI	evaluations	support	
Rural					
Mean	1.33	1.00	4.33	.00	3.00
SD	1.16	1.00	4.93	.00	1.73
Median	2.00	1.00	2.00	.00	4.00
Suburban					
Mean	4.36	.56	4.44	1.26	.96
SD	3.134	1.18	2.27	1.49	1.93
Median	4.00	.00	4.00	1.00	.00
Urban					
Mean	2.74	.65	4.91	.91	1.06
SD	3.53	1.40	5.95	1.16	2.14
Median	1.00	.00	3.00	1.00	.00
Total					
Mean	3.36	.63	4.68	1.01	1.12
SD	3.38	1.28	4.62	1.31	2.05
Median	2.00	.00	4.00	1.00	.00

Caseload size. Figure 2 demonstrates the average monthly caseload size by all district types. The average caseload for all SLPs is 73 students. The minimum monthly caseload average is 34, and the maximum monthly caseload average is 160. The frequently represented caseload is 70 students per month.

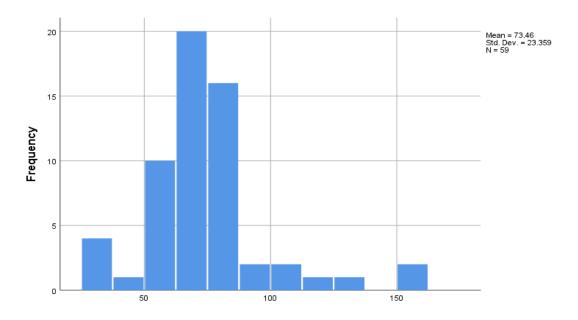


Figure 2. Average monthly caseload across all districts

Figures 3-5 demonstrate the average monthly caseload by district type. The average caseload for Rural SLPs is 65 students monthly. The minimum monthly caseload is 58, and the maximum monthly caseload is 70. The average caseload for Suburban SLPs is 76 students monthly. The minimum monthly caseload is 34, and the maximum monthly caseload is 160. The average caseload for urban SLPs is 72 students monthly. The minimum monthly caseload is 37, and the maximum monthly caseload is 120.

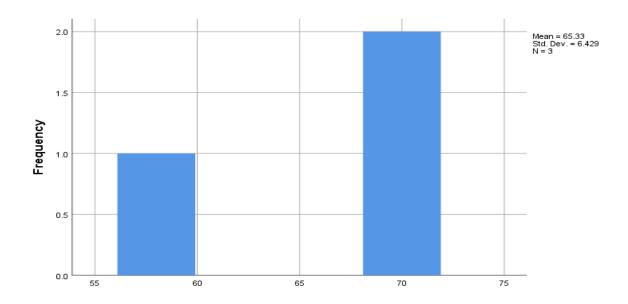


Figure 3. Average monthly caseload in the Rural district settings

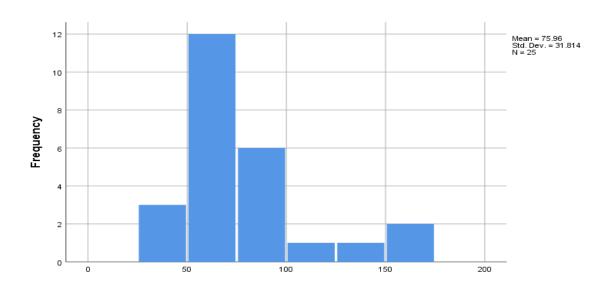


Figure 4. Average monthly caseload in the Suburban district settings

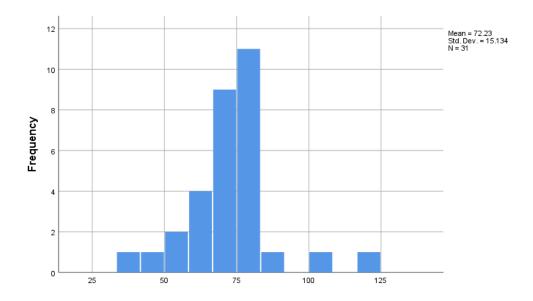


Figure 5. Average monthly caseload in the Urban district settings

Service Model. Figures 6 and 7 provide information regarding the SLPs' intervention service models.

Direct intervention: Classroom-based/integrated service model. The average time spent providing direct intervention using a classroom-based/integrated service model is 2 hours per week. The minimum time spent weekly using a classroom-based/integrated service model is 0 and the maximum time spent weekly is 12 hours. Rural SLPs do not use a classroom-based/integrated service model.

The average time spent providing direct intervention using a classroom-based/integrated service model by suburban SLPs is 3 hours per week. The minimum time spent weekly using a classroom-based/integrated service model is 0 and the maximum time spent weekly is 11 hours.

The average time spent providing direct intervention using a classroom-based/integrated service model by urban SLPs is 2 hours per week. The minimum time spent weekly using a classroom-based/integrated service model is 0 and the maximum time spent weekly is 12 hours.

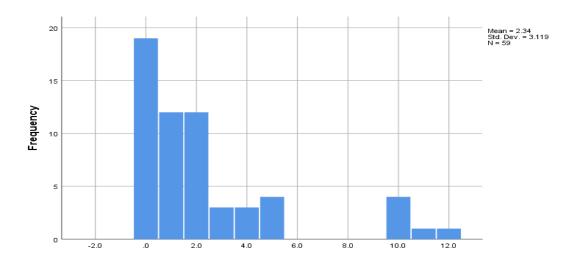


Figure 6. Hours per week on Direct Intervention: Integrated Service Model

Direct intervention: Pullout model. The average time spent providing direct intervention using a pullout service model is 22 hours per week. The minimum time spent weekly using a pullout service model is 0, and the maximum time spent weekly is 35 hours. The most frequently represented time is 30 hours weekly.

The average time spent providing direct intervention using a pullout service model for rural SLPs is 13 hours per week. The minimum time spent weekly using a pullout service model is 0, and the maximum time spent weekly is 28 hours.

The average time spent providing direct intervention using a pullout service model for suburban SLPs is 20 hours per week. The minimum time spent weekly using a pullout service model is 0, and the maximum time spent weekly is 35 hours. The most frequently represented time is 15 hours weekly.

The average time spent providing direct intervention using a pullout service model for urban SLPs is 25 hours per week. The minimum time spent weekly using a pullout service model is six and the maximum time spent weekly is 35 hours. The most frequently represented time is 30 hours weekly.

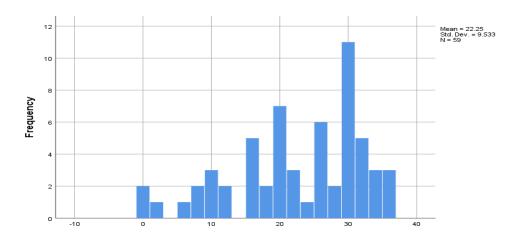


Figure 7. Hours per week on Direct Intervention: Pullout Model

Documentation. Figure 8 provides information regarding hours spent on documentation and additional paperwork required of SLPs.

The average time spent completing documentation and paperwork is 12 hours per week. The minimum time spent weekly on documentation is two and the maximum time spent weekly is 60 hours. The most frequently represented time spent on documentation and paperwork is 10 hours weekly.

The average time rural SLPs spend completing documentation and paperwork is 17 hours per week. The minimum time spent weekly on documentation is five and the maximum time spent weekly is 35 hours.

The average time suburban SLPs spend completing documentation and paperwork is 14 hours per week. The minimum time spent weekly on documentation is two and the maximum time spent weekly is 60 hours. The most frequently represented time spent on documentation and paperwork is 15 hours weekly.

The average time urban SLPs spend completing documentation and paperwork is 10 hours per week. The minimum time spent weekly on documentation is 2 hours, and the maximum time spent weekly is 30 hours. The most frequently represented time spent on documentation and paperwork is 10 hours weekly.

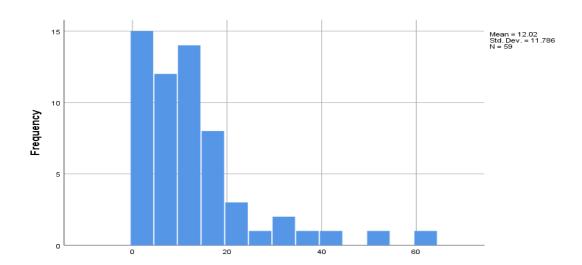


Figure 8. Hours per week on Documentation

Medicaid billing. Figure 9 provides information regarding hours spent on Medicaid billing. The average time spent on completing Medicaid billing in a typical week reported by all SLPs is three hours. The minimum reported time spent completing Medicaid billing is 0 hours weekly, and the maximum is 25 hours. The most frequently represented time completing Medicaid billing weekly is 1 hour.

The average time spent on completing Medicaid billing in a typical week reported by rural SLPs is 2 hours. The minimum reported time spent completing Medicaid billing is 1 hour weekly, and the maximum is 4 hours. The most frequently represented time completing Medicaid billing weekly is 1 hour.

The average time spent on completing Medicaid billing in a typical week reported by suburban SLPs is 3 hours. The minimum reported time spent completing Medicaid billing is 1 hour weekly, and the maximum is 25 hours. The most frequently represented time completing Medicaid billing weekly is 1 hour.

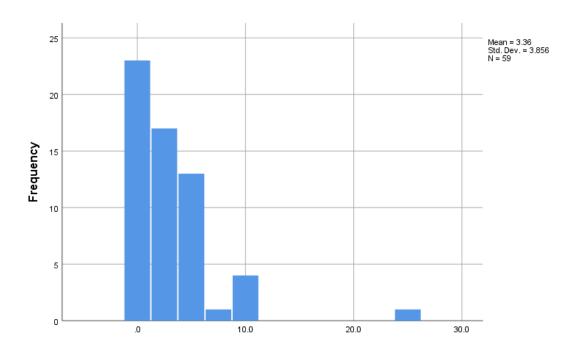


Figure 9. Hours per week on Medicaid Billing

The average time spent on completing Medicaid billing in a typical week reported by urban SLPs is 3 hours. The minimum reported time spent completing Medicaid billing is 0 hours

weekly, and the maximum is 10 hours. The most frequently represented time completing Medicaid billing weekly is 1 hour.

Indirect services. Figure 10 provides information on the weekly hours SLPs spend providing indirect activities, such as consultation and staff collaboration. The average time spent on other indirect activities in a typical week reported by all SLPs is 3 hours. The minimum reported time spent on other indirect activities is 0 hours weekly, and the maximum is 15 hours. The most frequently represented time spent on other indirect activities is 1 hour weekly.

The average time spent on other indirect activities in a typical week reported by rural SLPs is 1 hour. The minimum reported time spent on other indirect activities is 0 hours weekly, and the maximum is 2 hours. The most frequently represented time spent on other indirect activities is 2 hours weekly.

The average time spent on other indirect activities in a typical week reported by suburban SLPs is 4 hours. The minimum reported time spent on other indirect activities is 1 hour weekly, and the maximum is 10 hours weekly. The most frequently represented time spent on other indirect activities is 1 hour weekly. The average time spent on other indirect activities in a typical week reported by urban SLPs is 3 hours. The minimum reported time spent on other indirect activities is 0 hours weekly, and the maximum is 15 hours weekly. The most frequently represented time spent on other indirect activities is 1 hour weekly.

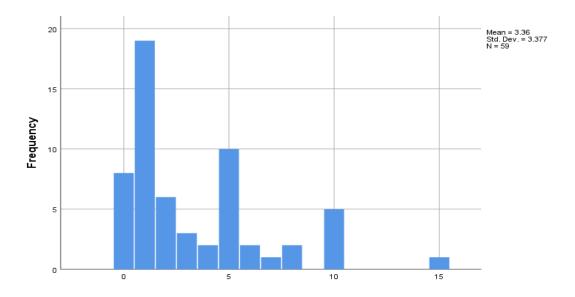


Figure 10. Hours per week on Indirect Activities

Diagnostic evaluations. Figure 11 provides information regarding the hours spent weekly on diagnostic evaluations. The average time spent on diagnostic evaluations in a typical week reported by all SLPs is 5 hours. The minimum reported time spent on diagnostic evaluations is 0 hours weekly, and the maximum is 30 hours weekly. The most frequently represented time spent on diagnostic evaluations is 3 hours weekly.

The average time spent on diagnostic evaluations in a typical week reported by rural SLPs is 4 hours. The minimum reported time spent on diagnostic evaluations is 1 hour weekly, and the maximum is 10 hours weekly.

The average time spent on diagnostic evaluations in a typical week reported by suburban SLPs is 4 hours. The minimum reported time spent on diagnostic evaluations is 0 hours weekly, and the maximum is 10 hours weekly. The most frequently represented time spent on diagnostic evaluations is 5 hours weekly.

The average time spent on diagnostic evaluations in a typical week reported by suburban SLPs is 5 hours. The minimum reported time spent on diagnostic evaluations is 0 hours weekly, and the maximum is 30 hours weekly. The most frequently represented time spent on diagnostic evaluations is 3 hours weekly.

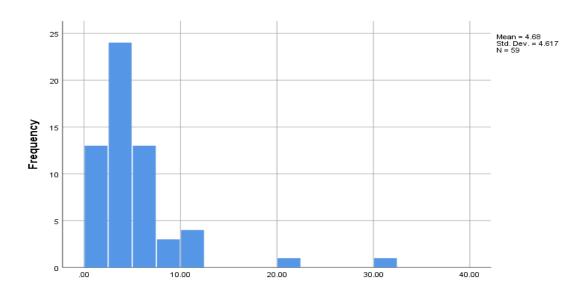


Figure 11. Hours per week on Diagnostic Evaluations

Technological support. Figure 12 provides information regarding hours spent weekly by SLPs providing technological support (i.e., hearing aids/Cochlear implants, augmentative and alternative communication). The average time spent on technological support in a typical week reported by all SLPs is 1 hour. The minimum reported time spent on diagnostic evaluations is 0 hours weekly, and the maximum is 5 hours weekly. The most frequently represented time spent on technological support is 0 hours weekly. Rural SLPs do not provide this support.

The average time spent on technological support in a typical week reported by suburban SLPs is 1 hour. The minimum reported time spent on diagnostic evaluations is 0 hours weekly, and the maximum is 5 hours weekly. The most frequently represented time spent on technological support is 0 hours weekly.

The average time spent on technological support in a typical week reported by urban SLPs is 1 hour. The minimum reported time spent on diagnostic evaluations is 0 hours weekly, and the maximum is 5 hours weekly. The most frequently represented time spent on technological support is 1 hour weekly.

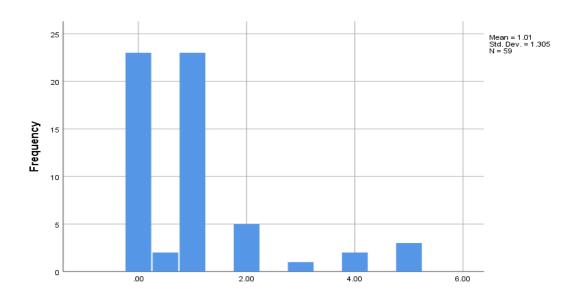


Figure 12. Hours per week on Technological support (e.g. hearing aids/Cochlear implants)

MTSS/RTI activities. Figure 13 provides information regarding the hours spent weekly on MTSS/RTI activities by SLPs. The average time spent on MTSS/RTI (multi-tier system of supports/response to intervention) activities in a typical week reported by all SLPs is less than 1 hour. The minimum reported time spent on MTSS/RTI activities is 0 hours weekly, and the

maximum is 5 hours. The most frequently represented time spent on other MTSS/RTI activities is 0 hours weekly.

The average time spent on MTSS/RTI activities in a typical week reported by rural SLPs is 1 hour. The minimum reported time spent on MTSS/RTI activities is 0 hours weekly, and the maximum is 2 hours. The most frequently represented time spent on other MTSS/RTI activities is 1 hour weekly.

The average time spent on MTSS/RTI activities in a typical week reported by suburban SLPs is less than one hour. The minimum reported time spent on MTSS/RTI activities is 0 hours weekly, and the maximum is 5 hours. The most frequently represented time spent on other MTSS/RTI activities is 0 hours weekly.

The average time spent on MTSS/RTI activities in a typical week reported by urban SLPs is less than one hour. The minimum reported time spent on MTSS/RTI activities is 0 hours weekly, and the maximum is 5 hours. The most frequently represented time spent on other MTSS/RTI activities is 0 hours weekly.

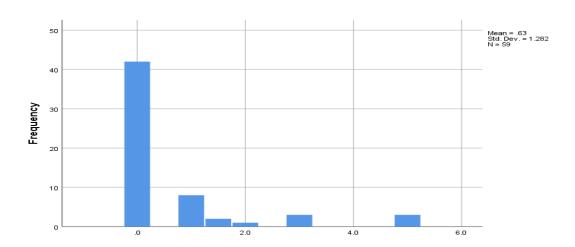


Figure 13. Hours per week on MTSS/RTI activities

Role on MTSS/RTI Team. As might be expected, almost half (49.2%) of all SLPs do not participate in MTSS/RTI interventions. Of those who do have a role, the majority (20.4%) provide a consultative role.

Makeup Sessions. As might be expected, more than half (66.1%) of all SLPs are only required to make up student sessions when the provider has missed the session for any reason.

Supervision. Figure 14 provides information regarding the hours spent per week on supervision. For SLPs who supervise either speech-language pathologist assistants or clinical fellows, the average time spent on supervision in a typical week reported by all SLPs is 1 hour. The minimum reported time spent on supervision is 0 hours weekly, and the maximum is 10 hours weekly. The most frequently represented time spent on supervision is 0 hours weekly.

The average time spent on supervision in a typical week reported by rural SLPs is 3 hours. The minimum reported time spent on supervision is 1 hour weekly, and the maximum is 4 hours weekly. The most frequently represented time spent on supervision is 4 hours weekly.

The average time spent on supervision in a typical week reported by suburban SLPs is 1 hour. The minimum reported time spent on supervision is 0 hours weekly, and the maximum is 7 hours weekly. The most frequently represented time spent on supervision is 0 hours weekly.

The average time spent on supervision in a typical week reported by urban SLPs is 1 hour. The minimum reported time spent on supervision is 0 hours weekly, and the maximum is 10 hours weekly. The most frequently represented time spent on supervision is 0 hours weekly.

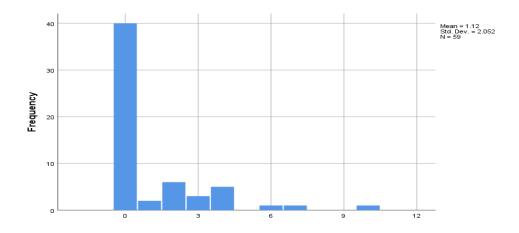


Figure 14. Hours per week on Supervision

Table 22 provides information regarding the cumulative number of speech-language pathologist assistants supervised. The majority of all SLPs (72.9%) who participated in the study do not have an assistant and, therefore, do not supervise. All SLPs employed in rural school districts supervised at least one speech-language pathologist assistant. SLPs who supervise report an increase to workload (34%) and caseload (12%) responsibilities.

Table 22
Frequencies and Percentages of Participants' Supervision of SLP-As

Range	Frequency	Percent
0	43	72.9
1	14	23.7
2	1	1.7
3	1	1.7
Total	59	100

Culture and lifestyle. Tables 23 and 24 provide information regarding the number of bilingual students on SLPs' caseload. The majority of respondents (44.1%) reported the number of bilingual students requiring speech and language services fall in the 0-10 %. Three SLPs employed in urban school districts reported the most bilingual caseload at 70% and above. Moreover, 8.5% SLPs reported they do not feel qualified to address cultural and linguistic influences on service delivery and outcomes; 32.2% of SLPs reported neutrality, and 59.3% of SLPs reported feeling qualified to address cultural and linguistic influences.

Table 23

Frequencies and Percentages of Overall Bilingual Students on Caseload

Range by Frequency	Frequency	Percent	Cumulative Percent
0-10%	26	44.1	44.1
31-40%	12	20.3	64.4
11-20%	6	10.2	74.6
21-30%	5	8.5	83.1
41-50%	5	8.5	91.5
70%+	4	6.8	98.3
51-60%	59	100	

Table 24

Frequencies and Percentages of Bilingual Students on Caseload all district types

	Frequency	Percent	Cumulative Percent
Rural			
0-10%	3	100.0	100.0
Suburban			
0-10%	9	36.0	36.0
11-20%	6	24.0	60.0
31-40%	4	16.0	76.0
21-30%	2	8.0	84.0
41-50%	2	8.0	92.0
51-60%	1	4.0	96.0
70% and above	1	4.0	100.0
Total	25	100.0	
Urban			
0-10%	14	45.2	45.2
31-40%	8	25.8	71.0
21-30%	3	9.7	80.6
41-50%	3	9.7	90.3
70% and above	3	9.7	100.0
Total	31	100.0	

Challenges. Table 25 provides visual information regarding SLPs' most significant challenges as a school-based professional. The greatest challenges all SLPs report are large amounts of paperwork (16.5%), high workload/caseload (15.5%), and personnel shortage (12.7%). The challenges that impact SLPs the least are ethical challenges (2.2%) reported highest in urban settings, travel between schools (2.8%) reported highest in suburban settings, and limited parental involvement (3.5%).

Furthermore, when asked directly if the school district each SLP belonged to employed enough SLPs to meet the needs of the students, 89.8% reported no, the district did not. Only 6 SLPs reported ample staff.

Table 25

Frequencies and Percentages of Challenges faced by SLPs

Challenges	Frequency	Percent	Rural	Suburban	Urban
Large amount of paperwork	52	16.5	3	23	26
High workload/caseload size	49	15.5	2	21	26
Personnel shortage	40	12.7	1	17	22
Budget constraints	30	9.5	1	17	12
Out of pocket professional expenses	22	7	0	11	11
Limited support from the administration	20	6.3	0	8	12
Medicaid billing	17	5.4	0	9	8
Limited understanding of my role by others	16	5.1	0	9	7
Inadequate work space and facilities	15	4.7	0	4	11
Low salary	15	4.7	1	5	9
Incorporating optimal service delivery models	13	4.1	0	8	5
Limited parental involvement and support	11	3.5	1	6	4
Travel/distance between schools	9	2.8	0	6	3
Ethical challenges	7	2.2	0	1	6
Total	316	100.0	9	145	162

Satisfaction Profile of Participants

Job Satisfaction by demographic location and ethnicity. To examine the growth and changing demographics for socially proficient clinical services in speech-language pathology, it is necessary to look at the job satisfaction of a diverse workforce to ensure the optimum performance of employees. The most-reported ethnicity among all SLPs is Caucasian (76.3%), followed by Latino/Hispanic (16.9%) and African American (6.8%). No other races/ethnicities were reported Table 26 provides information concerning ethnicity for SLPs in this study and provides the results of a univariate ANOVA that was computed to determine the impact of ethnicity on job satisfaction.

Table 26

Post Hoc Test: Satisfaction and Ethnicity

Tukey Ba,b,c

		Subset
Which category best describes you?	N	1
Latino/Hispanic	10	2.20
African American	4	2.75
Caucasian	45	2.89

While no significant difference (F=1.35; $df_{2,56}$; p=0.269) was detected. Specifically, the post hoc analyses in Table 26, show that Caucasian SLPs have higher levels of job satisfaction (2.89) than African American SLPs (2.75) and Latino SLPs (2.20).

Job Satisfaction by demographic location and salary. Employees expect reasonable compensation and promotion for their contribution to an organization. A univariate ANOVA was computed to determine the impact of type of district on job satisfaction. While no significant difference (F=2.84; df_{2,56}; p=0.067) was detected, the results approach significance and with additional rural representation there may indeed be a difference. Specifically, the post hoc analyses in Table 27 show that rural SLPs report higher levels of job satisfaction than do both urban and suburban SLPs.

Table 27

SLPs' Satisfaction in District Type

Tukey Ba,b,c

		Subse	t
District Type	N	1	2
Urban	31	2.68	
Suburban	25	2.68	
Rural	3		4.33

Workload and caseload satisfaction. Table 28 provides information regarding the impact of caseload and workload characteristics and overall job satisfaction.

Table 28

Correlation between caseload and workload characteristics and overall job satisfaction

					Ability to provide		
		Overall	Caseload	Workload	quality	Stress	Appreciation
		Satisfaction	average	average	services	level	level
Overall, how satisfied are	Pearson	1	.483**	.596**	.569**	.547**	.618**
you in your current district,	Correlation						
in your current position?	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	59	59	59	59	59	59
How satisfied are you with	Pearson	.483**	1	.781**	.615**	.480**	.246
the following aspects of	Correlation						
your job? Caseload	Sig. (2-tailed)	.000		.000	.000	.000	.061
average.	N	59	59	59	59	59	59
How satisfied are you with	Pearson	.596**	.781**	1	.714**	.622**	.324*
the following aspects of	Correlation						
your job? Workload	Sig. (2-tailed)	.000	.000		.000	.000	.012
average.	N	59	59	59	59	59	59
How satisfied are you with	Pearson	.569**	.615**	.714**	1	.681**	.332*
the following aspects of	Correlation						
your job? Ability to provide	Sig. (2-tailed)	.000	.000	.000		.000	.010
quality services.	N	59	59	59	59	59	59
How satisfied are you with	Pearson	.547**	.480**	.622**	.681**	1	.357**
the following aspects of	Correlation						
your job? Stress level.	Sig. (2-tailed)	.000	.000	.000	.000		.006
	N	59	59	59	59	59	59
Do you feel appreciated in	Pearson	.618 ^{**}	.246	.324*	.332 [*]	.357**	1
your current position?	Correlation						
	Sig. (2-tailed)	.000	.061	.012	.010	.006	
	N	59	59	59	59	59	59

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).

As might be expected, satisfaction with various aspect of the job (e.g., caseload average, workload average, quality service provision, and stress level) are all inter-correlated and significant. Specifically, higher levels of satisfaction overall relate to higher levels of satisfaction with the various components. SLPs who are satisfied in their current position are generally satisfied with aspects of that position.

Retirement. Tables 29 and 30 provide information regarding district settings and SLPs' retention plan. Most SLPs expect to retire within their current school district (49.2%). Rural school district SLPs responded in the affirmative (67%), whereas 0% reported they do not plan to retire in the current district, and 33% of the sample are unsure. Suburban school district SLPs responded in the affirmative (40%).

Table 29

SLPs overall intention to retire

Intent	Frequency	Percent	Cumulative Percent
Yes	29	49.2	49.2
Maybe	23	39.0	88.1
No	7	11.9	100.0
Total	59	100.0	

Table 30

SLPs' intention to retire across all district types

		Frequency	Percent	Cumulative Percent
Rural	Yes	2	66.7	66.7
	Maybe	1	33.3	100.0
	Total	3	100.0	
Suburban	Yes	11	44.0	44.0
	Maybe	10	40.0	84.0
	No	4	16.0	100.0
	Total	25	100.0	
Urban	Yes	17	54.8	54.8
	Maybe	11	35.5	90.3
	No	3	9.7	100.0
	Total	31	100.0	

Overall job satisfaction and retention rate. A univariate ANOVA was computed to determine the impact of overall job satisfaction on the retention rate of SLPs in public education facilities. A significant difference (F=209.065; $df_{2,56}$; p=0.000) was detected. Specifically, the post hoc analyses in Table 31 shows that higher satisfaction levels are related to higher retention rates of SLPs.

Table 31

SLPs' overall satisfaction and retention rate

Tukey B^{a,b,c}

		Subset		
Do you plan to retire within the school setting?	N	1	2	
No	7	1.71		
Maybe	23	2.43	2.43	
Yes	29		3.28	

Chapter V

Discussion

The purpose of this study was to determine the factors that impact the overall job satisfaction of SLPs in the state of Texas. In line with the literature review, decreased job satisfaction may contribute to a reduction in the quality of services provided to students and increased resignation of SLPs (Kalkhoff & Collins, 2012). The most significant influences of job satisfaction include caseload average, workload average, quality of services provided to students, annual salary, stress level, and appreciation level. Additionally, it appears overall job satisfaction impacts the intention to retire within a public-school setting.

Demographic Characteristics and Implications

Demographic characteristics across settings. In line with the literature review, a disproportionate level of diversity exists in the field of speech-language pathology. The most-reported ethnicity among all SLPs is Caucasian (76.3%), followed by Latino/Hispanic (16.9%) and African American (6.8%). With low levels of job satisfaction reported by Latino/Hispanic SLPs and African American SLPs, all districts should evaluate the current practices to increase job satisfaction to increase and preserve optimum employee performance.

Furthermore, as seen in the results, the bulk of performance evaluations are completed by the supervisor of the speech-language program (37.3%). However, 28.8% performance evaluations are completed by the special education director followed by the 15.3% completed by a building administrator. SLPs are integral members of a student's curriculum decisions. To ensure and promote professional growth and a system of accountability, professional performance should be considered within the educational settings as a means for quality assurance. Furthermore, performance evaluations should be completed by administrators with

unique knowledge of an SLP's role in a student's IEP and the ability to provide feedback to facilitate growth and development.

Research completed by Blood et al. (2002) indicated SLPs reported larger caseloads, lower incomes, and social and professional isolation; however, this study reported the greatest obstacles in the rural setting include high workload/caseload size and large amount of paperwork. Research completed by Blood et al. (2002) indicated student diversity, lower socioeconomic status, and increased dropout rates for students with disabilities contribute to challenges for SLPs employed in the urban setting. This study found that budget constraints, high workload/caseload, and large amounts of paperwork plague SLPs in the urban setting.

SLPs across all district types reported the greatest challenges to be large amounts of paperwork, high workload and caseload, and personnel shortage. The increase in documentation including IEPs, progress reports, evaluation reports, data collection within therapy sessions, Medicaid billing and other relevant paperwork assigned is confirmed as the most significant challenges impacting SLPs in the educational setting (ASHA, 2014). Time spent completing documentation detracts from providing quality interventions to students with SI as indicated by the 52% of respondents reporting dissatisfaction with the quality of service provided in the intervention setting. A poor work place environment demonstrates a pattern of personal frustration, low levels of job satisfaction, and decreased retention rate.

In the rural setting, as evidenced by results, additional challenges reported include budget constraints and limited understanding of the speech-language pathologist's role in the school setting. Educational institutions often provide incentives to attract SLPs to rural locations such as Loan forgiveness, competitive salaries, and sign-on bonuses (Wilson, Lewis, & Murray, 2009).

Maslow's theory states the most basic need in an organization is income (Luthans, 2011). Income is associated with global satisfaction and assesses satisfaction with pay and pay raises. As results indicated, higher salary levels are related to higher levels of job satisfaction. As indicated by results, rural SLPs report higher levels of job satisfaction than do both urban and suburban SLPs. Income rates as one of the top five rewards in a reward structure. Financial incentives could help alleviate the burden of extra duties; whereas increased responsibilities and static income demonstrate an adverse effect on the job satisfaction of school SLPs (Spector, 1997).

Caseload and Workload Characteristics and Implications

Caseload characteristics across settings. Student needs are diverse and complex and subsequently the scope of practice of SLPs have increased. As stated in the introduction, ASHA recommended a caseload size of 40 students; however, the recommendation was later discarded due to a lack of significant research to support a specific caseload size and misinterpretation of the guidelines as a minimum rather than a maximum (Katz et al., 2010). As indicated in the results, most respondents (59.3%) reported utilizing a caseload approach only. This service model does not include other duties assigned to SLPs which increase the demands and influence the quality of therapy provided to students.

Results indicate the average caseload for all SLPs across district type is 73 students. The minimum monthly caseload average is 34 and the maximum monthly caseload is 160. On average, rural SLPs provide speech and language services to 65 students monthly; suburban SLPs provide speech and language services to 76 students monthly, and urban SLPs provide speech and language services to 72 students monthly. These results greatly surpass the initial recommendation from ASHA of a monthly caseload size of 40 students.

As evident by results, an average of 25 hours are spent providing direct interventions to students in a variety of therapy settings across all district types. On average, rural SLPs provide direct intervention services to students 13 hours per week; suburban SLPs provide direct intervention to students 23 hours per week, and urban SLPs provide direct interventions to students 27 hours per week.

Workload characteristics across settings. SLPs are required to perform additional duties outside of the provision of speech and language interventions within the educational setting.

As evident by results, an average of 28 hours per week are spent providing indirect activities (i.e., documentation, Medicaid billing, diagnostic evaluations) across all district types. On average, rural and suburban SLPs spend 28 hours per week completing indirect activities such as documentation; whereas urban SLPs provide 24 hours per week completing indirect activities.

In total, rural and suburban SLPs devote 53 hours per week providing direct intervention to students and on indirect activities such as documentation, billing, and evaluations. Urban SLPs apply 49 hours per week providing direct intervention to students and on indirect activities such as documentation, billing, and evaluations. Research completed by ASHA (2016) reported an average caseload size of 51; results of this study indicate a significant increase in the provision of services to students who qualify for special education services as a student with a SI.

Implications for practice suggest moving from a caseload to workload service model approach may indeed be more beneficial to the students and SLPs in the educational setting. Furthermore, districts should begin to look at the efficacy of Telepractice and the consequences of use for SLPs with larger caseloads.

Job Satisfaction Across Settings

Low levels of job satisfaction could produce dire consequences for an organization financially and legally. Federal mandates state all students must be services according to individual need. The shortage of SLPs could lead to unsatisfactory educational opportunities, ill-equipped staff, and a decrease in student achievement (Billingsley, 2004; Deppe & Boswell, 2005).

As indicated in results, satisfaction with various aspect of the job (e.g., caseload average, workload average, quality service provision, and stress level) are all inter-correlated and significant. Specifically, higher levels of satisfaction overall relate to higher levels of satisfaction with the various components. SLPs who are satisfied in their current position are generally satisfied with aspects of that position.

As indicated by results, rural SLPs (66.7%) are more likely to retire in the public school setting as opposed to suburban SLPs (44%).

Continued documentation of provider service information such as cost analysis of large caseloads and therapy effectiveness can be utilized to communicate with stakeholders of the district, including community members, officials, and special education directors to advocate for change.

Conclusions

This study assessed the associations between demographic variables, workload variables, and overall job satisfaction of SLPs. Overall, findings suggest that job satisfaction can lead to the retention of school-based SLPs and impact the critical shortage of SLPs in organizations if the abovementioned factors are not addressed.

Limitations

The extent of this study was limited to SLPs in school districts across Texas, with a small sample size reported. An external survey should produce a return of 10-15%, and this study obtained a return rate of 13%. Though the participant response rate falls in the suggested frame, it is still a small sample and may not generalize to the broader population. This is especially true in regard to ethnicity and district setting.

This study only utilized responses from participants who hold the ASHA Certificate of Clinical Competence. Participants were excluded if this certification was not obtained, which also disqualified SLPs with a degree less than a master's degree.

Though the survey questionnaire could be completed in 10 minutes, some may have judged the survey as time-consuming, which could have impacted the likelihood of obtaining a higher response rate, also impacting generalizability.

This study did not survey how many SLPs came straight into this profession from another professional setting. For example, the survey did not question if respondents entered into the profession after teaching in a public school for a specific time frame, such as an educational diagnostician. This could be a mediating factor.

Future Research

Future research should include alternative procedures in studying the variables recognized in this study. A mixed-method approach to this study may offer more insight into the reasons respondents answered as they did in this study.

Future studies could utilize longer time-frames (i.e., more than ten calendar days) and larger population samples to include more participants in locations other than a rural, suburban,

urban setting such as from various regions. Moreover, the studies should be replicated across the states to determine additional conclusions and recommendations regarding demographics and population variables.

A longitudinal study could recognize the SLPs' perceptions in the event of a given situation (i.e., reorganization of schools).

Though the Certificate of Clinical Competence is the highest credential a speech-language pathologist can obtain, future research may want to include participants who do not possess this certification as some districts cannot afford or hold on to SLPs with these credentials.

Chapter VI

Action Plan

Traditional research methods are no longer considered best practice in school reform. Improvement science is a framework of research which determines improvement strategies in a practical application. This method is a continuum of change and permits educational systems to be the dynamic organization it is. Improvement science is based on six core principles: construct a specific work problem and user-centered, variation in implementation is essential, understand how conditions impact the work process, measure data, engage in systematic processes to determine outcomes and measure change, and increase improvements through networked organizations (Bryk, Gomez, Grunow, & LeMahieu, 2016).

Experimental science is beneficial in drawing causal implications to build fundamental knowledge, but as previously stated, experimental science minimizes variations. However, variation is the characteristic of necessitating improvement in education. Conversely, improvement science provides instruments to learn from variations in various interventions and organizational settings. While experimental science allows casual inferences, these may only hold for specific occurrences. Improvement science will adjust, and permit systems change within an organization. The practical application improvement science will help with the generalization of knowledge and producing improvement.

Improvement science applies knowledge into a practical application for improvement.

Knowledge from educational skills and profound knowledge is required to utilize improvement science. Profound knowledge includes generalizable skills as well as skills specific to an organization. The fundamental practice of improvement science includes cycles of learning from practice. The foundation of improvement science embraces the plan-do-study-act with three core

questions to drive improvement. This cycle signifies learning, failing, and improving quickly, which victory is indicated by learning from failures. Unlike experimental science, which minimizes variation in the intervention process, improvement science aims to address variation in performance to understand problem-specific and user-centered outcomes.

The purpose of improvement science is to acquire the essential skills and apply knowledge to a problem and foster the idea quickly and effectively. Reforming ideas requires continuous improvement. Improvement science integrates problem analysis, research, solutions, measurement of processes and outcomes, and refinement of the plan-do-act-study cycles. Improvement science assists education to move to more evidence-based practice to increase the efficacy of educational practice. The framework for continuous improvement compromises three fundamental questions: what problem needs solving, what changes necessitate change, and why, and is the change an improvement (Bryk et al., 2016)?

Districts across Texas have observed a critical need for SLPs in instructional facilities.

Utilizing the continuous improvement approach may permit district leaders and stakeholders the ability to determine how to retain highly qualified SLPs in public educational facilities.

Implementing the Plan-Do-Study-Act (PDSA) cycle provides a formal investigation process for improvement. Utilizing the PDSA cycle, district leaders can employ a structured plan for change and gain rapid learning for continuous improvement cycles. Figure 15 illustrates the Plan-Do-Study-Act Inquiry Cycle, portrayed by Bryk et al. (2016).

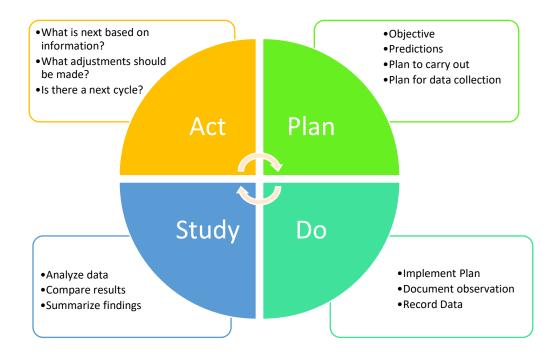


Figure 15. Plan-Do-Study-Act Inquiry Cycle

Purpose

SLPs operate through special education departments and cooperatives while serving in elementary and secondary schools. The recruitment and retainment of SLPs in the educational setting have been a critical national issue for an extended period, primarily due to factors such as job overload and decreased job satisfaction.

The purpose of this action plan is to investigate common themes in the perceptions of SLPs throughout Texas public education to determine factors that affect the relationship between job stress, satisfaction, and retention of placement within the education setting.

Examining the overall job satisfaction of participating SLPs licensed and employed by the public school districts within Texas could provide correlations between specific aspects of the work experience and how job satisfaction and retention factors contribute to the overall retainment of SLPs in the educational setting. Public school districts, including administrators,

the board of education members, our governing body (ASHA), and policymakers may benefit from understanding potential relationships between the specific job facets and overall job satisfaction.

During the initial phase of the PSDA cycle, the research provided will clarify if the problem of low retention rates of SLPs exists due to low levels of job satisfaction. A job satisfaction survey provided to a sample of SLPs employed in public instructional facilities throughout Texas will determine if demographic variables (income, level, gender, educational level, location) and workload characteristics (case size, documentation, other duties) correlate with job satisfaction. Additionally, the survey will determine the impact of job satisfaction on the retention rate of SLPs within the public-school setting. Determining the problem and identifying the overall purpose for the improvement change is depicted through a cause and effect model known as the Fishbone Diagram. Figure 16 illustrates the Fishbone Diagram concerning this action plan, as portrayed by Bryk et al. (2016). This action plan aims to increase retention of SLPs in public education facilities throughout Texas within five years. Data can be analyzed at a local level for each district and documented through the U.S. Bureau of Labor of Statistics at a national level.

The second phase of the PSDA cycle comprises the implementation of the change and the collection of outcome data. I postulate that surveys distributed to SLPs will demonstrate low job satisfaction rates. With the incorporation of interviews, implementation of improvement strategies can begin. A conversational protocol and survey should be designed to identify needs and concerns of SLPs to provide early intervention and to ensure that improvement change is occurring. School districts can improve job satisfaction and through frequent interviews between SLPs and special education directors, instructional coordinators, human resource executives, and

other stakeholders. The results should be collected and analyzed frequently to assess needs and commit to changes. A driver diagram is a structured tool to assist with various improvement changes in an organization's working process. Figure 17 illustrates an example driver diagram of this action plan, as depicted by Bryk et al. for this action plan (2016).

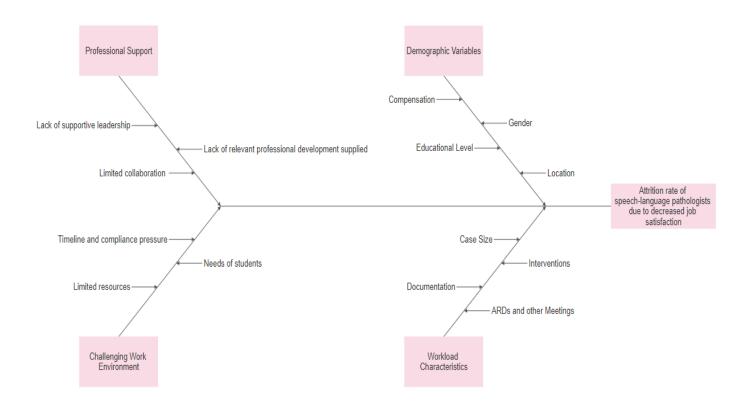


Figure 16. Fishbone Diagram for Causes of High SLPs Turnover

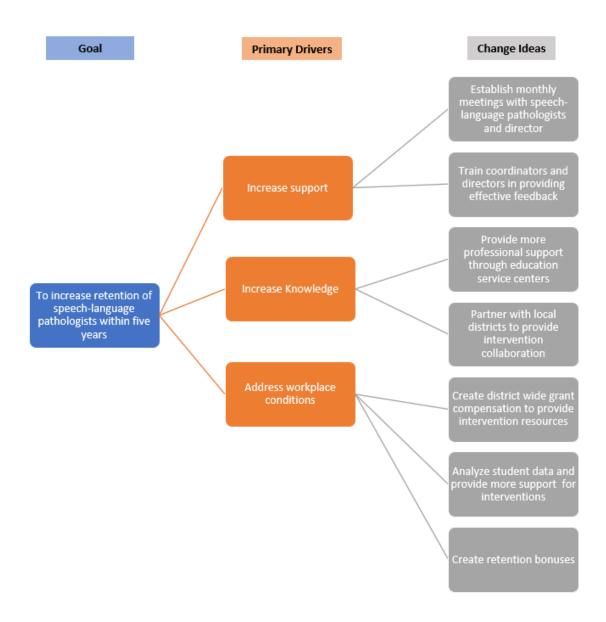


Figure 17. Driver Diagram for SLPs Turnover

During the third phase of the PSDA cycle, supervisors, coordinators, and directors analyze the responses and consider which target or objectives were met to reach the overall goal. These responses can be utilized to present to the board of directors and various stakeholders to assist with improvement changes.

The last phase of the PSDA cycle is the Act phase. This phase integrates all the knowledge stimulated throughout the work process and determines if the change should be accepted, modified, or discontinued.

Format

The action plan will be delivered utilizing the continuous improvement method and implementing the Plan-Do-Act-Study Inquiry Cycle as summarized above. Through a causal system analysis and working theory of practice improvement, stakeholders will understand factors impacting job satisfaction rates, recruitment rates, and retention rates of SLPs employed in instructional organizations throughout Texas.

Delivery

Intended audience. Conveying the message to the right individuals is crucial in achieving results. The intended audience for this action plan includes SLPs, special education directors, instructional coordinators, human resource executives, and other stakeholders.

Moreover, policymakers will have access to the data to implement changes necessary to improve job satisfaction.

Presentation process. In order to make continuous improvement changes, an action plan will be developed to outline and strategize changes for various stakeholders. The action plan will be presented first to the special education director. A visual presentation program will be utilized to document the purpose of the plan and incorporate goals and objectives to reach the plan, in this instance, increase job satisfaction of SLPs in public schools in Texas to recruit and retain highly qualified staff for students. The presentation will be available for members to print for documentation and note-taking. Furthermore, handouts containing cause and effect diagrams,

driver diagrams, and sample protocols will be available for printing as well as projected onto a screen.

Presentation availability. Connecting to various organizations to ensure change is occurring across the state is critical in increasing retention rates for SLPs. A face-to-face presentation of the action plan may be one solution for local districts; however, resources are limited, and face to face interactions cannot occur throughout all districts in Texas. Networking organizations are crucial to improvement change; therefore, an online video presentation (i.e., webinar) will be produced and made available to all district leaders and stakeholders through communication with each education service center in Texas. Handouts will be attached to the video presentation for reference materials.

Assessment/Evaluation Tool

Formative. To ensure all members understand the content of the presentation, questions, and answers will be made available throughout live webinar sessions and follow up emails will be available if the webinar is viewed at a later date. During the presentation, audience members will complete a PSDA worksheet for practice. After the presentation, a brief quiz will be provided to measure understanding of content.

Summative. To evaluate the learning of the stakeholders, a brief quiz will be provided to determine what can be changed to ensure the message is delivered efficiently and effectively. Feedback will be requested to determine clarity, content, and provision of material.

Conclusion

School districts across Texas should continue to foster the challenging tasks of providing supports for the culturally diverse students and students with disabilities enrolling in the district.

A more conclusive understanding of the shortage of SLPs within the educational setting may provide valuable feedback from working clinicians to assist schools in the development of recruitment, hiring, and retention practices for the school-based speech-language pathologist.

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Appendix A

Approval of Submission



APPROVAL OF SUBMISSION

October 30, 2019 Chelsea
Thompson
cnthompson@uh.edu

Dear Chelsea Thompson:

On October 29, 2019, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	Job Satisfaction Among School-Based Speech- Language
	Pathologists
Investigator:	Chelsea Thompson
IRB ID:	STUDY00001901
Funding/ Proposed Funding:	Name: Unfunded
Award ID:	
Award Title:	
IND, IDE, or HDE:	None

Documents Reviewed:	 Modified ASHA School Survey - Google Forms.pdf, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); IRB Letter 10-29-19.docx, Category: Correspondence (sponsor, IRB, misc.); HRP-503 Template-Protocol edit 10-29-19.pdf, Category: IRB Protocol; Letter to IRB.docx, Category: Correspondence (sponsor, IRB, misc.); HRP-091.pdf, Category: Consent Form; SLP Email.pdf, Category: Recruitment Materials;
Review Category:	Exempt
Committee Name:	Not Applicable
IRB Coordinator:	Maria Martinez



The IRB approved the study on October 29, 2019; recruitment and procedures detailed within the approved protocol may now be initiated.

As this study was approved under an exempt or expedited process, recently revised regulatory requirements do not require the submission of annual continuing review documentation. However, it is critical that the following submissions are made to the IRB to ensure continued compliance:

- Modifications to the protocol prior to initiating any changes (for example, the addition of study personnel, updated recruitment materials, change in study design, requests for additional subjects)
- Reportable New Information/Unanticipated Problems Involving Risks to Subjects or Others
- Study Closure

Unless a waiver has been granted by the IRB, use the stamped consent form approved by the IRB to document consent. The approved version may be downloaded from the documents tab.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system.

Sincerely,

Research Integrity and Oversight (RIO) Office

University of Houston, Division of Research

713 743 9204

cphs@central.uh.edu

http://www.uh.edu/research/compliance/irb-cphs/

Appendix B

Job Satisfaction Survey

Job Satisfaction Among School-Based SLPs Survey

A survey to collect information regarding school based SLPs and job satisfaction

* Required



Consent to Take Part in a Human Research Study

Title of research study: Job Satisfaction Among School-Based Speech-Language Pathologists in Texas.

Investigator: Chelsea Thompson M.S., CCC-SLP. This project is part of a dissertation being conducted under the supervision of Dr. Kristi Santi.

Key Information:

The following focused information is being presented to assist you in understanding the key elements of this study, as well as the basic reasons why you may or may not wish to consider taking part. This section is only a summary; more detailed information, including how to contact the research team for additional information or questions, follows within the remainder of this document under the "Detailed Information" heading.

What should I know about a research study?

- Someone will explain this research study to you.
- Taking part in the research is voluntary; whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- You can ask all the questions you want before you decide, and can ask questions at any time during the study.

We invite you to take part in a research study about the job satisfaction of working school-based speech-language pathologists employed in public educational facilities located in Texas because you meet the following criteria: Speech-Language Pathologist employed in a Texas public school district.

In general, your participation in the research involves answering a 67-item questionnaire describing your demographic variables (income, gender, race, location), workload characteristics (case size, documentation, other duties), and current satisfaction at your place of employment. The survey is anticipated to take approximately 10 minutes.

There are no known risks for participation in the study. However, a more conclusive understanding of the shortage of speech-language pathologists within the educational setting may provide valuable feedback from working clinicians to assist schools in the development for recruitment, hiring, and retention practices for the school-based speech-language pathologist.

Detailed Information:

The following is more detailed information about this study, in addition to the information listed above.

Why is this research being done?

Recruitment and retention of speech-language pathologists within the school setting remain a priority for ASHA. ASHA has conducted surveys on professional issues regarding speech-language pathologist related services biannually since 2004 (ASHA, 2014). However, minimal effort is made to assess the quality of life for school-based speech-language pathologists.

How long will the research last?

We expect that you will be in this research study for approximately 10 minutes, or until survey is completed.

How many people will be studied?

We expect to enroll about 1000 people in this research study.

What happens if I say yes, I want to be in this research?

A 67-item questionnaire pertaining to job satisfaction was developed combining the ASHA biannual school survey and Job Satisfaction Survey created by Spector, 1997. Demographic variables, workload characteristics, and job satisfaction will all be measured by an

Consent to Take Part in a Human Research Study
electronic survey containing multiple-choice questions, short-answer questions, and Likert scales. Once completed, your participation is over.
What happens if I do not want to be in this research?
You can choose not to take part in the research and it will not be held against you. Choosing not to take part will involve no penalty or loss of benefit to which you are otherwise entitled.
What happens if I say yes, but I change my mind later?
You can leave the research at any time and it will not be held against you.
If you stop being in the research, already collected data will be removed from the study record.
Is there any way being in this study could be bad for me?
We do not expect any risks related to the research activities. If you choose to take part and undergo a negative event you feel is related to the study, please contact Chelsea Thompson M.S., CCC-SLP.
Will being in this study help me in any way?
There are no known benefits to you from your taking part in this research. However, possible benefits to others include informing administrators, the board of education members, our governing body (ASHA), and policy makers on the shortage of SLPs within the educational setting and provide valuable feedback from working clinicians in order to recruit and retain SLPs.
What happens to the information collected for the research?
Your taking part in this project is anonymous, and information you provide cannot be linked to your identity.
Who can I talk to?
If you have questions, concerns, or complaints, or think the research has hurt you, you should talk to the research team at Chelsea Thompson, cthompson@uh.edu; Dr. Kristi Santi klaanti@uh.edu; or 713-743-6141
This research has been reviewed and approved by the University of Houston Institutional Review Board (IRB). You may also talk to them at (713) 743-9204 or cphs@central.uh.edu if:
 Your questions, concerns, or complaints are not being answered by the research team.
You cannot reach the research team.
 You want to talk to someone besides the research team. You have questions about your rights as a research subject.
 You want to get information or provide input about this research.
1.*
Check all that apply.
Yes
"I have read the consent
information and agree to take part
in the research"
III die leadaidi
Employment and Cornings
Employment and Earnings:
2. 1. Are you ASHA certified, maintaining your Certificate of Clinical Competence (CCC-SLP)? *
Mark only one oval.
Mark Only One Oval.
Yes
○ No
3. 2. Are you a Speech Language Pathologist (SLP) working for a school or school district? *
Mark only one oval.
Yes
No No
Unemployed

4.	Which one of the following categories best describes your employment status? * Mark only one oval.	
	Employed full time	
	Employed part time	
	Unemployed	
5.	4. Which one of the following best describes your principal employment situation?	
	Mark only one oval.	
	Salaried employee, full time or part time	
	Contractor, full time or part time	
6.	5. Although you may work in several types of facilities, select the one type of building best describes where you work all or most of the time. For individuals who work in propractice or early intervention, select the type of building in which you deliver most of services. Only one response can be accepted. * Mark only one oval.	rivate
	Special day/residential school	
	Pre-elementary (preschool)	
	Elementary school	
	Secondary School (middle school, high school)	
	Student's home	
	Administrative office	
	Other:	
7.	6. Although you may perform more than one job function, select the one position that describes how you spend most of your time. Only one response can be accepted. * Mark only one oval.	t best
	Clinical service provider (includes all individuals providing any direct service)	
	Diagnostician	
	Special education teacher	
	Consultant	
	Administrator/supervisor/director	
8.	7. Do you receive a salary supplement, stipend, bonus, or other type of "salary upgra	de" for
	Mark only one oval.	
	Yes	
	○ No	

9.	8. Do you receive a salary supplement, stipend, bonus, or other type of "salary upgrade" for Extra work (Medicald billing, supervision, etc.)? *
	Mark only one oval.
	Yes
	◯ No
10.	9. Do you receive a salary supplement, stipend, bonus, or other type of "salary upgrade" for Recruitment/retention bonus? *
	Mark only one oval.
	Yes
	◯ No
11.	10. Do you receive a salary supplement, stipend, bonus, or other type of "salary upgrade" for Bilingual services? *
	Mark only one oval.
	Yes
	◯ No
12.	11. Do you receive a salary supplement, stipend, bonus, or other type of "salary upgrade" for Performance Evaluation results? *
	Mark only one oval.
	Yes
	○ No
13.	12. In your primary job, are you paid on an annual basis or an hourly basis? Select one response only.*
	Mark only one oval.
	Annual Salary
	Hourly Rate
	<u> </u>
14.	13. What is your gross annual income for your primary job, before all deductions? Include supplementary payments identified in previous questions. *
	Mark only one oval.
	Under \$9,999
	\$10,000-\$20,000
	\$21,000 - \$30,000
	\$31,000 -\$40,000
	\$41,000 - \$50,000
	\$51,000 - \$60,000
	\$61,000 - \$70,000
	\$71,000 - \$80,000
	\$81,000 +

15.	14. For what period of work is this? If you work is period, select response "1." Select one response	
	Mark only one oval.	o omy.
	Work 9-10 months per year	
	Work 11-12 months per year	
16.	15. How satisfied are you with your salary? *	
	Mark only one oval.	
	1 2 3 4	5
	Not at all satisfied	Very satisfied
Са	seload/Workload	
and	seload" is based only on the number of students sen performed activities. 16. Using the description above, which approact	
17.	you serve? *	is used to determine the number of students
	Mark only one oval.	
	Caseload approach only	
	Workload approach only	
	Both caseload and workload	
18.	17. What is your average monthly caseload size? *	
19.	18. How many hours do you spend on Direct intervention: classroom based/integrated services in a typical WEEK? Enter "0" if none.	
20.	19. How many hours do you spend on Direct intervention: pullout in a typical WEEK? Enter "0" if none. *	
21.	20. How many hours do you spend on Services to section 504 students in a typical WEEK? Enter "0" if none. *	

22.	21. How many hours do you spend on Documentation/paperwork in a typical WEEK? Enter "0" if none. *	
23.	22. How many hours do you spend on Medicaid billing in a typical WEEK? Enter "0" if none. *	
24.	23. How many hours do you spend on Other indirect activities in a typical WEEK? Enter "0" if none. *	
25.	24. How many hours do you spend on MTSS/RTI activities in a typical WEEK? Enter "0" if none. *	
26.	25. How many hours do you spend on Diagnostic evaluations (e.g. observation, screening, scoring analysis)s in a typical WEEK? Enter "0" if none.	
27.	26. How many hours do you spend on Technological support (e.g. hearing aids/ Cls, AAC) in a typical WEEK? Enter "0" if none. *	
28.	27. How many hours do you spend on Supervision in a typical WEEK? Enter "0" if none. *	
29.	28. Under what circumstances are you required apply. * Check all that apply.	to make up missed sessions? Select all that
	I am not required to make up missed sessions	:
	When the student misses a session due to as	sembly or classroom activity
	Anytime a student misses a session for any re	eason
	Any time I miss a session for any reason	

30.	29. What is your role on the multi-tiered system of support (MTSS)/response to intervention (Rtl) or pre-referral team? Select all that apply. *
	Check all that apply.
	Conduct screenings
	Provide consultation as a member of the pre-referral team
	Provide direct services within general education
	Provide strategies to classroom teachers
	Not applicable: I don't participate in MTSS/RTI or pre-referral
31.	30. How qualified do you believe you are to address cultural and linguistic influences on service delivery and outcomes? *
	Mark only one oval.
	1 2 3 4 5
	Not qualified at all Very Qualified
32.	31. What percentage of your caseload requires bilingual services? *
	Mark only one oval.
	0-10%
	11-20%
	21-30%
	31-40%
	41-50%
	51-60%
	61-70%
	70% and above
Sıı	pport Personnel
<u> </u>	pport r discinici
33	32. How many assistants or aides do you
00.	currently supervise? Put "0" if none. *
34.	33. How does supervision of the assistant or aide impact your caseload and workload?
	Mark only one oval.
	Increases my caseload
	Increases my workload
	Decreases my caseload
	Decreases my workload
	No impact on my caseload
	No impact on my workload

Performance Evaluation

35. 34. Who completes your performance evaluation? Select all that apply. *
Check all that apply.
Building administrator
Special education director
Supervisor of speech-language program
None of the above
Other:
Demographics
36. 35. Which one of the following best describes where you work? *
Mark only one oval.
City/urban area
Suburban area
Rural area
37. 36. Identify your highest degree earned. Count only actual degrees-not equivalencies or certificates-and do not include degrees expected but not yet conferred.
Mark only one oval.
Master's
PhD
AuD
☐ Ed.D
SLP.D
Bachelor's
Other Doctorate
38. 37. How many years have you been employed as an SLP in the school setting? Round to the nearest full year. *

	Which category best describes you? * ck all that apply.
	Caucasian
H	Latino/Hispanic
Н	African American
	Asian
H	Native Hawaiian or Other Pacific Islander
	Other:
	Olloi.
	Which age group do you belong to as of 2019? * s only one oval.
- Ividir	
\subseteq	20-29
\subseteq	30-39
	40-49
	50-59
\subseteq	60-69
	70 and above
	What are your greatest challenges as a school-based professional? Select all that apply. *
	Budget constraints
П	Ethical challenges
	High workload/caseload size
П	Inadequate work space and facilities
	Incorporating optimal service delivery models
	Large amount of paperwork
П	Limited support from the administration
	Limited understanding of my role by others
	**
	Limited understanding of my role by others
	Limited understanding of my role by others Limited parental involvement and support
	Limited understanding of my role by others Limited parental involvement and support Low salary
	Limited understanding of my role by others Limited parental involvement and support Low salary Medicaid billing
	Limited understanding of my role by others Limited parental involvement and support Low salary Medicaid billing Out of pocket professional expenses

	1	2	3	4	5	6	
Disagree very Much	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	Agree very Much
42. There is really to Mark only one oval.	o little c	hance f	or prom	otion o	n my jo	b. *	
	1	2	3	4	5	6	
Disagree very much			\bigcirc	\bigcirc	\bigcirc	\bigcirc	Agree very much
43. My supervisor is Mark only one oval.	quite co	ompeter	nt in doi	ng his/h	ner job.	•	
	1	2	3	4	5	6	
Disagree very much							Agree very much
44. I am not satisfied <i>Mark only one oval.</i>	with th	e benef	its I rec	eive. *			
	1	2	3	4	5	6	
			3	4	5	0	
Disagree very much		0	<u>,</u>	<u>-</u>	<u> </u>		Agree very much
	d job, I re	eceive t	the reco	gnition	for it th	at I shou	
45. When I do a good Mark only one oval.							
45. When I do a good	d job, I re	eceive t	the reco	gnition	for it th	at I shou	uld receive. *
45. When I do a good Mark only one oval.	1	eceive t	the reco	gnition 4	for it th	at I show	ald receive. * Agree very much
45. When I do a good Mark only one oval. Disagree very much	1	eceive t	the reco	gnition 4	for it th	at I show	ald receive. * Agree very much
45. When I do a good Mark only one oval. Disagree very much	1 s and pr	eceive t	3 es make	gnition 4 doing	for it th	at I shou	ald receive. * Agree very much
45. When I do a good Mark only one oval. Disagree very much 46. Many of our rules Mark only one oval. Disagree very much	d job, I r	eceive t	3 es make	gnition 4 doing	for it th	at I shou	Agree very much
45. When I do a good Mark only one oval. Disagree very much 46. Many of our rules Mark only one oval. Disagree very much 47. I like the people is	d job, I r	eceive t	3 es make	gnition 4 doing	for it th	at I shou	Agree very much

. 48. I sometimes feel Mark only one oval.	my job i	is mean	ingless	.*			
	1	2	3	4	5	6	
Disagree very much			\bigcirc				Agree very much
. 49. Communications Mark only one oval.	seem g	ood wit	thin this	organi	zation.		
	1	2	3	4	5	6	
Disagree very much		\bigcirc		\bigcirc			Agree very much
. 50. Raises are too fe Mark only one oval.	w and fa	ar betwe	en. *				
	1	2	3	4	5	6	
Disagree very much		\bigcirc	\bigcirc	\bigcirc			Agree very much
. 51. Those who do w Mark only one oval.	ell on the	e job st	and a fa	ir chan	ce of be	ing pror	moted. *
	1	2	3	4	5	6	
Disagree very much		\bigcirc	\bigcirc	\bigcirc			Agree very much
. 52. My supervisor is Mark only one oval.	unfair to	o me. *					
	1	2	3	4	5	6	
Disagree very much							Agree very much
. 53. The benefits we i Mark only one oval.	receive a	are as g	ood as	most of	ther org	anizatio	ns offer. *
	1	2	3	4	5	6	
Disagree very much							Agree very much
. 55. I do not feel the v Mark only one oval.	vork I do	o is app	reciated	i. *			
	1	2	3	4	5	6	

 56. My efforts to do a Mark only one oval. 	a good j	ob are s	eldom	blocked	by red	tape. *	
	1	2	3	4	5	6	
Disagree very much			\bigcirc		\bigcirc		Agree very much
. 57. I find I have to w Mark only one oval.	ork hard	er at my	/ job be	cause o	of the in	compete	ence of people I work with.
	1	2	3	4	5	6	
Disagree very much		\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	Agree very much
. 57. I like doing the th Mark only one oval.	hings I d	o at wo	rk. *				
	1	2	3	4	5	6	
Disagree very much							Agree very much
	1	2	3	4	5	6	
Disagree very much							Agree very much
. 59. Do you feel your all students on your Mark only one oval. Yes No			is staffe	ed with o	enough	SLPs to	provide quality service for
Unsure							
Unsure . 60. Do you feel your students?*	caseloa	d/workl	oad imp	oacts yo	our abili	ty to pro	ovide quality service to
Unsure . 60. Do you feel your	caseloa	d/workl	oad imp	oacts yo	our abili	ty to pro	ovide quality service to
Unsure . 60. Do you feel your students?* Mark only one oval.	caseloa	d/workl	oad imp	oacts yo	our abili	ty to pro	ovide quality service to
Unsure 60. Do you feel your students? * Mark only one oval. Yes	caseloa	d/workl	oad imp	oacts yo	our abili	ty to pro	ovide quality service to
Unsure . 60. Do you feel your students? Mark only one oval. Yes No							
Unsure . 60. Do you feel your students? * Mark only one oval. Yes No Unsure							

	1	2	3	4	5		
Not at all satisfied	\bigcirc	\bigcirc		\bigcirc	\bigcirc	Very satisfied	
63. How satisfied ar services. * Mark only one oval.	re you	with the	follow	ing aspe	ects of y	our job? Ability	to provide quality
	1	2	3	4	5		
Not at all satisfied						Very satisfied	
	1	2	3	4	5		
Mark only one oval.							
	1	2	3	4	5		
65. Do you feel app	reciate	d in you	ur curre	nt posit	ion? *	Very satisfied	
Mark only one oval. Not at all appreciated	1	2	2 ;	3 4	5		ciated
65. Do you feel appr Mark only one oval. Not at all appreciated 66. Do you plan to r Mark only one oval. Yes	1	2	2 ;	3 4	5		ciated
Not at all appreciated 66. Do you plan to r Mark only one oval. Yes No	1 cretire w	ithin the	e school	3 4	5) (Very appred	

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Appendix C

Email to Speech-Language Pathologists

To Whom It May Concern:

Recruitment and retention of SLPs within the school setting remain a priority for ASHA. ASHA has conducted surveys on professional issues regarding speech-language pathologist related services biannually since 2004 (ASHA, 2014). However, minimal effort is made to assess the quality of life for school-based SLPs. If job satisfaction is present, employees are more likely to yield productivity, fruitful work, aspiration to remain in the profession, and inspiration toward others who enter the field (Edgar & Rosa-Lugo, 2007; Kalkhoff & Collins, 2012).

As the number of students who qualify with a speech impairment continues to increase, the demand for school-based SLPs will continue to grow. Shortages in school-based SLPs produce high financial stress to school districts. Moreover, school districts paid contracted SLPs a median of \$20 more per hour than full-time employees (Janota, 2004). Moreover, increased shortages expand the caseload responsibilities for existing professionals, continuing the cycle of burnout and attrition. Consequently, students in the public education system may suffer the price for the shortage in SLPs in educational facilities, deserving the attention of stakeholders to provide free and appropriate services to the students in Texas's schools.

The purpose of this quantitative study is to investigate common themes in the perceptions of SLPs throughout Texas public education to determine factors that affect the relationship between job stress, satisfaction, and retention of placement within the education setting.

As an SLP employed within an educational setting in Texas, your participation in the research involves answering a 67-item questionnaire describing your demographic variables (income, gender, race, location), workload characteristics (case size, documentation, other duties), and current satisfaction at your place of employment. The survey is anticipated to take approximately 10 minutes.

There are no known risks for participation in the study. However, a more conclusive understanding of the shortage of SLPs within the educational setting may provide valuable feedback from working clinicians to assist schools in the development for recruitment, hiring, and retention practices for the school-based speech-language pathologist.

Thank you for consideration and participation in the study.

Chelsea Thompson M.S., CCC-SLP