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Walden University 2021

## Abstract

# Educational Interpreters for the Deaf: Job Ambiguity and Role Conflict

by

Marian L. Berry

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Psychology

Walden University

August 2021

#### **Abstract**

This study investigated the ongoing job ambiguity and role conflict of certified educational interpreters for the deaf (CEID). It explored and identified factors that contribute to the difficulty in recruiting and retaining CEID interpreters for K-12 schools. The difficulty is compounded by the need for increasingly complex and specialized skills and knowledge required to become a CEID. Little attention has been given to CEIDs and the problems of job ambiguity, role conflict, and interpreter shortage. Identification of the recurring factors in the job ambiguity and role conflict will contribute toward eliminating the shortage of CEID's. This qualitative study aimed to advance the knowledge of the factors behind the CEID shortage and the conflicting views of and relationship between administrators, teachers, and interpreters. The study was done through triangulation of semi-structured interviews, questionnaires, and field notes. The sample size included two schools to ensure data saturation and confirmation of findings, create comprehensive data, increase validity, and maximize understanding. Through an analysis of data from the 12 interviews of administrators, teachers, and interpreters, this investigation discovered differing of views butby working together, a synthesis can be reached with a favorable influence on the job ambiguity, role conflict, and the shortages of CEIDs in the K-12 school system. These findings may prompt changes in hiring more CEID, who could positively influence the attitudes of participation in activities, and educational success of deaf students, which could lead to their positive contributions to society, and enhance their future well-being.

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# Dedication

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# Acknowledgments

This is an optional page for acknowledgments. It is a nice place to thank the faculty, family members, and friends who have helped you reach this point in your academic career.

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### Chapter 1: Introduction to the Study

The No Child Left Behind Act (2001), now Every Student Succeeds Act (ESSA), describes mainstreaming in public school classrooms as the standard placement for all children, including d/D/hh students (Linn et al., 2002). As of 2016, approximately 87% of d/D/hh students, or 75,000 students, were enrolled in mainstream education (U.S. Department of Education, (DOE), 2017). These figures include d/D/hh children with cochlear implants and increasing numbers of d/D/hh students from cultural or linguistic backgrounds, making for a complex and varied needs set. d/D/hh students' linguistic competence, academic achievement, and social outcomes are a function of education interpreters' competence (Cogen & Cokely, 2015). Interpreters are granted their identity by the Deaf. There are four avenues to membershipinto the Deaf community for interpreters: audiological, political, linguistic, and social.

Interpreter's intimate knowledge of their language and culture is an important part of what is taught to d/D/hh students in mainstream programs through the educational interpreter (Greene, 2011). The purpose of the study was to identify factors that contribute to the difficulty in recruiting and retaining CEID interpreters, as perceived by school administrators, teachers, and CEIDs.

The remainder of the chapter is divided into four sections. The first section presents the strategy employed to develop the literature review. The next section describes the job demands- resources model (JD-RM), developed by Schaufeli et al. (2009) which was used to frame data collection and analysis in this study. The

theoretical framework is related to educational research in general and educational interpreters in particular. The research synthesis section includes a review of the legislative and policy history affecting the d/D/hh in an educational context, then synthesizes research relevant to the educational interpreter shortage. Finally, I summarize the chapter and discuss initial conclusions regarding extant research on factors relating to the educational interpreter shortage.

### **Background**

Chronic, long-term shortages of (CEID), for Grades K-12 public schools has reduced access for d/D/hh students to the least restrictive environment, as mandated by ESSA (Cogen & Cokely, 2015; DOE, 2015). Approximately 125,000 of the 50.7 million students attending publicelementary and secondary schools in the United States were legally blind or had significant hearing loss in 2015 (National Center for Education Statistics, 2017). As of 2018-2019, the number of students ages 3-21 who receive special education services under the Individuals with Disabilities Education Act of 1990 (IDEA) was 7.1 million or 14% of the total public-school enrollment, with those receiving services for d/D/hh growing to 1 percent with 18% of the institutions, with d/D/hh students indicating that they had been unable to provide some or the required support services to the d/D/hh students either at all or at the level required. (NCES, 2019). Approximately 86% of school administrators reported it was somewhat difficult to very difficult to recruit and retain certified interpreters. The shortage is forecasted to continue until 2028 (Bureau of Labor Statistics, 2021). The ongoing shortage of interpreting personnel

is influenced by the need for increasingly complex and specialized skills and knowledge (National Interpreter Education Center (NIEC, 2015). Interpreting situations increasingly require signed languages other than English and American Sign Language (ASL), as well as sensitivity to cultural differences and special needs. The pool of available of educational interpreters is impacted by state efforts to establish licensure, and the trend toward specialization (NIEC, 2016).

The majority of d/D/hh children are educated in mainstream settings, often without sufficient language or academic support. The communication needs of all these children are complex and vary widely, and their success in mainstream education is often tied to the quality of the support services they receive.

Mainstream education is inherently a high-risk area of interpreting and should be undertaken only by the most fluent and experienced practitioners. Therange of d/D/hh students and the type of communication challenges with which CEIDs are presented vary widely and simultaneously serving as language developer, tutor, and student advocate, in addition to their role as the sign language interpreter can be challenging and rewarding

The need to understand factors affecting the educational interpreter shortage is highlighted by research that found that linguistically competent educational interpreters were associated with improved academic and social outcomes for d/D/hh students (Cogen & Cokely,2015). Providing full access to an increasingly diverse d/D/hh K-12 student population in a hearing-based classroom presents numerous challenges to CEID interpreters (NIEC, 2015).

Accurate representation of all classroom communication is challenging in a classroom environment where communication is distributed among multiple speakers, and the information is relayed to d/D/hh in real-time to enable learning through interaction. Teachers' and students' communications contain a great deal of information about their beliefs, expectations, and understanding that is often not conveyed in their language or vocabulary but rather in aspects ofspeaking, such as tone of voice and prosody (Baker, 2014). The confluence of a diverse array oflinguistic, cultural, and situational needs will affect the role of CEID interpreters for many yearsto come (NIEC, 2015). The purpose of this qualitative case study to identify factors that contribute to the difficulty in recruiting, and retaining CEID interpreters, as perceived by schooladministrators, teachers, and educational interpreters for the deaf.

#### **Problem Statement**

The general problem this study explored was a chronic and ongoing shortage of CEID personnel in Grades K-12 public schools that is forecasted to continue through 2028 and is compounded by increasing classroom diversity (Cogen & Cokely, 2015). While specific statistics for the magnitude of the CEID shortage are not available, a study by the U.S. Department of Education Rehabilitation Services Administration reported that 86% of respondents reported that it is difficult to *very* difficult to recruit and retain CEID interpreters (Cogen & Cokely, 2015). Approximately 125,000 of the 50.7 million students attending public elementary and secondary schools in the United States, were legally blind

or had significant hearing loss (National Center for Education Statistics, 2017). As of 2018-2019, the number of students' ages 3-21 who receive special education services under IDEA was 7.1 million or 14% of the total public-school enrollment, and those receiving services for d/D/hh grew 1%. Eighteenpercent of the institutions with d/D/hh students indicated that they had been unable to provide some or the required support services to the d/D/hh students either at all or at the level required.(NCES, 2019). Educational interpreters exist to serve the educational needs of d/D/hh students who find themselves needing to access education in hearing mainstream classrooms. More specifically, factors contributing to the CEID interpreter shortage are unknown (Baker, 2014).

# **Purpose of the Study**

The purpose of this qualitative case study was to identify factors that contribute to the difficulty in recruiting, and retaining CEID interpreters, as perceived by school administrators, teachers, and educational interpreters for the deaf. The study aimed to advance knowledge on the factors that contribute to CEID shortages, with an emphasis on the relationships among teachers, interpreters, and administrators. The first step toward developing interventions to eliminate the CEID shortage is to understand factors that contribute to the shortage (Guthmann, 2011).

#### **Research Questions**

I derived the following research questions from the problem statement and formed thembased on the choice of a case study methodology:

RQ1. What factors contribute to the shortage in CEID interpreters?

- RQ2. What barriers exist to educate, identify, recruit, and retain CEID interpreters?
- RQ3. What programs and practices are available to address factors that contribute to the shortage in CEID interpreters?

#### **Theoretical Framework**

The JD-RM served as the theoretical framework for the study. Job demands are physical, psychological, and social, with organizational expectations for meeting the cognitive and/or emotional job requirements, as well as for promoting personal and professional growth. (Schaufeli et al., 2009). Three major causes of psychological strain in a classroom setting are disruptive pupil behaviors, work overload, and an inadequate physical work environment (Schaufeli et al., 2009). Classroom job resources that promote success are job control, access to information, supervisory support, clear roles and responsibilities, and a positive climate (Schaufeli et al., 2009). The JD-RM of job burnout proposes that two parallel processes affect work-related well-being, namely, the *energetic* and the *motivational*. The JD-RM proposes that high job demands, and a lack of job resources lead to job burnout and turnover for classroom professionals. Burnout is a "chronic affective response pattern to stressful work conditions that feature high levels of interpersonal contact" (Cordes & Daugherty 1993 p. 625)

### **Nature of the Study**

The purpose of this qualitative case study was to identify factors contributing to the difficulty in recruiting and retaining CEID interpreters (see

Baker, 2014), as perceived by schooladministrators, teachers, and educational interpreters for the deaf.. A qualitative research approach is consistent with identifying factors that contribute to the CEID interpreter shortage, which is a complex and multifaceted phenomenon (see Savin-Baden & Major, 2013). I accomplished triangulation using semi structured interviews, questionnaires, and field notes to create a richly textured picture and achieve data saturation. Methodological triangulation involves the use of three or more sources of data and a small sample size to ensure data saturation, and confirmation of findings, create comprehensive data, increase validity, and advance understanding of a phenomenon (Savin-Baden & Major, 2013). It is recommended that the size of the group be between six and 12 participants. To ensure data saturation the recommended number of participants is 12 (Lasch et al., 2010; Onwuegbuzie et al., 2010). The study sample included two school administrators, five teachers, and five certified educational interpreters from a single school district in the San Francisco Bay Area. The chosen school district had a d/D/hh program.

#### **Definition of Terms**

Certified educational interpreter for the Deaf A CEID is an educational specialist whoprovides interpreting, translation, language comprehension, and transliteration services using ASL and other visual and tactual communication forms used by individuals who are deaf, or hard-of-hearing (Pochhacker, 2016).

Job demands: Job demands are all physical, psychological, social, or organizational aspects of a job that require persistent physical, cognitive, or emotional effort (van Woerkom etal., 2016).

Job resources: Job resources refer to physical, psychological, social, or organizational job characteristics that: (a) reduce job demands and the related physiological and psychological costs, are functional to achieve goals, or stimulate personal growth, learning and development (Bakker & Demerouti, 2017).

### **Assumptions**

Assumptions in a study are conditions accepted as true, or at least plausible that can affect the study. This case study was conducted based on the philosophical assumptions that to truly "know what they know" (Creswell & Creswell, 2017, p. 20), a researcher must be immersed in the social environment. This approach was also ontological in that each participant's view of reality was considered valid and based on their unique set of experiences, afurther assumption was that participants responded honestly and without bias or ulterior motive (see Savin-Baden & Major, 2013). I assumed that the inclusion criteria of the samples were appropriate and therefore the participants experienced the same or similar phenomenon of the study. Also, I assumed that the participants had a sincere interest in participating in my research (see Wargo, 2015).

### **Scope and Delimitations**

The delimitations of a study are the goals the researcher has set as boundaries, so they do not become too large. The scope of this research was delimited to data collection from two school administrators, five teachers, and five CEID interpreters from a single school district near San Francisco, California. The study was further delimited to questionnaires and interviews outlining factors that may influence CEID recruitment and retention. The case study approach was consistent with richly textured data collection from a small sample of individuals with direct experience with the phenomenon of interest (Savin-Baden & Major, 2013).

#### Limitations

Limitations are usually areas over which the researcher has no control, constraints or restrictions that cannot be reasonably dismissed and that can affect results. The small sample sizeand choice of 1the qualitative case study methodology limits the generalizability of study findings (Savin-Baden & Major, 2013). Qualitative research methods in general, and the case study approach in particular, rely heavily on individual researcher skills and may be influenced by personal biases or idiosyncrasies. Academic rigor is more difficult to maintain, and demonstrate with qualitative research, which limits credibility and trustworthiness of study findings. The length of the study and the response rate as well as unknown conditions or factors at the facility, such as covid-19 and the closing of the schools, where the participants worked could bias the responses (Wargo, 2015).

# **Significance**

The significance of this study was to identify factors, relationships or interactions that create the CEID interpreter shortage as a first step toward improving the means to identify, recruit, retain, and manage CEIDs to be able to meet the increasing needs of deaf students. Underfederal law, deaf students are entitled to an education comparable to that of their hearing classmates. Having CEIDs enables deaf students to have equal accessibility in the classroom.

Forbes (2016) has ranked *Interpreters and Translators* as the fifteenth fastest growing job in the country. The Bureau of Labor Statistics (2017) projects the need for interpreters will grow 29% between the years of 2014 and 2024. Identifying a relationship of conflicting views existing between administrators, teachers, and CEIDs can add to the discussion as to how much these variables contribute to the shortage and work toward improving the situation. At least half of interpreting training program graduates pursue educational interpreting (Stuckless et al., 1989), although Interpreter Educational Programs do not train for specialized professions. It is recommended that the interpreter educational programs raise their standards and not graduate interpreters who do not have the skills to succeed (NIEC, 2016). Yet, regardless of the deaf student's grade level the interpreter shortage has continued to permeate into the post-secondary setting, (Jackman, 1999). With few certified interpreters for post-secondary d/D/hh students, many colleges do their own assessment (Sanderson et al., 2019). Colleges and other-post secondary institutions that receive any form of financial assistance or loans, for the institutions or for

students, are federal financial recipients pursuant to Section 504 of the Civil Rights Restoration Act of 1987. The receipt of that funding by any component of the institute, requires every program within the institution to comply with the civil rights requirements imposed by Civil Rights Restoration Act 1078, 29 U.S.C. & 794(b). For many sign language users, the only effective way to achieve effective communication is through the use of qualified sign language interpreters National Association of the Deaf (NAD, 2021).

#### **Summary**

ESSA, and related state and federal regulations, mandates mainstreaming public school classrooms for all disabled students including d/D/hh students (Linn et al., 2002). As of 2016, approximately 75,000 d/hh students were enrolled in mainstream education and required in- classroom interpreters (DOE, 2017). The general problem is a chronic and ongoing shortage of CEID personnel in public schools that is forecasted to persist through 2028 (Cogen & Cokely, 2015). The purpose of this qualitative case study was to identify factors that contribute to the difficulty in recruiting, and retaining CEID interpreters, as perceived by school administrators, teachers, and educational interpreters for the deaf. I employed triangulation using semi- structured interviews, questionnaires, and field notes to create a richly textured picture and achieve data saturation (see Savin-Baden & Major, 2013). The study sample included two school administrators, five teachers, and five education interpreters from a single school districtin the San Francisco Bay Area. Throughout history life has been tumultuous for deaf people as it

pertains to their social status and education. There have been vast improvements in this past century with progressthrough federal legislation. This advancement brought about a demand for those who couldinterpret the needs and wants for the deaf through sign language interpreters.

Chapter 1 has been an overview of the research problem and the purpose of this research study, the questions that were answered, the approach, methods, and theory used to answer them. Chapter 2 reviews the literature of importance to the study and the theoretical framework used.

# Chapter 2: Literature Review

#### Introduction

Chronic, long-term shortages of CEID for Grades K-12 public schools has reduced accessfor d/D/hh to the least restrictive environment, as mandated by ESSA (Cogen & Cokely, 2015; DOE, 2015).. The words "least restrictive environment" are words often used in special education and refer to the placement of a child, with a disability, in a classroom that will permit that child to have the most freedom to be a child. An educational interpreter for the deaf allows a child whois deaf or hard-of-hearing to have that freedom. Approximately 125,000 of the 50.7 million students attending public elementary and secondary schools in the United States. were legally blind or had significant hearing loss in 2015 (National Center for Education Statistics, 2017).

Eighty-six percent of school administrators reported it was *somewhat* difficult to very difficult torecruit and retain CEID and the shortage is forecasted to continue through 2028 (Cogen & Cokely, 2015). The ongoing shortage of interpreting personnel is compounded by the need for increasingly complex and specialized skills and knowledge (NIEC, 2015). Interpreting situations increasingly require signed languages other than English, and ASL, and sensitivity to cultural differences and special needs. The pool of available educational interpreters is impacted by stateefforts to establish licensure, and the trend toward specialization (NIEC, 2015). Educational interpreters are often misunderstood as to their job, duties, and responsibilities. The scope or boundaries of an educational interpreter

nor what the pressures to their job. The need to understand factors affecting the educational interpreter shortage is highlighted by research that found that the: linguistically competent educational interpreters were associated with improved academic and social outcomes for d/D/hh students (Cogen & Cokely, 2015). Providing full access to an increasingly diverse d/D/hh K-12 student population in a hearing-based classroom presents numerous challenges to CEID interpreters (NIEC, 2015). More and more d/D/hh students are attending public school education and CEIDs are finding that the classroom lighting, seating, lack of resources, social concerns, experiential shortages, language deficiencies, and teacher's assumption that all d/D/hh students can lip read or have residual hearing are just a few of the challenges they face daily (Deaf Interpreter Services, 2017). Accurate representation of all classroom communication is challenging in a classroom environment where communication is distributed among multiple speakers, and the information is relayed to d/D/hh in real-time to enable learning through interaction. Teachers' and students' communication contain a great deal of information about their beliefs, expectations, and understanding that is not conveyed in their language or vocabulary but rather in aspects of speaking, such as tone of voice and prosody (Baker, 2014). The confluence of a diverse array of linguistic, cultural, and situational needs will affect to role of CEID interpreters for many years to come (NIEC, 2015). CEIDs are cultural brokers every time they interpret by the need to understand what is being said and choosing the appropriate sign wording to prevent slights of insults.

The remainder of this chapter is divided into four sections. The first section describes the strategy employed to develop the literature review. The next section describes the JD-RM used to frame data collection and analysis in this study. The theoretical framework is related to educational research in general and educational interpreters in particular. The research synthesis section includes a review of the legislative and policy history effecting the d/D/hh in an educational context, then synthesizes research relevant to the educational interpreter shortage. Finally, I summarize the chapter and discuss initial conclusions regarding extant research on factors relating to the educational interpreter shortage.

# **Literature Search Strategy**

I queried the following scholarly research databases during the literature review search: Annals of the Deaf, EBSCOhost, ERIC, Google Scholar, JSTOR, Project Muse, ProQuest, and ResearchGate.net. I addition I searched multiple commercial and government websites for information relating to educational interpreters, including: the Center for Disease Control and Prevention, Clerc Center, NAD, National Education Association, NIEC, Registry of interpreters for the Deaf, State of California Special Education: Interpreters for the Deaf, DOE, University of California Center on Deafness, White House government website, and World Health Organization. The development of key words and search terms was an iterative process starting with an initial set of keywords and expanded to include combinations of the following words and phrases: educational interpreters, statistics, diversity, licensure, certification, classroom social environment, federal

and state law, educational administration, roles and responsibilities, role conflict, and shortage.

Content included in this literature review were from peer-reviewed journal articles, state and federal laws and regulations, books, conference proceedings, dissertations, and white papers. The majority of content cited in this literature review were published between 2010 and 2018, although some older foundational publications were included that detailed the background and history of educational policy and laws that affect the d/D/hh. Of the works that have been cited, approximately 50% were descriptive analyses, and the remaining 50% were quantitative or qualitative research. A significant portion of this literature review describes the laws and policies that created the mandate for educational interpreters which serves as important context for understanding how the educational interpreter shortage emerged.

#### **Theoretical Foundation**

#### Job Demands-Resources Model

The JD-RM is a model of strain resulting from an individual's attempt to balance the demands upon them against the resources they have available to meet those demands (Bakker &Demerouti, 2007). Job demands are primarily related to disengagement. According to a study byBakker et al. (2017), highly similar patterns were observed in each of three groups: human services, industry, and transport (total N=374). In addition, results confirmed the 2-factor structure (exhaustion and disengagement) of a new burnout assessment instrument - the

Oldenburg Burnout Inventory - and suggested that this structure is essentially invariant acrossoccupational groups (Bakker, et al, 2017).

The stress and burnout of the job demands of healthcare workers is a growing problem. The data of a 2018 study of Boston Health Workers was used to assess and evaluate the relationship of job, family demands, workplace flexibility, and burnout (N = 824) (Dagar, et, al 2021). The JD-RM was created to accommodate numerous variables occurring in the working environment as part of an analysis of an employee's stress and job burnout. The JD-RM relies on a simple balance of demands versus resources (Bakker et al., 2003). Demands can occur in a multitude of forms, including physical, psychological, organizational, and social. Essentially,

anything that places a sustained demand on the employee during the course of work is considered a job demand. Demands take a toll on a person both physically and psychologically over time. Interpreters for the deaf work on a 20-minute on and a 20-minute off schedule for anyinterpreting assignment over 1 hour. Interpreting in sign language is a mentally exhausting job. The Professional Standards Committee of the Registry of Interpreters for the Deaf (RID 2019) has written in the guidelines that team interpreting be assigned when 1 hour in length or involvesspecial needs children. Repetitive motion injury, carpal tunnel syndrome and tendinitis are high in occurrence, and the interpreter's ability to deliver the information decreases when interpreters work without periodic or no scheduled breaks. When an educational interpreter is needed to continue to interpret over an hour, but no interpreter is available, due to a shortage of

educationalinterpreters, that interpreter's ability to deliver the conversation diminishes.

An interpreter for the deaf is a member of the Deaf community. Educational interpreters have an added responsibility as deaf children, in mainstream classes, learn ASL through their interpreter. Educational interpreters also risk developing carpal tunnel syndrome by the over-use of their hands. (Berke, 2018; Fischer, 2019; Missy, 2017; Schewerle, 2000; Stedt, 1992). Job resources can be categorized the same as job demands: socially, organizationally, physically, or psychologically (Bakker et al., 2003). Unlike job demands, job resources serve the purpose of improving a person's physiological or psychological state. Job resources reduce the impact of jobdemands and the associated negative outcomes. Therefore, job resources are advantageous in the workplace, particularly when the workplace has significantly high job demands.

In actual practice, job demands and job resources interact with one another in the workplace to produce an overall impact to a person's physical and psychological health (Bakker et al., 2003). A physical toll occurs on the employee when the nature of the job, particularly repetitive portions of a job, drain physical energy and resources without appropriate support to prevent that drain. When physical tolls reach a peak, the employee becomes physically unable tocontinue with their work. However, this is not the only condition under which an employee failsto perform their duties. When physiological and psychological tolls drain a person's motivation, it leads to low work engagement and poor performance. A

disengaged employee ceases to perform up to expectations. This is seen in the workplace in the form of burnout, when psychological strain reaches such a point that the employee simply reaches a level of stress that they no longer engage with their work (Bakker et al., 2003).

Too prevent excessive physical toll and psychological strain, an employer can provide a number of resources that mitigate excessive strain (Bakker & Demerouti, 2007). These resourcescan boost physical health and psychological wellness. Resources vary depending on the job context. However, because job resources are generally anything that can boost the wellness of the employee, resources can include sufficient work-home life balance, the ability to grow in their careers, clear coaching from superiors, and a degree of independence on the job. Many of these resources help a person have greater mental wellness and motivates them to work more effectively. Also, the appropriate amount of rest allows employees the chance to recover physically from their job strain (Bakker & Demerouti, 2007).

## **JD-RM** in Education

The JD-RM has been applied in schools among teachers and identified several in-school factors that influence well-being (Simbula et al., 2012). A questionnaire was distributed among 439 Italian teachers at the secondary school level followed by data analysis to determine trends. The researchers found that there were different outcomes for teachers, who could themselves becategorized into different group. A variety of in-school resources helped to impact wellness,

ranging from administrative support to in-class resources. Teachers themselves could be clustered into groups based on the balance of demands versus resources. Resourceful individualshad high demands, but also high resources available. Although their demands would typically make the stressed, they effectively used the resources available to them to overcome difficulties. In contrast, the second group as categorized as stressed and were characterized by high demands and few resources. Finally, a third group, categorized as wealthy, had low demands but high levels of resources (Simbula et al., 2012). Stressed teachers were significantly different from their peers in other groups. They were the least engaged and were the least satisfied.

A stressed workforce should be of concern for school administrators, given the link between stress and burnout in schools (Liu & Onwuegbuzie, 2012).

Burnout is a syndrome defined by emotional exhaustion, which develops in response to the ongoing pressure of managing complex people-related interactions (Maslach, 1992). Specific to sign language interpreters, psychological job stress is positively associated with fatigue, injury, and burnout(Bower, 2013; Feuerstein et al., 1997; Heller et al., 1986; Schwenke et al., 2014). Within theinterpreting profession, burnout is linked to personal distress and early departure, or reduced hours working, in the profession (Bower, 2013; Dean & Pollard, 2001). Data drawn from a studyin China was collected by survey from 510 teachers with 40.4% of those who responded indicating that they would leave their profession

for another if given the opportunity. This number demonstrates how stress and burnout can affect the job and a percentage of workers.

This mixed approach survey included qualitative data that indicated one of the primary reasonsthese teachers wanted to leave was because of stress (Liu & Onwuegbuzie, 2012). The role of stress, burnout, and turnover was also uncovered in a quantitative study by Lee (2017), whose research of 613 teachers from across 47 states in the United States revealed that burnout was linked with turnover intentions (Lee, 2017). There were a number of negative results to stress among these individuals, but turnover has a significant negative impact for any organization, which is formed to invest in a new recruitment phase. The result found by both Lee (2017) and Liu and Onquegbuzie (2012) reflect on the negative role excessive stress can have in the academic environment and the burnout, and consequent turnover, it can create.

Application of the JD-RM in the school context also linked burnout with disruptive students (see Salmela-Aro & Vuori, 2015). The data was drawn from 806 French-Canadian teachers operating in both elementary and public schools and examined using a job demands- resources framework. The researchers also drew on self-determination theory to examine the relationship between teachers and both positive and negative outcomes of working in the school. When teachers were faced with negative student behavior, it was linked with a reduction in autonomous motivation. This reduction in autonomous motivation was itself linked to emotional exhaustion. These teachers felt less capable of acting autonomously within their work

environment and felt lower levels of self-efficacy, which predicted burnout (Fernet et al., 2012). Remembering that burnout is linked with turnover intention (Lee, 2017; Liu & Onwuegbuzie, 2012), negative behavior among students should be reduced where possible to reduce incidents of burnout, which can cause staff turnover.

In assessing the use of the JD-RM in the school environment, it can be seen that multiple factors impact stress and burnout (Fernet et al., 2012; Lee, 2017; Liu & Onwuegbuzie, 2012; Simbula et al., 2012). While research into the job demands and job resources of deaf interpreterswas not found in the literature, there were still school level predictors of burnout discovered while examining what predicted burnout among teachers. Staff generally required a healthy balance of demands and resources in order to be effective (Simbula et al., 2012). This was consistent with the original work of Bakker and Demerouti (2007), who noted that excessive demands without resources could create burnout. Further, burnout among school staff was linkedwith turnover intention, negatively impacting retainment (Lee, 2017; Liu & Onwuegbuzie, 2012). Among the factors negatively impacting teachers was the negative behavior of students (Salmela-Aro & Vuori, 2015). However, autonomous behavior was also linked with burnout.

Given the previous association of decision latitude with job satisfaction (Schwenke, 2012), theimportant role of autonomous behavior in the work environment should not be underestimated with regard to attracting and retaining school staff.

The JD-RM is flexible enough that it can be applied in multiple contexts, including different countries and industries (Huynh et al., 2014; Schaufeli, 2015). Although leadership wasnot found to have a direct connection with reducing burnout in the Dutch business workforce, it did have an indirect impact (Schaufeli, 2015). Leadership inspired and strengthened the workforce, which created an environment in which these workers were able to thrive. Leadership directly positively impacted organizational outcomes such as employee commitment to the organization and employee performance, suggesting that leadership acted as a form of resource on which employees were able to draw (Schaufeli, 2015). The JD-RM was also applied in a study of 887 emergency service workers in South Australia (Huynh et al., 2014). This research found that exhaustion mediated the relationship between job demands and both poor mental health and turnover intention. However, work engagement also acted as a mediator between job resources and both happiness and turnover intention. This study suggested the importance of mediators in the JD-RM and the impact they had on both negative and positive outcomes. The researchers concluded that job resources could improve work engagement and organizational connectedness, which reduced turnover intention (Huynh et al., 2014).

Another study of the JD-RM has found that job resources can improve positive outcomes a medical work context (see Zito et al., 2015). A study of 279 nurses was conducted using a questionnaire followed by statistical analysis and use of structural equations modeling. The researchers found that the availability of

job resources helped improve a smooth flow of work inhospitals, and that such a smooth flow itself contributed to reduced exhaustion while mitigating against other negative effects from job demands. These findings suggested that the model can be used to find variables that have a direct impact on reducing the effects of job demands as well as be used to determine mediating variables, similar to the findings of Huynh et al. (2014), who uncovered an important but indirect role for leadership in reducing the negative impact of jobdemands.

A study (Swarts, 2008) on *Burnout Among Interpreters for the Deaf;* examined the relationship of job burnout programs. There were strong positive correlations between: exhaustion burnout and autonomy, workload, role conflict, and professional efficacy. The JD- RM was designed to explain what creates and prevents burnout in employees, which is linked to whether an employee remains at an organization (Bakker & Demerouti, 2007). It was founded onthe basis that demands and resources interact to explain whether a person feels strained in the workplace or not (Bakker et al., 2003). As such, it is an appropriate tool for explaining why certain employees remain in an organization and why others decide to move on to new employment. In application, the JD-RM has been used to establish a connection between exhaustion and negative work outcomes, such as turnover intention (Huynh et al., 2014), but when positive resources are available, it can increase satisfaction in the workplace. These resources can include effective leadership (Schaufeli, 2015) and increased work engagement (Huynh et al., 2014).

## Job Demands/or Educational Interpreters

It is essential that educational interpreters have the time to prepare for communicating classroom content. Burnout has previously been explored in a study among sign language interpreters, revealing that many interpreters experience occupational strain manifesting in emotional exhaustion and depersonalization (Schwenke, 2012). This study was conducted among 17 sign language interpreters attending the 2009 Registry of Interpreters for the Deaf National Conference and conducted using a paper and pencil survey. The tool used in this instance was the Job Content Questionnaire, which was originally designed for psychosocial job assessments and was flexible enough to accommodate different work contexts. Burnout was assessed using the Maslach Burnout Inventory-Human Services Survey, a 22-item measure designed that also comes in a variant specifically targeting educators. The researchers found that interpreters experienced low to average levels of burnout, though those who did report emotional exhaustionand depersonalization negative outcomes were not correlated with the number of years worked or hours worked (Schwenke, 2012).

Logistic regression identified some predictors, workload and latitude in decision making of emotional exhaustion (Kowalski et al., 20I 0). Decision latitude or autonomy is the most important variable of complete activity. The complete activity is the extent to which one can make decisions and exercise control over their work (Kowal et. al. 2011). Warr (2007), drew attention to the possibility that job characteristics may be non-linearly associated with employeewell-being.

The belief that stress at work has a damaging effect on health is widely held by the general public and various constructs have been developed to explain how the worker and job environment interact to produce stress. The most widely cited of these models is the Karasek- Theorell job strain model, the two central components of which are high job demands (the need to work quickly and hard with hard meaning the amount of work they do) and low decision latitude (lack of control over skill use, time allocation and organizational decisions). (Warr, 1990). Decision latitude was also positively associated with personal accomplishment, suggesting that giving deaf interpreters greater work-related decision-making authority play an important role in generating a positive feeling of accomplishment.

# Legislative History Regarding Education for the Deaf and Hard of Hearing

In 1975, Public Law 94-142 (the Education for All Handicapped Children Act of 1975), which later became IDEA in 1990 placed primary responsibility of educating d/D/hh students, with necessary related services (IDEA Sec. 140 (22) in the hands ofK-12 local education agencies (LEA's). In 1989, the National Task Force on Educational Interpreting noted that "sincethe RID certification does not adequately address the requisite criteria of a qualified educational interpreter, the field would need to institute the certification itself (p23). Currently in the United States and its territories, almost 73,000 d/D/hh children between the ages of 6 and 21 are served under IDEA {Doe, b 2015}. Both the House of Representatives and

Senate versions of the reauthorization of IDEA in Section 504 of the Rehabilitation Act of 1973, recognized Educational Interpreting "as a related service."

A National Task Force on Educational Interpreting for the Deaf (Stuckless et al., 1989) was establish d in 1985. The Task Force was to examine and clarify roles and responsibilities, training and certification, working conditions, and other issues and needs concerning educational interpreters and their services to mainstreamed deaf children at all educational levels. The Task Force comprised seven national organizations, with support from the National Technical Institute for the Deaf (NTID). The organizations are as follows: American Society for Deaf Children, Alexander Graham Bell, Association for the Deaf, Convention of American Instructors of the Deaf, Conference of Educational Administrators Serving the Deaf, Conference of Interpreter Trainers, National Association of the Deaf, and RID.

#### **Educational Interpreters**

The need for interpreters for the deaf became apparent in the late 1 960's with the emergence of the postsecondary movement for deaf students into mainstream college settings. Itwas not until interpreters were needed for colleges that the true shortage of interpreters was noted. This was supported by Section 504 of the Rehabilitation Act of 1973. Quality classroom instruction provides no benefit at all if a student is unable to access that instruction. This is critical when a student is d/D/hh. For students who are d/D/hh and rely on sign language communication, access to instruction may require the use of an educational sign

language interpreter. The passage of PL. 94-142 was the essential in extending the need and demand for interpreting into the K-12 levels throughout the country. PL94-142 cannot work without the services of educational interpreters. The importance of the educational interpreter often receives little disclosure from teachers, administrators, school districts, and government officials.

Educational interpreting for the deaf has been an important development in the educational history of the deaf. For many d/D/hh student's educational interpreters offer a necessary service for assistance in communication and the ability to participate in a classroom. Educational interpreting has a relatively short history. In 1975, Public Law 94-142 (the Education for All handicapped Children Act), which later became IDEA of 1990, placed the primary responsibility of educating deaf and hard of hearing students, with necessary related services (IDEA Sec. 140 (22), in the hands of K-12 LEA's. In 1988, the Commission on Education of the Deaf report, Towards Equality, stated that there is a shortage of qualified interpreters. In 1989, the National Task Force on Educational Interpreting noted that since RID certification does not adequately address the requisite criteria of a qualified educational interpreter, the field would have to institute the certification itself." The 2001, No Child Left Behind Act (NCLB), brought new challenges to d/D/hh education. The law's stated purpose is toclose the achievement gaps that exist between schools with accountability, choice, and flexibilityso that no child is left behind in terms of education.

No Child Left Behind does not mention the use of an interpreter for the d/D/hh directly other than to say they must be "highly skilled" interpreters. In 2002, the State Board of Education of California (SBE) approved regulations that required educational interpreters to becertified by January 1, 2007. In 2008, SBE adopted revised regulations that allowed interpretersuntil July 1, 2009. On July 1, 2009, and thereafter the State of California State Board of Education Policy: California Code of Regulations, Title 5 (5 CCR) Section 3051, required that an educational interpreter shall be certified. In 2012, RID instituted the requirement of the possession of a bachelor's degree in order to take the certification test.

## **Educational Interpreter Shortage**

Recent data from the United States Bureau on Occupational Outlook (2016) indicates thatthe demand for educational interpreters for the deaf is growing. Employment of interpreters and translators is projected to grow 18% from 2016 to 2026, much faster than the average for all occupations. In the United States, since the first federal law that mandated access to local community schools, many d/D/hh students have moved from center-based and residential educational programs (Jones et al., 1997). These changes have occurred in other countries such as the United Kingdom (Powers, 2003), Australia (Power & Hyde, 2002), and Spain (Fernandezet al., 2004). The services of an educational interpreter are required for many of these students. The educational interpreter is one aspect of providing access to all teacher and peer communication. The key to a deaf/hard-of-hearing child's academic success in mainstream education is not the quality of teaching, but

the educational interpreter who communicates the material being taught (Burke, 2012).

Educational interpreters play such an important role in mainstreamed d/D/hh children's education, yet the conditions that they are largely forced to endure are often unacceptable (Burke, 2012:). With the help of library personnel at Walden University, it was found that there is little current literature written on educational interpreters. What was found is represented in this dissertation. For a long time, educational interpreters have been shortchanged by the education system. They have received poor pay and uncertain status (Kluwin, 1992). The majority of studies or written work is done on the education of the deaf and very little is found on educational interpreters for the deaf. Exhaustive research was done to find new studies on the conditions of CEID and what was found is cited within this study. Due to these conditions acrossthe nation, there is a shortage of trained professional educational interpreters who can interpret for individuals who are d/D/hh (Askar, 2013). Driving the national demand for interpreters is their crease in laws requiring the four- year degree, licensing, and certification and the working conditions. The United States Bureau of Labor Statistics reported (2010), that the need for educational interpreters and translators is expected to grow 42% between 2010 and 2020. This is a faster than average rate compared to other occupations.

There is a grave misunderstanding as to what is ASL. There is a common misconception in the North American Hearing Community that ASL

is a derivative of English, and therefore nota language by itself. ASL is not English. ASL originated independently of English linguistic influence and is in fact its own language with its own set of rules (Belt, 2013). It is a unique visual language with its own syntax, grammar, and rules. Learning ASL and obtaining fluency requires years of practice and interaction with community members. It requires an in-depth knowledge of the cultures of the hearing world, the Deaf/Hard of Hearing world, and two completely different languages (Russell, 2012).

Providing full access to a hearing classroom is very complex (Marschark et al., 2005; Schick, 2004). Classrooms are complex social environment, involving discourse styles that are unique to K-12 education. Accurate representation of all classroom communication is extremely challenging, as it is typically distributed among multiple speakers, and an understanding of the content requires an educational interpreter to deliver the correct information, enabling the studentto integrate what many individuals say, not just the teacher (Schick et al., 2005). If a person can sign, it does not mean that they can interpret. The requirements to become an interpreter are becoming harder along with the cost of testing to become certified, makes the supply of certified interpreters available for hire scarce. The salary that most school districts offer is generally far below what an interpreter can make freelancing or through an agency.

The recruitment of educational interpreters has been studied in multiple contexts (Amrein-Beardsley, 2012; Evans & Leonard, 2013; Egalite et al., 2014). A study of recruiting expert teachers into schools that were in particular need of such teachers revealed multiple variables impacted the decision to join that school (Amrein-Beardsley, 2012). These expert teachers anticipated that the administration for the school would be of high quality, and in particular, that the principal would be of high quality and skilled in managing school issues. This pointed to the need for teachers to have a quality working environment and to be well paid, had expectations of bonuses for high performance, and anticipated receiving an adequate benefits package. These teachers also wanted to be able to make decisions in allowing them to take on multiple roles, which they believed could enhance learning in the classroom (Amrein-Beardsley, 2012).

The desire for effective leadership was shared by public school teachers who expressed concern regarding their principals (O'Keefe, 2013). These teachers were more likely than their peers in private schools to agree that their principals exhibited a number of positive attributes. These attributes included (a) properly communicating their expectations to the staff, supportingand encouraging staff members, including recognizing them for good performance, and (b) discussing instructional practices with the staff (O'Keefe, 2013). This placed private schools at acompetitive advantage for recruitment and retainment given the perceived superior performance of the principals operating there. Recruitment and retainment may, therefore, require improving the quality of the administration first. The need

for good leadership was emphasized by Lynch (2012) in a study of teacher retainment. This study found that a supportive administration was critical in retaining teachers after hiring. In some cases, teachers felt bullied by members of theadministration, and in other cases felt their efforts went unrecognized. This correlated with an increased desire to leave the workplace. As such, administrator behavior may play a significantrole in the recruitment and retainment of educators.

A separate study of black teachers in urban schools revealed that these teachers were wary of swift transition into the classroom (Evans & Leonard, 2013). This study indicated whatcould push teachers away instead of attracting them to a school. These teachers had participated in high quality programs that prepared them for the classroom experience, particularly in the urban environment, but still felt concerned that a quick shift into the classroom would have negative outcomes (Evans & Leonard, 2013). Consequently, it may be that staff requires a slower transition into a school, particularly when entering the school environment for the first time. This indicated a need to provide support and a more gradual shift into the classroom environment and providing this support would be more likely in recruitment and retention of teachers in table school.

The Learning Policy Institute's policy brief on loan forgiveness indicated that these programs were effective in recruiting teachers when the program meaningfully offset the financial investment required to become a teacher (Podolsky & Kini, 2016). These programs held the potential for being

most effective when they (a) covered most or all of an individual's tuition, (b) arose from high need schools, (c) recruited strong candidates with a commitment toteaching, (d) included financial consequences for not fulfilling their commitments, and (e) were easily managed with minimal bureaucracy (Podolsky & Kini, 2016). This indicated the importance of financial incentives in recruiting staff. Such a finding was consistent with theresearch of Amrein-Beardsley (2012), who noted that teachers being recruited into a schoolexpected good compensation and benefits for their work.

A review of the literature did not reveal how schools recruit and retain interpreters for thedeaf, but there are multiple studies regarding the recruitment of teachers and what motivates them to stay in a school (Amrein-Beardsley, 2012; Evans & Leonard, 2013; O'Keefe, 2013; Egalite et al., 2014; Podolsky & Kini, 2016). Although there were multiple variables mentioned, two of the variables that emerged from the literature was the importance of financial support (Amrein-Beardsley, 2012; Podolsky & Kini, 2016), as well as the importance of a quality administration (Lynch, 2012; O'Keefe, 2013). These factors were attractive in recruiting educators and are important variables in motivating them to remain employed in a school.

#### **Summary and Conclusion**

CEIDs are an important component of delivering quality education to deaf individuals and have had the primary duty of handling education for the deaf since the passing of the IDEA of 1990. The requirements on these individuals only

act (2001). Educational interpretation is a specialization in the larger field of interpreting (Council of Credentialing Organizations in Professional Psychology, 2008), and the demand for these instructors has only grown since the 1990s (Jones et al., 1997). The JD-RM can help attract and retain CEIDs which posits that different variables contribute to both positive and negative outcomes in the workplace (Bakker & Demerouti, 2007). Generally, for interpreters, burnout occurs in those with little decision latitude (Schwenke, 2012). The lack of decision latitude for educational interpreters in the school environment can also cause burnout. Though no direct literature was found on interpreters in schools with regard to recruitment and retention, teachers often desire good compensation (Amrein-Beardsley, 2012) and effective leadership (Lynch, 2012). As in other professions, stress and burnout can increase the turnover intentions of individuals working in schools (Lee, 2017).

In Chapter 2, I examined the importance of CEID's in the education of deaf children, therequirements to become a CEID, recruitment of personnel in other professions that have experienced shortages, and some of the various reasons that may account for the shortages. In Chapter 3, I will present a research method for a qualitative case study that will try to identify factors that are influencing the CEID shortage.

#### Chapter 3: Research Method

#### Introduction

The purpose of this qualitative case study was to identify factors that contribute to the difficulty in recruiting, and retaining CEID interpreters, as perceived by school administrators, teachers, and. educational interpreters for the deaf. The study aim was to advance knowledge on factors that contribute to the CEID shortage by collecting data from school administrators, teachers, and. CEIDs from a school district with a d/D/hh program located in the San Francisco Bay Area. Study findings are expected to provide a first step toward developing interventions to address the CEID shortage advancing knowledge on factors that contribute to the shortage (see Guthmann, 2011). In Chapter 3 discusses the research method, interview protocol, study data collection and analysis plan, and issues of trustworthiness in qualitative research designs.

#### **Research Design Rationale**

The study involved a qualitative case study research design (see Savin-Baden & Major, 2013). I used semi-structured interviews, and journaling to collect data and understand the participant's perspective from their point of view. In-depth interviews can be defined as a qualitative research technique, which involves "conducting intensive individual interviews with asmall of number of respondents to explore their perspectives on a particular idea, program, or situation." (Boyce & Neale, 2006, p. 3). I chose a qualitative case study because a qualitative research approach was

consistent with identifying factors that contribute to the CEID interpreter shortage, which is a complex and multifaceted phenomenon (see Savin-Baden & Major, 2013).

As the study participants were both hearing and deaf, it was designed to elicit the most information possible from these questions.

RQ1: What factors contribute to the shortage in CEID interpreters?

RQ2: What barriers exist to educate, identify, recruit, and retain CEID interpreters?

RQ3: What programs and practices are available to address factors that contribute to the shortage in CEID interpreters?

#### Role of the Researcher

In qualitative studies, the researcher is the instrument of data collection, which means that data are mediated through a subjective human being, rather than objective survey instrument inventories, questionnaires, or machines (Denzin & Lincoln, 2003). To fulfill the role as data collectors, researchers must know themselves, including their biases, assumptions, expectations, and experiences to qualify their ability to conduct qualitative research (Greenbank, 2003).

Maintaining a journal of reflections and insights regarding their own thoughts and perceptions issueful for qualitative researcher's to identify potential biases. The qualitative researcher must explain if their role is emic, as an insider, who is a full participant in activity, program, or phenomenon, or if their role is more etic, from an outside, an objective viewer (Savin-Baden & Major, 2013). I have worked as an

instructional counselor at the California School for the Deaf, as an educational interpreter for the d/D/hh and as a contract negotiator for school districts and for state schools. In my job as an interpreter and a contract negotiator, I had met some of the participants in a professional capacity previously. Interpreters for the deaf are considered a part of the Deaf community. This study was not about the relationship of interpreters for the deaf within the Deaf community or about interpreter's relations to each other, as this was not an ethnography study. I am currently a teacher and counselor: and have my own business that hiresinterpreters for the deaf. I have been a coordinator for the R.I.D. and Educational Interpreter Performance Assessment certification testing. Based on my experience as an educational interpreter, I am an insider for the purposes of this study. This study does not explore the relationship between me and other CEID's or their relationship to interpreters to the deaf community.

I ensured that each participant understood the benefits as well as the possible risks andlets them know that that they were free to make any comment or decision without fear of reprisal. The areas that were discussed are:

- protection of participant through the informed consent process,
- honest as to who the researcher is and the reason for the interview,
- have clear procedures for all notes, journals, transcripts, and videos that do notcontain personal identifying information,
- keep raw and processed data locked with required password protection

- wherenecessary, and
- share information with those on the study team and ensure that any biases/authority orprevious relationships are accounted for or noted and included in the interview or evaluation (Savin-Baden & Major, 2013).

## Methodology

## **Participant Selection Logic**

The study population was CEID, for the almost 73,000 deaf and hard of hearing children between the ages of 6 and 21 in the United States. covered by the IDEA, (Doe, 2017b). The National Task Force on Educational Interpreting for the Deaf of 1989, was to examine and clarify roles and responsibilities, training and certification, working conditions, and other issuesand needs concerning educational interpreters and their services to mainstreamed deaf children within their jurisdiction who are-in-need of special education and related services.

Institutions that receive IDEA funds are required to identify, locate, and evaluate all children within their jurisdiction who are-in-need of special education and related services. Educational interpreting is a specialty requiring additional knowledge and skill that are specific to educating d/D/hh students. This study used only participants who have a direct bearing or contact with certified educational interpreters and the job they perform, including school administrators, teachers, and certified educational interpreters. The study had a total of 12 participants. 12 is the

number of participants needed to achieve saturation (Lasch et al., 2010; Onwuegbuzie et al., 2010).

I scheduled interviews to ensure that the dates and times were acceptable with participants and for me. Upon meeting with the participant, I explained the reason for the study and their participation. Using interviews as the unit of analysis I found useful information that school districts could use in assessing the role and duties of CEID, including their level of pay, and to permit the comparison of the requirements of becoming an educational interpreter to other elated services or autonomous professions.

#### Instrumentation

A semi questions allowing for a flexible and interactive approach to data collection. Qualitative methods look for indicators of success or improvement through experiences and thereplies of the participants (Tenny, Brannan, Brannan; Shark-Hopko, 2020), while effective, questions are questions that are powerful and thought provoking. Effective questions are open-ended and not leading questions. They are not "why" questions, but rather "what" or "how" questions (Leonard, 2013).

#### Procedures for Recruitment, Participation, and Data Collection

I employed a purposive sampling technique to identify and recruit study participants. I recruited 12 participants who are stakeholders in the education of the deaf from the population of school administrators, teachers, and CEIDs from one school district. The study sample comprised two school administrators, five teachers,

and five educational interpreters. The education of deaf children includes people who make up their Individual Educational Program (IEP) Team. Each plays an important role. The participants in the sample also have an influence upon the job the CEIDs are expected to perform. Data collection was accomplished through semi-Sharls-Hopko structured interviews lasting 30 to 45 minutes. Where the interviews took place had to be changed due to Covid-19. The interviews were done on the phone, through Zoom, or via video phone and through questionnaires. A signed informed consent form was necessary before any data collection could occur with a participant. I prepared a sample set of brief and concise questions and a guide to use while conducting the interviews (Appendix A). Inaddition, I maintained a journal to keep track of my own feelings shortly after each interview (see Morrow & Smith, 2000). Bracketing and journaling are reflective techniques that enhance the rigor of qualitative inquiry, as the investigator is able to record their reactions, assumptions, expectations, and biases about the research process.

## **Data Analysis Plan**

Interviews and field notes that were recorded were transcribed, by me, each day (see Savin-Baden & Major, 2013). I used content analysis to identify patterns and themes (see Patton, 2002). I noted relevant wording, phrases, and sentences. I accomplished coding of all data using an iterative process, in which categories were created, content labeled and as data accumulated, headings and subheading changed to reflect the underlying content (see Savin-Baden & Major, 2013). I developed a

hierarchy of categories. Coding is the process of organizing and sorting thedata.

Coding was done by assigning a word, phrase, or symbol to each coding category. I coded any ideas, concepts, or themes that I saw when going through the interview transcripts and notes, to fit the categories. Coding involves the following questions:

- What is this saying? What does it represent?
- What is this an example of?
- What do I see is going on here?
- What kind of events are at issue?
- What is trying to be conveyed?

The word, symbol, or number that I gave to answering these questions was the code. As the coding was being done, if there were any reactions or ideas that arose, I took notes and added them into the interpretation. Codes came together and showed larger themes. I compared participants' views to show the complexity and contradictions of the analysis (see Patton, 2002).

#### **Issues of Trustworthiness**

Issues of trustworthiness in qualitative studies, involve confirmability, credibility, dependability, and transferability and are analogous to validity and reliability in quantitativeresearch, bull are established using different procedures (Savin-Baden & Major, 2013). Qualitative data collection and analysis rely on the researcher as the primary data collection tool and are subject to researcher bias. Procedures available to qualitative researchers include bracketing, journaling, and triangulation. I

conducted interviews with a variety of stakeholders in the same district with varying perceptions of the education research, me and its function.

Persistent observation was also consistent with the use of semi-structured interviews and observation of teacher participants that provide opportunities to either ask the same question in different ways to establish the reliability of the answers, or to ask open-ended questions to revealitems not directly involved in the interview protocol. Journaling enables the researcher to identify and record their own thoughts and feelings while conducting data collection and analysis(Morrow & Smith, 2000). The bracketing and journaling techniques add reflective rigor to qualitative inquiry as the investigator are able to record their reactions, assumptions, expectations, and consider biases about each.

#### **Ethical Procedures**

Any documents gathered for this study, only include those that pertained to the educationand certification of educational interpreters, a sampling of school district job specifications, journal notes, and Informed Consent Forms. Any document that had identifiable information of participants had duplicates made of them and that information removed from the document. Data collection occurred after approval from the Walden University Institutional Review Board. In addition, participants were required to sign an Informed Consent Form that states the purpose of the study, ensures confidentiality, and states that no remuneration was available for participation. The researcher informed participants each can withdraw from the study

at any time without consequence. Data will be stored for a period of 5 years in a locked drawer in the researcher's office and then destroyed along with any notes or other data files. All participants were treated inaccordance with the ethical guidelines of the American Psychological Association (APA) and Walden University

Institutional Review Board (IRB) (approval number 2020.05.2919:24:50-50'00'). In addition, participants were required to sign an informed consent form that states the purpose of the study, ensures confidentiality, and states that no renumeration was available for participation. I informed participants that each could withdraw from the study at any time without consequence. Data will be stored for a period of 5 years in a locked drawer in my office and then destroyed along with any notes or other data files. All participants were treated in accordance with the ethical guidelines of the American Psychological Association and Walden University Institutional Review Board.

#### Summary

The purpose of this qualitative case study was to identify factors that contribute to the difficulty in recruiting, and retaining CEID interpreters, as perceived by school administrators, teachers, and educational interpreters for the deaf. A purposive sample of two school administrators, five teachers, and five educational interpreters composed a total sample size of 12. I recruited participants from one school districts collected data using 30-to-45 minute semi structured interviews and journaling. I conducted data analysis using content analysis and triangulation.

Chapter 4 describes in detail the research findings, the data analyses, and the procedural application of the research methods. Chapter 5 followed with a discussion of the findings and expand on their importance, meaning, and significance.

#### Chapter 4: Results

#### Introduction

The findings in this chapter emerged from the in-depth interviews with five CEID, five teachers, and two administrators in a Special Education Department mainstreamed program in a school district. In-depth interviews are a qualitative research technique, involving "conducting intensive individual interviews with a small number of respondents to explore their perspective on a particular idea, program or situation" (Boyce & Neale, 2006, p. 3). The analysis of the interviews (translations from sign language) and the three research questions are presented in the data description. The chapter concludes with a summary of the findings.

Interviews with the participants were the basis for the findings. The study findings represent the first step towards developing interventions to address the CEID shortage and advancing knowledge on factors that contribute to the shortage (Guthmann, 2011). The data from the interviews (translations) bridge all the three research questions,

- RQ 1. Which factors contribute to the shortage of CEID interpreters?

  RQ 2. What are the barriers to educating, identifying, recruiting, and retaining CEIDinterpreters?
- RQ 3. Which programs and practices are available to address factors contributing to the shortage of CEID interpreters?

The research design of the JD-RM was appropriate based on the physical, psychological, social, and organizational expectations that meet the cognitive and/or

emotional effort of the jobrequirements, due to the complexity of the research questions and the importance of participants' perceptions. Chapter 5 focuses on a discussion of the relationship of the findings to the researchquestions.

After the participants signed the consent form indicating their voluntary participation, I initiated the interviews/questionnaires. These were originally intended to be face-to-face, but were altered to phone, Zoom, video phone, and questionnaires mode, due to the coronavirus. The signed consent forms were placed in a separate manila envelope along with the completed questionnaires and the translations from the interviews, to ensure anonymity. (This was after recruitment to ensure that the identity is kept confidential).

#### **Descriptive Results**

## **School Climate and Collectivity**

A total of 15 interviews and questionnaires were completed. The first 12 participants to meet the needs of saturation for this research were used for data analysis. Descriptive comments from participants as to the setting of the school were restricted. Several subthemes emerged andwere placed under the more liberal themes.

To clarify the term 'climate' as used in this study, I used Brookover et al's. (1982) definition that stated school climate refers to feeling, tone, and the affective dimension of the school environment. The Cambridge Dictionary (2020) defines collectivity as the experience or feeling of sharing responsibilities, experiences, activities, and so forth.

Although the CEID interpreters are an important part of this environment as well, they are willing to work together, with or without the understanding of what their job entails. This is due to their dedication to ensuring that the d/D/h students have as much access to education inmainstream classrooms as can be offered.

## Interpreting: What is the job of a Certified Educational Interpreter for the Deaf?

Most of the teachers believe that CEID's are there fundamentally to assist them, to provide a direct interpretation of what they are saying and to aide and assist in the connectionbetween the teacher and the deaf student. In presenting the results in a narrative form, I usedpseudonyms to maintain anonymity and to allow the participants to speak for themselves.

Dolores (teacher) said, "The interpreter should understand the rudiments of the subject, to interpret in anyclass, meeting, or specific situation, and should be able to present a literate style of interpretation that will follow the teacher's style."

Willa (teacher): stated.

CEIDs need to interpret what the teacher and the hearing students are saying and to support students in the class to achieve success. It can be awkward in the beginning, when a sign language interpreter is present in the class. Although deafchildren have the right to an education, there is a thought that the students are unprepared for the change from being in a self-contained class where all the students are deaf, to mainstream classrooms.

The administrators' thoughts of the job were based on perceptions about the requirements for an interpreter for the deaf:

Paul (administrator): said:

I know that the interpreters interpret what is said in class by the teacher, to the deaf student, but not much more than that. They are to take the spoken languageand put it into ASL and to take ASL and translate it, so that the hearing peoplein the class will understand".

*Leilq* (administrator): stated,

"When I am told that a teacher needs an interpreter or a deaf student needs an interpreter for a class, I do not think past their ability to interpret".

Zuri (teacher):

The interpreters are to help in the classroom by interpreting what the teacher says, to help the deaf or hard-of-hearing student, if they are having a problem. Interpreters are to be in the class, or in a meeting. I just learned that the CEID is tobe in the Individual Educational Program meeting as a member of the meeting and not as the interpreter".

Danniele (interpreter): stated, "Teachers do not know exactly what we are there to do. I have often been asked to do things that are not my job. Those jobs are meant for the teacher aides."

Knowing what the job of an educational interpreter entails can help with understanding the educational interpreters. Schick, with a grant from the DOE Office of Special Education, developed the Educational Interpreters Performance

Assessment (1999) at the Diagnostic Center Boys Town National Research Hospital. Interpreting requires years of specialized training, involves a great deal of knowledge, decision making, and includes standards for performance established by the field (Schick, 1999). CEIDs must acquire a B.A. and undergo training in several topics. These topics include child (student) development, cognitive development, language development, education, interpreting, linguistics, medical aspects of deafness, sign systems, tutoring, guidelines for professional conduct, deaf culture, literacy, roles and responsibilities, and technology. In addition, they need 6 months of experience to take the certification exam. The exam consists of a 3-4 hour written test of content knowledge standards and a 2-hour performance test. The interpreter must achieve a rating level of 4 out of 5 to become a CEID. The Educational Interpreter Performance Assessment (EIPA) is a tool designed to evaluate the voice-to-sign interpreting skills of interpreters who work in the elementary and secondary classroom setting. A certified educational interpreter for the deaf does more than just relay infomlation from the teacher to the student and vice versa. The interpreter must be prepared to wear several different hats, including those of facilitator, advocate, IEP team member, and tutor. (Schick, 1999). Preparing for interpreting is essential to being able to communicate the classroom content and vocabulary. Time is needed to preview information, vocabulary, learn new signs, and understand concepts that will be taught and how the teacher plans to teach them (EIPA, 2017; NAIE, 2019).

Gwen (interpreter):

"The primary responsibility of a CEID is to facilitate communication using signlanguage and voice for the d/hh, their peers, the classroom teacher, meetings, assemblies, other personnel, and any event or situation where what is being said or happening around them needs to be expressed. The interpreter is an advocate for the student, apart from making sure accommodations of the I.E.P are being followed".

*Nita* (interpreter):

"An interpreter must understand the subject matter of discourse, so they can accurately translate what is being spoken. Interpreters assist students to meet instructional demands of the classroom, attend IEPs as a member, not an interpreter. We provide language to d/D/hh students and teach the subjects that students are struggling with. We go into classrooms ready to explain what we do not."

The role of the educational interpreter is further explained by Schick (2007), with regard to the education of prospective educational interpreters. Schick stated that interpreting is not accessing a mental dictionary. It is not a word-for-word process. The interpreter needs to know the child's language skills both expressively and receptively, the child's cognitive potential, and the educational goals as outlined in the child's IEP. Sign systems designed to represent English were developed by educators and are not naturally developed languages. They are generally not used by the deaf community. Deaf and hard of hearing children are often in the process of

learning language in school, while they are learning new concepts; however, children who can hear use their language to learn new concepts. This means that an interpreter may need to include an explanation of the concepts; however, children who can hear use their language to learn new concepts. This means that an interpreter may need to include an explanation of the concepts.

Emma(interpreter) said, "Interpreters are not here there just for the student or the teacher. They are therefor the whole class."

#### Professionalism: Are CE/Ds Professionals?

CEIDs complain that they are not taken seriously or perceived as professionals.

Gwen (interpreter) said:

"We are such a small department, and the number of interpreters is even smaller, that I do not think the teachers or administrators even think about the controversy of the position we work in, in the district. Why are CEIDs placed under the paraprofessional title? It is a constant struggle to educate people about what we do nd who we are. As far as being seen as professionals, I think it is very clear that we are not".

Rica (interpreter):

"We are not being respected, not taken seriously, and are not being seen as professionals. Sometimes I feel like we just get grouped as "classified", which does not make me feel being thought of as a professional. I know that if an interpreter comes from an agency, they get more respect and are treated as

professionals. Often these interpreters are not even qualified. Some are not certified and do not have the training we have. It is insulting".

Rod (teacher):

"I think some of the interpreters are seen as professionals. I do not know why all are not. I see them as professionals, but even I have asked them to copy papers for me, not realizing that I asked them to do something that they do not do. The interpreter explainedthat interpreters do not do that. I could see that she was frustrated".

Bergi: (administrator):

"As an administrator, I do not have day-to-day contact with the interpreters; so, I do not know whether the teachers or principal treat them as professionals or with respect. Maybe I should know this. I hope they are. It is not something I ever really thought about. I know the district needs interpreters for the deaf. I know that they are to be certified and there is a person in the district who is supposed toknow about this. That is all I know".

Is interpreting an interesting job? All participants agreed that interpreting appeared to be or is an interesting job. For the question of being taken seriously in the job, the answers were different. The CEIDs do not believe they are. The teachers had a difficult time understanding the context of the question.

Gwen (interpreter):

"Are we seen as a professional, again the district does not see us that way.

There is no profession that is a step above us. There are signing aides and

interpreters, there are teachers' aides and teachers, and there are paralegals and lawyers. However, teachers and lawyers are professionals and CEIDs are not. Individuals with Disabilities Education Act (I.D.E.A) lists interpreters under related services, similar to speech therapists. Yet, speech therapists are classified as professionals".

### Dolores (teacher):

"I take them very seriously. I believe they know a lot about the deaf and can teach us some things. It is hard sometimes to talk to them about teaching. For some reason, I often find myself thinking that they could not possibly know. I guess there is some ambivalence. There are teachers who believe that interpreters do notknow anything about teaching, IEPs or any parts of educating students and that they only know how to interpret what the teacher is saying. I guess this is where the lack of respect or not being taken seriously comes in. It is something to think about".

Leila (administrator): stated, "I think some of the interpreters are seen as professionals, but not all the time. Ialso think they are misunderstood."

#### **Contact: Are CEIDs Disconnected?**

When people lack communication with others within their profession, they can feel unplugged or disconnected from the workplace and eventually suffer in terms of mental health, (Graham, 2020). In responding to the amount of contact any of the participants had with CEIDs, Rod stated, "As a teacher who utilizes CEIDs in his classroom: I am usually in daily contact."

Administrators are in contact very rarely or not at all. Depending on the number of interpreters at the school, there would be no contact at all, or some minor contact daily. As there is a shortage of CEIDs, educational interpreters are often the only ones on the campus. The district may have agency interpreters, but they do not always have certification or the same training. In the trainingmodel of an educational interpreter, it is taught that they are a legally defined member of the IEPteam, obligated to facilitate education.

Emma (interpreter): said, "Interpreters should have meetings. Too often, interpreters are alone and need tohave the contact. It helps with feedback on signs, information, and training. Things change so much, and it is good to have open lines of communication."

Dolores (teacher):

"I believe the interpreters should and need to have meetings. It is no different from teachers or administrators having meetings. Meetings help to disperse information or sources of knowledge acquisition. We all need to have contact with our peers. Possibly, if there were meetings that included the interpreters, misunderstandings could be eliminated".

#### Preparation, Professional Development, In-Service

To maintain their level of skill or professional development, interpreters must attend webinars, trainings, workshops, and/or updates. Signs can change or new ones be added. Mostschools offer in-service training and workshops.

#### *Bergi* (administrator):

"I want it to be known that in-service training is generally done district-wide for all staff. Various sessions are offered for the different departments. Workshops are usually off campus and by job title. I know that money is allocated to the d/D/hh department for training and workshops. It should include interpreters as well as teachers. Since I do not do the individual planning for the different departments, I do not know if they are getting what is needed. There areothers who are to do that".

All the CEIDs responded alike when asked about in-service training: that there is no in-service training offered to them in their field of work on or off campus, which all of them experienced in their job as a group.

Gwen (interpreter) also noted that she knows the district has in-service trainings, but never specifically for interpreters or anything that has to do with the deaf or helping interpreters keep up withchanges. Nita (Interpreter) said, "The: only training I have received was for CPR. The district did offer us a training inlifting and toileting, but that is not what we do."

Resources exist to improve interpretation skills. All interpreters should have a professional development plan. Interpreters need the support of professional peers and mentors develop skills. CEUs are required every three years to maintain certification. Interpreters should be aware of maintenance requirements in terms of certification and standards (Schick, 2007).

There are factors that influence message equivalency, such as the interpreter's languageability and content knowledge, the speaker's rate of delivery, discourse organization, communication intent, register, etc. (Schick, 2007). Preparation prior to class is imperative.

Interpreters need time to plan for future lessons, read textbook assignments, research and learnnew vocabulary. It is also necessary for interpreters to discuss with the teacher the logistics of the environment prior to the beginning of class: where the students will sit, where the teacher usually stands and where the interpreter will be.

### Satisfied: Is, there Satisfaction in the Job?

To address the question of CEID's being satisfied with their jobs, for the most part, almost everyone stated that they believed the interpreters were satisfied with their job.

Leila (administrator):

"The staff interpreters seem to be satisfied. They can come and enjoy events that are on campus. We have found that agency interpreters may seem intimidated at times due to the acronyms that we use. There are times I am sure that they do not like the job, because they are asked to do more than their job, because of the environment they are in at a specific time, or the respect".

*Emma* (interpreter) stated, "Interpreting can be very interesting and satisfying. It can also be frustrating, tiring, and boring. Sometimes it depends on the

teacher. Maybe what the teacheris saying or the way they are saying it is boring, we will try having to also interpret it".

Rod (teacher):

"I think it is satisfying. I am a teacher and I sign. I like being able to get information over to the students who cannot hear me. It gives me that extra boost. I would guess that interpreters get that same feeling at times and are satisfied withit. I think they take satisfaction in knowing they did a good job". Willa(teacher):

"I think the interpreters are satisfied. I think they see their job as important and derive the satisfaction of having made the student understand the material. Even though the teacher is giving the information to be interpreted, it is the interpreter that gets it across to the student. That gives satisfaction. Interpreters also get the chance to move from class to class, coming across different teachers and different students in the class".

### Health: Does an Interpreter's Health Influence Their Performance?

Interpreting can be taxing physically and mentally. As interpreting is a physical and mental profession, burnout, or carpal tunnel syndrome or tendinitis can occur. When interpretingexceeds an hour, there needs to be two interpreters to enable them to take turns. An interpreter's ability to deliver the message begins to diminish after 50 minutes. The more an interpreter understands the concepts of the message, the better would the interpreted product be. Asking theteachers and administrators about interpreter burnout or the physical dangers of interpreting surprised them. The idea

had not occurred to them at all; however, several teachers commented that they assumed interpreter burnout was the same as a teacher having a burnout. They did not know about other health problems or how mentally taxing signing could be.

When the question was put to the CEIDs, they were not surprised, and all were well aware of burnout and the health hazards they had to beware of. Dannielle (interpreter) made it clear that the hazards faced by interpreters is a very important reason to have two interpreters, when interpreting exceeds an hour.

#### **Mainstream Versus Self-Contained Classroom**

When the topic of interpreting in a mainstream classroom being easier than in a self-contained classroom was presented, not surprisingly, the answer differed with the type of position the participant held in the district.

Bergi, (administrator):

"Interpreting in a self-contained classroom calls for different abilities and in a mainstream classroom the interpreter is responsible only for their assigned student. I would think that having more deaf students in a self-contained class would make the job harder. More people are signing, and the interpreter has to interpret or understand all the students with different abilities and signing capabilities; so, it must be harder".

Danniele (Interpreter):

"I have worked in both situations, and it is far easier to work in a selfcontained classroom. There are fewer students and more adults. Generally, the teacher is notteaching to the classroom as a whole; or if he/she is, the other adults in the class are helping those who need extra help. Added to that, everyone signs and hence interpreting can be less. Very often, the students work more independently. When interpreting in a mainstream classroom, I am there for the entire class. I interpret for the teacher and make sure the student understands the concepts of what is being taught; further, I interpret for every student in the class, apart from translating for the deaf student. If there are other adults in the class, they do not sign".

# Individual Educational Programs: What is a Certified Educational Interpreter for the Dears Responsibility?

All students in a special education program have an IEP formulated for them. Interpretersplay a vital role as a member of the IEP team, that of providing consultation regarding strategies to promote student independence, encourage direct communication across various interactions and interpret content and non-content areas. The interpreter is also responsible for promoting student participation in classroom discussions and activities, addressing discipline problems and procedures and concerns related to a student's needs, and educating others regarding the implications of hearing loss (Schick, 1999; classroom interpreting, 2007). The question of interpreters being included and treated as valued members of an IEP team elicited quick comments.

Nita (interpreter):

"No, I do not believe that those in charge of setting up meetings even know that interpreters should attend IEP meetings. It is part of interpreters' training, and they are the only ones with that student all day. They may have information a teacher does not. They do not seem to think we have anything to contribute. I have been asked to attend an IEP meeting to interpret, but not as a member of the team. They do not even ask us for inputs before the meeting".

Emma (interpreter):

"In elementary school, I have never heard of an interpreter being invited to an IEP meeting for input. I have not seen interpreters even asked for their thoughts about a student. In middle school, I only know of one interpreter who was asked to attend meetings to provide input and it was that same interpreter who was asked when she worked at the high school. Interpreters at the high school may go to more meetings, but they would interpret. I think the one interpreter who was invited to the meetings as a part of the meeting was invited because she received respect, having made it known that she had knowledge about the deaf. I also know that some administrators did not like her knowing more than they did. I am not sure if this caused some teachers to be a little weary of interpreters. I remember ateacher asking a team of interpreters whether they were talking about her"!

DJ (teacher):

The interpreters are no more valued than anyone else. She had not been to any meetings in which an interpreter was part of the team. She had spoken to several interpreters and asked them to attend meetings. It was something she

hadto think about. Interpreters are often seen as a type of aide and aides are not invited to IEP meetings.

#### Shortage: Where are the Certified Educational Interpreter for the Deaf?

If the job is interesting and if the CEIDs are satisfied with the job, why is there shortageof CEIDs? Some believe it is the training, testing, and cost it takes to become certified. Others believe it is the school district pay. Agency interpreters are paid more. Some think it is the environment of the school.

#### Gwen:

"I think there is a shortage due to several reasons. It is not easy to become a CEID. It requires a B.A., learning sign language, passing two tests and costs closeto \$900, for certification. Then there is the classification and the pay. There are the professionalism and respect. Hence, there are those that do not take tests because all are not required to do so. They go to work for an agency and make more money than they would at a school. You must be certified to work in a K-12 school. You do not have to be certified to be hired by an agency. You do need tobe highly qualified".

## Emma (interpreter):

"I think the shortage of interpreters in the school is because the district does not know the interpreter's function. They ask us to do things like attending to children's toilet needs or to feed them. They are trying to dump unrelated work onus. That is not what we do. This makes us wonder why work for the

district. I think they could pay more. I think we should have meetings just like the teachers have meetings. More respect is needed".

Rica (interpreter):

"Agency interpreters come to the schools to interpret and no one knows whetherthey are certified or not. They are getting paid more for doing less and get morerespect. What is required, expected, or asked of a district interpreter is not of anagency interpreter. Agency interpreters refuse to do anything beyond what an interpreter does".

DJ (teacher): said, "I believe there is a real misunderstanding about the job interpreters do and what signing aides do. We ask a lot of them and they are not compensated appropriately for what they do."

Bergie (administrator) said, "I am not sure why there is a problem with hiring CEIDs." All school districts seem to have a need, but some more than others. It may be that other schoolspay more, I do not know".

#### **Summary**

This chapter's findings are from the interviews of the 12 participants and are in raw data form. These data are being presented in a compressed narrative. The construction of the interview questions was done to help provide answers to the three research questions. The resultsof the questions and responses have been placed into the three groups of the participants: two administrators, five teachers, and five CEID. The initial findings are furnished below:

RQ 1: Which factors contribute to the shortage of CEID interpreters? The factors that appeared to bring about the most reaction and feelings from the interpreters and little from theteachers or administrators was for interpreters to be treated as professionals, with respect, and paid appropriately.

RQ 2: What are the barriers to educating, identifying, recruiting and retaining CEIDinterpreters? The specific factors seemed to be no training- external or inservice- no communication, no real knowledge of what an interpreter does and no professionalism.

RQ 3: What programs and practices are available to address factors that contribute to the shortage in CEID interpreters? There are resources for training, like district in-service training/workshops specifically focused on interpreters, and meetings to keep them updated on what is happening at the school or in the district. Administrative consistency is required in ensuring that agency interpreters are certified. Further, CEIDS with district certification should be actively recruited to aid the process.

Many of the interpreters exhibited enthusiasm for interpreting and wanting the d/D/hh students to receive the education they are entitled to, with enough certified interpreters to achievethis goal. The most universal comments were: 1. Respect and Professionalism. The need for teachers and administrators to know the actual functions of interpreters do, to treat them and pay them as such, 2. Communication and contact, with support from the administration, can help to break down the barriers and provide information, updates etc., and 3. CEID, teachers, and

administrators should work together in coordination to ensure that there are no conflicts and that the d/D/hh students receive the best education possible.

In their work, individuals often create bonds with the other professionals they work with. These bonds are stronger when there is an understanding of the roles and functions of their respective jobs. Chapter 4 introduced the results of the interviews of the study. Chapter 5 uses collected data for answering the research questions.

#### Chapter 5: Discussion, Conclusions, and Recommendations

This qualitative JD-RM study represents the views and perspectives of CEID, teachers and administrators at a public school's mainstream program. The study focus was on the factorsthat contribute to the shortage of certified educational interpreters for the deaf. This study is presented in narratives. These narratives are important as they are direct descriptions of how theviews and perspectives of the participants influence the shortage of CEID. The narratives demonstrated similarities in views, and experiences.

Chapiter 4 presented the results of the interviews and demonstrated how the questions permitted an ease for other topics or sub-themes to emerge through comments. The study and findings support the main ideas of the research questions:

(a) factors that influence the shortageof CEID in mainstream programs. (b) barriers that interfere with the education, recruitment, retention, and the ability to identify the problem, and (c) what is available to address these influences on the shortage.

Chapter 5 synthesizes the findings of the data collected and offers abreakdown for answering the research questions.

This chapter includes a discussion on how the findings and information from the literature review are connected to the research questions and how burnout, a syndrome defined by emotional exhaustion that develops in response to the ongoing pressures on managing complex people-related interactions (Maslach, 1982) is connected to CEIDs. The study's findings help in closing the gap of the limited literature on CEID. It augments the knowledge on CEIDs and facilitates greater

understanding of the occupation and the differing views and experiences of CEIDs, teachers, and administrators. In Chapter 5 I use the narrative conclusions based on the CEIDs' experiences. I also provide recommendations for future consideration and research.

# **Findings**

RQ1: Which factors contribute to the shortage of CEID interpreters?

A few other topics were mentioned during the interviews with CEIDs that could also be causal factors for the shortage. Factors indicated by most of the CEIDs were lack of inclusiveness, their input not being sought, lack of communication and verification of agency interpreter certification, and inadequate pay. These unaddressed topics can furtherlead to the decline and continued shortage of district interpreters and the district's efforts to hire or retain CEIDs.

Neither teachers nor administrators expressed any concrete comments to offer in respect of the shortage of CEIDS or the situation CEIDs feel they are in. Most of the teachers and administrators did not acknowledge any problem of any kind, except perhaps the shortage. However, the questions did prompt them to think about it, once they were made aware of the problem. One teacher commented, "It was unfortunate thatmost teachers did not take the time to consider the possibility of their colleague within the d/D/hh department might have problems."

According to Glickman (1993), interpreters are a part of the Deaf community and times may have the same social/cultural identification. Ninety percent of all deaf children are born to hearing parents, and most of these parents never learn to

sign ((Dean& Reiman, 2007). CEID witness and experience firsthand the oppression of the deaf and insults that are communicated through their hands (Humphrey & Alcorn, 2007).

Interpreters must enter and be accepted into the Deaf community in order to possess an intimate knowledge of their language and culture (Greene, 2011). This may reveal the regret the CEIDs have when not included in discussions, not asked for their input, not invited to IEP meetings, denied trainings and even meetings to keep them apprised of what is happening in the district. Teachers and administrators must understand that not being considered or included unless needed to interpret, is a sign of disrespect. It also speaks of their opinion of the job that CEIDs perform. Communication is important to CEIDs. Knowledge and the ability to provide access to deaf students is a key ingredient of their function. Being denied that information impedes their ability to deliver the message. All the CEIDs mentioned the problem of not being perceived or taken to be a professional, along with the wages they were paid. Direct instruction was preferred by teachers, who desire not to have a barrier in their communication with the deaf and hard- of-hearing students. Some teachers feel that having a CEID in the room prevents such direct communication. Another comment from a CEID was, "Some teachers are controlling by nature and having a CEID in the room reduces their degree of control, with the CEID ostensibly a barrier between them and a d/D/hh student. If there were no CEIDsor the teacher were able to tell a CEID what to do, it would help in the former's feeling of control. The power we, as educational interpreters have, is becoming less and less. When situations arise, we often have to contact the Union. Instead of having to contact the Union, it would be easier if there were to be open communication and we could solve the problem together."

RQ2: What barriers exist in the education, identification, recruitment and retention of CEID interpreters?

This question garnered more reaction from CEIDs than any other, when it came toperspectives, thoughts, experiences, and their interactions in the school. The same topics and points continued to engage them all, such as that of agency interpreters and the lack of verification of their certification or the current ineffective practice of doing it.

The majority of the non-CEID participants in this study reported having an understanding of what a CEID does: the CEID is to interpret in the classroom what the teacher says. One teacher commented that she did not know how the interpreter fit in when the d/D/hh student needed to work in a group. There is a lack of knowledge of CEIDs and deaf culture or how d/D/hh students learn. d/D/hh students develop their ability to sign and understand concepts through their interaction with their interpreter. A CEID's ability to sign various forms of ASL, the knowledgle they acquire during training, and the ability adapt the signs and signing level to the individual student permits the d/D/hh students to understand what is being said (Easterbrook's& Baker, 2002).

RQ3: What programs and practices are available to address factors that contribute to the shortage of CEID.?

This question appeared to move much of the focus of the study to the experiences of CE]Ds. The topics that stood out the most were the agency interpreter verification, professionalism, pay, communication, training, and inclusiveness. The questions that emerge, d from the interviews are: Why does the district deem agency interpreters as professional and not district CEIDs? Why is there no training? Why are CEIDs not invited to the IEP meetings or asked for their input, when they are with the student morethan the teachers? How was it decided to place CEIDs in the classified job category?

Why do they not pay CEID more? Why are there no CEID meetings and how are we supposed to get information? A suggestion of a head CEID was also brought up. This person could attend teacher meetings and convey information at CEID meetings, could bepart of the hiring process and help to set up trainings.

It is noted in the literature (Askar, 2013; 2017; Bower, 2013; Schick, 2004; Schaifeli 2009) that there is a decline in interpreters in general. This could be due to the the process and the cost involved in becoming an interpreter, in addition to the factors mentioned by the CEIDs as influencing the shortage. This decline demonstrates the significance of the need to recruit, retain and treat CEIDs as professionals, with better communication, respect, and pay.

My aim for this study was to explore the job ambiguity and role conflict of CEIDand identify factors that contribute to the difficulty in recruitment and retention

of CEIDinterpreters, as perceived by school administrators, teachers, and educational interpreters for the deaf. The identification of the factors is the first step. The next step would be a close consideration and discussion of these factors to enable and ensure changes such as the development of trainings, meetings, and critical review of the classification and pay.

The school environment, climate, and communication have an influence on CEIDs and their functioning (Easterbrook's & Baker, 2002; Felsten &, Wilcox, 1992). CEIDs need to be prepared. In the study, I found that most teachers and administrators do not think CEIDs need prep time. This is due to the belief that all that the CEIDs need to do is interpret what the teachersays. Just as teachers continually study and update how they teach a subject, CEIDs also need thetime to study, read, adjust, and understand what they need to interpret. CEIDs want understanding of their job and support from administrators and teachers, as they continually face job ambiguity and role conflict. CEIDs need prep time, respect, communication, information, training, and to be perceived as professionals. If these issues are not addressed, the shortage of CEIDs may continue and may even worsen.

The interviews through Zoom, phone, via video phone, and questionnaire were of benefit for participants who use sign language to communicate and for participants who wanted a choice. Twelve participants contributed information that expressed their positive and negative views, perspectives and experiences. Most of the research in the field of education for the deaf is focused on the d/D/hh students and very little on the educational interpreters. What little literature there is, relates to

interpreters for the deaf in general and not CEID. The literature review revealed that in the studies of certified interpreters for the deaf, the reasons for the shortage of the interpreters at the school have not been addressed. The chronic, long-term shortages for (grades K-12 in public schools have reduced access for d/D/hh students to the leastrestrictive environment, as mandated by the ESSA; (Cogen & Cokely, 2015; DOE, 2015).

School administrators reported that it is very difficult to recruit and retain certified interpreters and the shortage is envisaged to continue through 2028 (Cogen & Cokely, 2015). A qualitative research approach is consistent with identifying factors that contribute to the CEID shortage, which is a complex and multifaceted phenomenon (see Savin-Baden & Major, 2013).

Teachers, administrators and CEIDs who work in a mainstream program for the deaf and who use CEID were contacted for this study. 12 eligible participants were identified. Each signed consent form and participated in interviews up to 45 minutes. The participants have all worked in a mainstream program for a minimum of 4 years. The interviews conducted on Zoom or via video phone were recorded or videoed. This was done to allow me to translate and review the transcriptions. This study bridges the gap in the knowledge of factors that influence the shortage of CEIDs.

This study demonstrates the importance of having the knowledge of the path to becoming a CEID and of the job itself. School administrators should create communication channels to allow CEIDs the opportunity to input and for them to

learn about CEID role and function. They must take the time to understand what is required to become a CEID and to maintain certification. This alone will give CEIDs the respect they feel the lack of. Not only do the administrators need to learn about what a CEID's job entails, teachers too need to acquire knowledge to broaden their understanding and working relationship with CEIDs. The training and certification for interpreters in education is important. The State Department of Special Education and Rehabilitative Services (2018), believes that all interpreters in education should have national certification and for that certification training to be the uniform across the U.S. They have initiated this action to provide training and technical assistance to better prepare interpreters to become highly qualified and nationally certified sign language interpreters. There are currently four agencies that are allowed to certify interpreters in the State of CA, three for national certification RID, EIPA, NAD and for only state certification: Educational Sign Skills Evaluation (ESSE).

### Recommendations, Practice, and Research

The interpretation of the study findings has suggestions for the district/school to implement, to improve the working conditions of CEIDs in coordination with teachers and administrators: (a) ensuring better communication of teachers and administrators with CEID; (b) trainings for the professional development of CEID; (c) CEID input into the training and meetings range, and 4) ways to explore the district/school environment for interpreters and infuseknowledge about CEIDs that can help in the generation of respect for them and their treatment asprofessionals. This is not a resolution, plan, or a design for changes. These are, however,

suggestions that can be taken into consideration to address the shortage of CEIDs and their concerns.

#### Recommendations

Administrators, teachers, and CEIDs think there should be workshops and inservice trainings that are geared towards the professional development of CEIDs and informational for administrators and teachers. Some teachers and administrators believe that not all d/D/hh students need to have an interpreter for communication, considering the presence of an interpreter in the classroom as having a third party involved in their communication with the d/D/hh student. Sign Language is the language of the Deaf. There are teachers, administrators, and CEIDs who believe the use of an interpreter should be mandatory. Students having cochlearimplants or hearing aids are often not given CEIDs. CEIDs are needed by them as a backup or for understanding, as hearing aids get lost, batteries stop working, and cochlear implants are not worn 24 hours a day.

The shortage of CEIDs has placed more d/D/hh students at a disadvantage. There is a need for certified interpreters to meet the growing demand for service (R.I.D., 2012, Bureau of Labor Statistics 2017). There are both the recruitment and retention issues, the credentials, & theinsufficient supply of educational interpreters (Dean & Pollard, 2001). If d/D/hh students are not provided with a CEID, they are forced to find other ways to cope and understand. These students are prone to gletting lost in the shuffle and do not receive the access or help they are entitled to from staff. The availability of a CEID allows the student to seek support if needed. Some of

these students transfer to schools for the deaf with minimal signing skills. CEIDs impart a sense of pride and identity, through their learning and involvement in deaf culture, history of the deaf, through emotional support, implementing changes in technology for the deaf and by imparting cultural manners and behaviors. The school could consider trainings in various areas to encourage a more positive and inclusive environment. This too might be an encouragement in the recruitment of CEIDs.

The following recommendations are offered:

- Training for CEID and all d/D/hh staff
- Development of or re-evaluation of the process for agency certification verification.
- Retention incentives for CEIDs
- Regular meetings for CEIDs (school information and the need for the exchange of peerand d/hh information).
- Increase in recruitment, with at least one CEID involved in the process.
- CEID input for I.E.P. meetings.
- Discussion of the pay range in alignment with professional/agency interpreters.

For any of this to work, it will require administrators to be completely involved in making changes and working toward the hiring of more CEIDs. Without these suggestions being considered, the factors that influence the shortage of CEIDs will persist. The value of CEIDs andtheir importance to the education of deaf students should be recognized by school and district administrators.

Previous literature on certified interpreters for the deaf or interpreters for the deaf mostfocused on deaf education and had little if anything to say about CEIDs (Kluwin, 1992; Anita,et.al. 2011; Cogen, et. AL 2015). This study focused on the shortage of CEIDs working in mainstream programs. The requirements and duties of certified interpreters for the deaf continually changes, along with the changes in educating d/D/hh children. With these changes comes the ne1ed for future studies to further address the influences for the shortage of CEIDs. The information presented in this study could improve the knowledge and situation of current and future CEIDs.

# **Social Change**

This study was done to investigate and identify factors that contribute to the difficulty in recruiting and retaining CEID. The results of this study demonstrate that the effects of today's socially constructed hierarchy in education are real and important pieces to the educational interpreter's recruitment and retention. CEIDs do not function in the role they think they should or are trained to do. Nor do they believe they are given the respect or credit for their education asdo other professions within the educational system. Coming out of the shadows of invisibility, interpreters working in educational settings gain the respect, credit, involvement in the decisions and the enhancement of the education of d/D/hh children. Deaf children benefit when educational interpreters become agents of change. This can CEID needs to be redefined and further explorations into the reasons there is a shortage can only help in change within the system.

ADA made it easier for the deaf to attain their rights for access to education. The recruitment and retention of CEIDs are a necessity and an important part of the d/D/hh having better and equal access to education. Leveling the field for the professional profession of CEID's and incorporating their opinions in the matters of d/D/hh education are at the center of CEID's shortage. This knowledge moves us toward finding and changing the factors that may contribute to the shortage and into the progress for all who are involved in the education of d/D/hh children.

#### References

- American Society for Deaf Children. https://deafchildren.org
- Amrein-Beardsley, A. (2012). Recruiting expert teachers into high-needs schools: Leadership, money, and colleagues. *Education Policy Analysis Archives*, 20(27), 1-26. https://doi.org/10.14507/epaa.v20n27.2012
- Antia, S. D., Jones, P., Luckner, J., Kreimeyer, K. H., & Reed, S. (2011). Social outcomes of students who are deaf and hard of hearing in general education classrooms. *ExceptionalChildren*, 77(4), 489-504. https://doi.org/10.11
- Askar, Y. (2013). Addressing the growing demand for sign language interpreters.

  [Unpublisheddoctoral dissertation/master's thesis]. University of
  Arizona.
- Baker, M. (2014). Ethics and the curriculum: Critical perspectives. Routledge.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. https://doi:10.1108/02683940710733115
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-281.https://doi.org/10.1037/ocp0000056
- Bakker, A. B., Demerouti, E., Boer, E. D., & Schaufeli, W. B. (2003). Job demands and jobresources as predictors of absence duration and

- frequency. *Journal of Vocational Behavior*, 62(2), 341-356. https://doi.org/10.1016/s0001-8791(02)00030-1
- Bell, A.G. https://www.alexandergrahambell.org
- Berke, J. (2011). An introduction to American deaf culture: Stories, art, traits, attitudes, and other aspects of deaf culture. https://www.verywell.com/deaf-culture-basics-1046268 Belt, C. M. (2013). American Sign Language is not English on the Hands. ASL University Print.
- Brookover (1982). https://eric.ed.gov/?id-ED231091

  https://kantakji.com/media/7520/c53.pdf Bower, K. (2013). Stress and
  burnout in video relay service interpreting. *Registry qf Interpreters for*the Deaf Views 30.18-19
- Boyce, C., & Neale, P. (2006). Conducting in depth interviews: A guide for designing and conducting in-depth interviews for evaluation input.

  http://hiVWWpathfind.org/site/DocSever/m\_e\_tool\_series\_indepth\_interviews.

  pdf?docID=6 301
- Bureau of Labor Statistics. https://wwwbls.gov
- Burke, T. B. (2011). *Quest for a deaf child: Ethics and genetics* [Doctoral dissertation, The
- University of New Mexico]. https://digitalrepository.unm.edu/philetds/14/ Cawthon, S., & Leppo, R. (2013). Assessment accommodations on tests of academic

- achievement for students who are deaf or hard of hearing: A qualitative metaanalysis of the research literature. *American Annals of the Deaf, I* 58(3), 363-376. https://doi.org/10.1353/aad.2013.0023
- Center for Disease Control. https://www.cdc.gov

  Clerc Center. :https://clerccenter.gallaudet.edu
- Cogen, C., & Cokely, D. (2015). Preparing interpreters for tomorrow: Report on a study of emerging trends in interpreting and implications for interpreter education. *National*
- Interpreter Education Center, 1-44.

  http://accelerate.streetleverage.com/wp-content/uploads/2016/02/NIEC-TrendsReport.pdf
- Commonwealth of Virginia, Department of Education. (2010). Educational

  InterpreterQualifications and Training Opportunities.

  <a href="http://www.doe.virginia.gov/administrators/superintendents">http://www.doe.virginia.gov/administrators/superintendents</a>

  memos/2006/inf215.html
- Cordes, C. L.., & Daugherty, T.W. (1993). A review and integration of research on job burnout. The Academy of Management Reviews 18,621-656
- Council of Credentialing Organizations in Professional Psychology. (2008). *A*conceptual framework for specialization in the health service domain of professional psychology. National Register for Health Service Providers in Psychology. https://www.nationalregister.org/wp-

- content/uploads/2016/12/A-Conceptual-Framework-for-Specialization-in-the-Health-Service-Domain-of-Professional-Psychology-pd
- Cox, D.R. (2010). Board certification in professional psychology: Promoting competency and consumer protection. *Clinical Neuropsychologist*; 24(3), 493-505. https://doi.org/10.1080/13854040902802947
- Creswell, J, s & Creswell, J. D., (2017). Research design: Qualitative, quantitative & mixedapproaches. Sage Publications.
- Dagar, D.M., Sorenson, G., Hopicia, K., Hashimoto, D., Katigbak, C., Pandy, S., Takeuchi, D., Sabbath, E.L. (2021). https://ssm Popul Health 2021 apr 22:14:100802 doi:10.1016/j.smph.2021.100802.
- Denzin, N. K., & Lincoln, Y. (2003). The landscape of qualitative research: Theories and issue (2<sup>nd</sup> Ed). Sage.
- Dean, R. K. & Pollard, R. Q. (2001). *Demand control schema*.

  CreateSpace Independent Publishing.

  https://www.urmc.rockester.edu/deaf-wellness-center/demand-control-schema.aspx
- Easterbrooks, S. R., & Baker, S. K. (2002). Language learning in children who are deaf and hard of hearing: Multiple pathways. Allyn & Bacon.
- Education for All Handicapped Children Act of 1975. Pub. 1., No. 94-142 (1975)
- Educational Interpreters Proficiency Assessment (EIPA). https://eipa.boystown.org
- Egalite, A. J., Jensen, L. I., Stewart, T., & Wolf, P. J. (2014). Finding the right fit:

  Recruiting andretaining teachers in Milwaukee choice schools. *Journal* of

- School *Choice*, 8(1), 113- 140. https://doi.org/10.1080/l 5582159.2014.875418
- Evans, B. R., & Leonard, J. (2013). Recruiting and retaining Black teachers to work in urbanschools. *SAGE Open*, 3(3), 215824401350298. https://doi.org/10.1177/;158244013502989
- Every Student Succeeds Act of 2015. Pub. 1. No. 114-95 §114 Stat.I17 (2015-2016).
- Felsten, G., & Wilcox, K, (1992) Influence of stress and situation specific mastery: Beliefs and satisfaction with social support on well-being & academic performance. *Psychological*\*Reports 7091),291-303. HTTPS://DOI.ORG/10.2466/PR0.1992.70.1.291
- Fernandez-Vlader, M. D. P., & Fuentes, M. (2004). Education of deaf students in Spain: Legal and educational politics developments. *Journal of Deaf/Studies and Deaf Education*, 9(3), 327-332. https://doi.org/10.1093/deafed/enb035
- Fernet, C., Guay, F., Senecal, C., & Austin, S. (2012). Predicting intraindividual changes inteacher burnout: The role of perceived school environment and motivational factors. *Teaching and Teacher Education*, 28(4), 514-525. https://doi.org/10.1016/j.tate.2011.1 1.013
- Fisher, K. (2019). Carpal tunnel. bing.com/video August 8, 2016.
- Forbes. (2016). Forbes: Interpreting is a top job opportunity.

  https://www.deaf-interpreter.com/forbes-interpreting-is-a-top-job-opportunity

- Gearing, R. E. (2004). Bracketing in research: A typology. *Qualitative Health*\*Research, 14(10),1429--1452. https://doi.org/10.1177/1049732304270394
- Glickman, N. (1993). Deaf identity development: Construction and validation of a theoretical model [Unpublished doctoral dissertation]. University of Massachusetts.
- Greene, D. (2011). Why are interpreters' deaf community members? And other questions.
- Education, Interpreting. *Views* (28)1. Registry of Interpreters fort the Deaf. Alexandra, VA.
- Greenbank, P. (2003). The role of values in educational research: the case for reflexivity. *BritishEducational Research Journal*, 29(6), 111-134. https://doi.org/10.1080/0141192032000137303
- Guthmann, D. (2011). An analysis of variables that impact treatment outcomes of chemically dependent deaf and hard-of-hearing individuals. *Deaf Health Archives*, 1-36.http://files.eric.ed.gov/ful1text/ED396J 94.pdf
- Huynh, J. Y., Xanthopoulou, D., & Winefield, A.H. (2014). The Job Demands-Resources Modelin emergency service volunteers: Examining the mediating roles of exhaustion, work engagement, and organizational connectedness.

  Work & Stress, 28(3), 305-322. https://doi.org/02678373.JO14.936922
- Individuals with Disabilities Education Act of 1990. Pub.L.No. 101-476.104 Stat.1142.U.S.C. 1400 et seq. (1990)

- Individuals with Disabilities Education Act of 1997. Pub. L. NO. 105-17.111

  Stat. 37 (1997). Ippolito, J. & Fisher, D. (2019). Instructional leadership for disciplinary literacy.
- Jones, B. E., Clark, G., & Soltz, D. (1997). Characteristics and practices of sign language interpreters in inclusive education programs.

  Exceptional Children, 63(2), 257-268. (n.d) > The Free Library.

  (2014)
- Kluwin, T. N. (lhtt992). Toward effective public school programs for deaf students:

  Context, process, and outcomes. Special Education Series. Teachers College

  Press, Columbia University: NY, NY. https://eric.ed.gov/?id=ED35081
- Kowalski, C., Driller, E., Ernstmann, N., Alich, S., Karbach, U., Ommen, 0., Schultz- Nieswandt, F., & Pfaft, H. (2011). Associations between emotional exhaustion in social capital, workload & latitude in decision-making among professionals working withpeople with disabilities.

  \*Research in Developmental Disabilities, 31(2), 470-479. DOI: 10.1016/j.ridd.2009.10.021
- Kuper, L. & Marmot, M. ( ). Job strain, job demands, decision latitude, and risk of coronary heart disease with the Whitehall II study. BMJ. J Epidemial Community Health, 57,147-153. http://dx.doi.org/a0.1136/jech.157.2.147
- Lasch, K. E., Marquis, P., Viqneux, M., Abetz, L., Arnould, B., & Bliss, M. (2010).

  \*PRO development: Rigorous qualitative research as the crucial foundation.

- Quality of Life Research 19(8):1087-96; https://doi.org/10.1007/s11136-010-9677-6
- Lee, Y. H. (2017). Emotional labor, teacher burnout, and turnover intention in high-schoolphysical education teaching. *European Physical Education Review*. 25(1).236- 253https://doi.org/10.1177/1356336x17719559
- Leonard, I. (2013). The art of effective questioning: Asking the right questionfor the desiredresult. https://www.coachingforchange.com/pub10html#
- Linn, R. L., Baker, E. L., & Betebenner, D. W. (2002). Accountability systems:

  Implications of requirements of the no child left behind act of 2001.

  Educational Researcher, 31(6), 3-16.

  https://doi.org/10.3102/0013189X031006003
- Liu, S., & Onwuegbuzie, A. J. (2012). Chinese teachers work stress and their turnover intention. *International Journal of Educational Research*, 53, 160-170. https://doi.org/10.1016/i.ijer.2012.03.006
- Lynch, M. (2012). Recruiting, retaining, and fairly compensating our teachers. *International Journal of Progressive Education*, 8(2), 122-137. http://dergi\park.gov.tr/download/article-file/237189
- Marschark, M., Sapere, P., Convertino, C., & Seewagen, R. (2005). Access to postsecondary education through sign language interpreting. *Journal of Deaf Studies and Deaf Education*, 10(1), 38-50. https://doi.org/deafed/eni002 http://www.jstor.org/10.1093.deafed/eni002

- Maslach, C. (1982). Burnout: *The cost of caring*.

  https://doi.org/10.1176/ps.34.7.650 Morrow, S. L., & Smith, M. L. (2000). Qualitative research for counseling psychology. In S.D.
- Brown & R. Vv. Lent (Eds.) *Handbook of counseling psychology, (3ed,* ed., pp. 199-230). Wiley National Association of the Deaf. (2021). https://www.nad.org/resources/american-sign-language/interpreter-american-sign-language
- National Center for Education Statistics. (2017). *Enrollment for elementary and secondaryeducation*. https://nces.ed.gov/fastfacts/display.asp?id=372
- National Interpreter Educational Center (2005-2016). Founded by the U.S.

  Department of Education, Rehabilitation Serves Administration.

  Northwestern University.
- National Technical Institute for the Deaf (RIT) Rochester Institute of Technology.

  https://www.rit.edu/ntid/slpi
- No Child Left Behind. Act of 2001. Pub. L. 107-110.20 U.S.C.. § 6319 (2002)
- O'Keefe, J.M. (2013). How research can inform efforts to recruit and retain high-qualityteachers. *Journal of Catholic Education*, 5(1), 117-124. http://digitalcommons.lmu.edu/cgi/viewcontent.cgi?article=1 531&context=ce
- Onwuegbuzie, A. J., Leech, & Collins (2010). Innovative data collection strategies in qualitative research. *Qualitative Report*, *15(3)*, 696-726. https://eric.ed.gov/?id=EJ887912 Oregon Department of Education. (2012,

April). Oregon guidelines: *Educational interpreting for students who are deaf* <a href="http://www.oregon.gov/ode/students-and-">http://www.oregon.gov/ode/students-and-</a>

family/SpecialEducation/RegPrograms\_

BestPractice/Documents/guidelinesfordeaf.pdf

Patton, M. Q. (2002). Two decades of developments in qualitative inquiry a personal, experiential perspective. *Qualitative Social Work*, 1(3), 261-283. https://doi.org/10.1177/1473325002001003636

Pochhacker, F. (2016). Introducing interpreting studies. Routledge Press.

Podolsky, A.,. & Kini, T. (2016). How effective are loan forgiveness and service scholarships for recruiting teachers? *Learning Policy Brief* 1-8. http://www.ecs.org/wp-content/uploads/Loan Forgiveness Brief.pelf

- Power, D., & Hyde, M. (2002). The characteristics and extent of participation of deaf and hard- of-hearing students in regular classes in Australian schools.

  \*\*Journal of Deaf Studies and Deaf/Education\*, 7(4), 302-311.\*\*

  https://doi.org/10.1093/deafed/7.4.302
- Powers, S. (2:003). Influences of student and family factors on academic outcomes of mainstream secondary school deaf students. *Journal of Deaf Studies and Deaf Education*, 8(1), 57-78. https://doi.org/10.1093/deafed/8.1.57

Registry of Interpreters for the Deaf. (2019) https://rid.org

Russell, D. (2012). Court/legal interpreting. *Handbook of Translation Studies*, *3*, 17-19.

- Salmela-Aro, K., & Vuori, J. (2015). School engagement and burnout among students: Preparingfor work life. In *Sustainable Working Lives* (pp. 51-64). Springer, Dordrecht.
  https://doi.org/10.1007/978-94-017-9798-6
- Sanderson, G., Siple, L., Lyons, B. (2019). Interpreters for Post Secondary Deaf Students Savin-Baden, M., & Major, C.H. (2013). *Qualitative research:*The essential guide to theory and practice. Routledge.
- Schaufeli, W. B. (2015). Engaging leadership in the Job demands-resources model. *Career Development International*, 20(5), 446-463. https://doi.org/10.1108/cdi-02-2015-0025
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands andresources predict burnout, work engagement, and sickness absenteeism, *Journal of Organizational Behavior*, 30(3), 893-917. www.interscience.wiley.com/doi:10.1002/job.595
- Schick, B. (2004). How might learning through an educational interpreter influence cognitive development? In E. A. Winston (Ed.), *Educational Interpreting: How it Can Succeed* (pp73-87). Gallaudet University Press.
- Schick, B., Williams, K., & Kupermintz, H. (2005) Look who's being left behand: Educational interpreters and access to education for deaf and hard-of-hearing students. *Journal of Deaf Studies and Deaf Education*, 11(1), 3-20. https://doi.org/10.1093/deafed/enj007

- Schick, B. (2007). Classroom interpreting.

  https://www.classroominterpreting.org/About/index.asp
- Schwenke, T. (2012). Sign language interpreters and burnout. *Journal of Interpretation*, 20(1), 31-54. https://digitalcommons.unf.edu/joi/vo120/issl/7/
- Shealy, J., Latko, W., Feuerstein, (1991). Biomechanical analysis of upper body risk in sign language interpreting. *Journal of Occupational Rehabilitation*, Plenum Publishing. Journal of Occupational RehabilitationSep:1(3):217-25. https://doi:101007/BF01073458
- Simbula, S., Panari, C., Guglielmi, D., & Fraccaroli, F. (2012). Teachers' well-being and effectiveness: The role of the interplay between job demands and job resources. *ProcediaSocial and Behavioral Sciences*, 69, 729-738. https://doi.org/j.sbspro.2012.11.467
- Stedt, J. D. (1992). Interpreter's wrist: Repetitive stress injury and carpal tunnel syndrome insign language interpreters. *American Annals of the Deaf* 137(1), 40-41.
- Stuckless, R., Avery, J., & Hurwitz, T. A. (1989). Educational interpreting.for

  deaf students, report of the national task force on educational interpreting.

  {Report of the National Technical Institute for the Deaf.}
- Tenny, S., Brenannan, G.D., Brannan, J.M., Sharts-Hopko, N.C. (2020). Qualitative study. https://pubmed.ncbinlm.nih.gov292621 62
- U.S. Bureau of Occupational U.S. Department of Education. (2015). *Every child* succeeds act. https://www.ed.gov/esea

- U.S. Department of Education. (2017a). *Deaf students education services*. https://www2.ed.gov/about/offices/list/ocr/docs/hq9806.html
- U.S. Department of Education. (2017b). *Individuals with disabilities education act*. https://www.ed.gov/policy/landing.jhtml?src=pn
- van Woerkom, M., Bakker, A. B., & Nishii, L. H. (2016). Accumulative job demands and support for strength use: Fine tuning the job demands resource model using conservation of resource theory. *Journal of Applied Psychology*, 10(1), 141-150. https://doi.org/10.1037/ap10000033
- Wilcox, K. (1992). Influence of stress & situation specific mastery: Belief & satisfaction withsocial support on well-being & academic performance. https://journals.sagepub.com/doi/abs/a0.2466/pr0.1992.70.1.291
- Wargo, W. G., (2015). *Identifying assumptions & limitations for your dissertation*. www.academicinformationcenter.com/identifying-assumptions-and-limitations-for-your-dissertation.html
- Witter-Merithew, C. S. C., & Nicodemus, C. I. (2012). Toward the international development of interpreter specialization: An examination of two case studies.

  \*\*Journal of Interpretation, 20(1), 1-13.\*\*

  https://digitalcommons.unf.edu/ioi/vol20/issl/8/
- World Health Organization. https://www.who.int
- Wu,YT, ChenSR, LiTy, HoTy, ShenYP, TsaiCK, ChenLC. (2019). Nerve hydro, (2), 174-1800.doisection for carpal tunnel syndrome. https://Muscle Nerve.2019 Feb,59(2):174-1800.doi:10.1002/mus.26358

Zito, M., Cortese, C. G., & Colombo, L. (2015). Nurses' exhaustion: The role of flow at work between job demands and job resources. *Journal of Nursing Management*; 24(1), El2-E2

# Appendix A: Protocols for Interviews

Title: Educational Interpreters for the Deaf: Job Ambiguity and Role

Conflict

Interviewer and Assistant: Marian Berry and Corlette

Balestier

Number of Interviews: 12 (No face to face due to Covid-

19)

Language: Sign Language and English

Location: West Contra Costa Unified School District. Zoom, Phone, Video

Phone, Questionnaire

**Setting:** Staff from Harding Elementary School or Karamatsu Middle School on zoom, videophone, phone or questionnaire.

**Description of Environment:** From individual participants home on Zoom, video phone, phone, through mailed questionnaire.

**Participants:** Staff from Harding Elementary School, Karamatsu Middle School, and WCCUSDmainstream program. Administrators, Teachers, and Certified Educational Interpreters for the Deaf.

**Description of Participants:** Participants are certified interpreters for the deaf, teachers, and administrators that work in or with the d/hh mainstream program.

**Objective:** To aid in identifying factors that may contribute to the difficulty in recruiting andretaining educational interpreters for the deaf.

**Length of Time:** 30-45 min.

**Assistant:** An assistant will be at all interviews and read all questionnaires. They will assist in the interpretation, translation, and any misunderstandings.

# Appendix B: Interview Questions

# **Personal Data**

| Name:   | Code xxxx                       |
|---|---------------------------------|
| Deaf/Hard of Hearing/Hearing (Circle one).  |                                 |
| Position in the school district.  |                                 |
| Do you know Sign Language?  |                                 |
| Describe what you believe an educational interprete   | er's job is:                    |
|   |                                 |
| Note: The State of California is one of 4 states that it to become a certified educational interpreter. A teac obtain a 2.5 level. All otherstates require a 3 or 3.5 f interpreters. | ther of the deaf is only to     |
| How much contact have you had, or do you have with  | th educational interpreters?    |
| Do you know the requirements to become a certified the deaf? Cost?  | l educational interpreter for   |
| Does your school district provide in-service training orsigning aides?  | for educational interpreters    |
| Do you know that for educational interpreters to maineed in-service training?   | intain their certification they |

| How do think interpreters maintain their certification?   |
|---|
|   |
| Do You consider interpreting an interesting job?  |
|   |
| Are educational interpreters/signing aides taken seriously in this district?  |
|   |
| Do you think the educational interpreters/signing aides that work in this district like orare satisfied with their job? Why or why not? |
|   |
| Are certified educational interpreters for the deaf seen as professionals?  |
|   |
| Is interpreting in sign language, in a mainstream classroom vs a self-contained classrooman easy job? Why or why not?                   |
|   |
| Are educational interpreters/signing aides respected?   |

| Are educational interpreters included and treated as a valued member of the I.E.P   |  |
|---|--|
| team?   |  |
| Do you think educational interpreters are seen as being similar-to teacher's aides?   |  |
| Do educational interpreters need prep time?   |  |
| Do you know about burnout for educational interpreters/signing aides?   |  |
|   |  |
| Are there or should there be meetings with educational interpreters, signing aides, d/D/hhteacher, principal, supervisor, and/or administrators?  |  |
|   |  |
| Educational interpreters are required to be certified. With the shortage of certified educational interpreters for the deaf, does the district ensure the certification of agency /freelanceinterpreter's certification? How? |  |
|   |  |
| Why do you think there is a shortage of educational interpreters for the deaf?  |  |
|   |  |

| Do you think there should be signing aides?  |  |
|--|--|
|  |  |
| Should educational interpreters/signing aides be required to feed or toilet d/hh studentswith these disabilities?    |  |
|  |  |
| How do you think the school administration (teachers, administrators) view signing aidesor educational interpreters? |  |
|  |  |
|  |  |