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An Analysis of Training Needs for Providers of Transition Services for the Deaf/Blind

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An Analysis of Training Needs for Providers of Transition Services for the Deaf/Blind

by
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Statement of Original Work

I declare the following:

I have read the Code of Student Conduct and Academic Responsibility as described in the *Student Handbook* of Nova Southeastern University. This applied dissertation represents my original work, except where I have acknowledged the ideas, words, or material of other authors.

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Kelly Castino_____
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Acknowledgments

Abstract

An Analysis of the Training Needs for Providers of Transition Services for the Deaf/Blind. Kelly Castino, 2017: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education. Keywords: deaf/blind, dual-sensory impaired, transition, self-determination

There is a lack of knowledge in the area of training needs for Deaf/Blind vocational rehabilitation and/or independent living service providers in Florida. This quantitative study utilized self-report surveys of Deaf/Blind providers in Florida to determine what needs to be done related to professional development. The researcher attempted to determine what service providers identify as areas of strength, and what areas they perceive to be those which require additional professional development training. The study participants were 31 professionals who worked at state agencies, non-profits, for-profits, private, or federal agencies that provide services to the Deaf/Blind population in Florida in the areas of vocational rehabilitation and/or independent living. The survey was developed by the researcher based on previous research in the areas of best practice in vocational rehabilitation and independent living. The areas that the survey addressed are interagency collaboration/relationship building, self-determination, parent involvement/parent support, and additional training areas. There were 18 questions on the survey that took participants no longer than 15 minutes to complete.

Quantitative data were collected using a commercial platform to keep respondents' information confidential and analyzed using descriptive statistics which include percentages and other data. Key areas were identified in which providers to the Deaf/Blind may need additional training in the areas of vocational rehabilitation and independent living. The results suggested that the background training of Deaf/Blind providers is varied. Even though Deaf/Blind providers' training is varied, perceived strengths and weaknesses were suggested

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Chapter 1: Introduction

Statement of the Problem

Close your eyes and imagine that you are born with impaired vision and hearing. You have had all the services offered from your public school and now don't know what to do. You are lost or frustrated. You think "what steps can I take after high school?" It is the responsibility of Deaf/Blind service providers to do all that is possible to make the Deaf/Blind individual as independent and job ready as possible in independent living and vocational rehabilitation programs in Florida. There are many different agencies that can be of assistance: Non-profits, for-profits, state and federal agencies, private, and independent living centers. Potential Deaf/Blind participants need to qualify for services through a standardized process before services can be provided to an individual. Vocational rehabilitation programs starting in transition at the age of 14 and independent living programs can assist in providing the potential services necessary for Deaf/Blind individuals to become independent and job ready.

Professional Development

In order for services to Deaf/Bind individuals to be optimal, Deaf/Blind service providers need to be competent in services that they are providing. However

> Teachers of students with low incidence disabilities, those disabilities found relatively infrequently in the student population, face unique challenges in translating education policy into sound practice for their students. As a result, teachers often learn specific strategies on the job or through professional development in their work setting.
> (Cawthon, 2009, p. 50)

For Deaf/Blind students to optimize their potential for independence, full, meaningful employment, and a sense of self-efficacy, they must receive comprehensive training from fully competent providers. These providers should be aware of the best practices in regard to training this population in the areas of interagency collaboration/relationship building, self-determination, parental involvement/parent support, and additional training areas. Due to time constraints and feasibility, only these six areas of best practices for people with disabilities were chosen for this research study. Professional development, or "training opportunities obtained after the initial credentialing period" might be needed for professionals who teach or provide services to students diagnosed with a low incidence disability (Cawthon, 2009, p. 53). In order to satisfy the least restrictive environment mandate in the Individuals with Disabilities Education Act, paraprofessionals are often used to assist general education teachers in classrooms. If paraprofessionals are not properly trained, the paraprofessional could end up hurting the student and the classroom rather than positively contributing. Causton-Theoharis and Malmgren's (2005) study "demonstrated that a relatively short and low-cost paraprofessional training program could provide an immediate and potentially long-lasting positive impact on the interaction rates of students with severe disabilities in inclusive classrooms" (p. 442). Horrocks and Morgan's (2011) study suggested that teachers of students with profound multiple disabilities often do not possess all the skills needed to provide services to their population but "both teachers and students can benefit if systematic training is provided" (p. 304). However, depending on the pool of Deaf/Blind clients each professional serves and the context in which they are providing services, Deaf/Blind providers' needs can vary (Leko, & Brownell, 2009).

Culture and context. It is also important to train service providers to recognize and acknowledge cultural, gender, socioeconomic class, and language's impact on success after secondary school completion for students with disabilities (Trainor, Lindstrom, Burroughs-S., Martin, & Sorrells, 2008). According to Trainor, Lindstrom, Simon-Burroughs, Martin, and Sorrells (2008), culturally and linguistically diverse students with disabilities might need different transition or education practices implemented compared to their dominant culture peers with disabilities. It is a goal of "the Division on Career Development and Transition" to prepare "all youths with disabilities for successful post-school employment and educational experiences" (Trainor et al., 2008, p. 56). Pre-service training and professional development are important areas for providers to students with disabilities. Before assessments are administered or interventions are applied it is important for the service provider to assess the person with a disability's individual race, culture, language, and socioeconomic background to verify that the person has not been improperly placed in special education and that all relevant information is collected in order to maximize the potential of the individual (Obiakor, 2007).

The goal of secondary transition programs is to design a program so that a child with a disability or multiple disabilities can achieve as high as possible in the academic and functional realms after completion or aging out of secondary school (Florida Department of Education, 2015). Students in Florida begin secondary transition services at "age 14 or earlier and may not end until 22 for students with significant disabilities" (Florida Department of Education, 2015) Due to new legislation, the Workforce Innovation and Opportunity Act (WIOA), youth in Florida can request assistance until the age of 24 (B. Michaels, personal communication, June 12, 2015). When Deaf/Blind students age out of the special education system or graduate from

secondary school and are not fully prepared to become productive members of the society, many

students with disabilities have to rely on public assistance (Brooke, Revell, & Wehman, 2009;

Everson, 1995; Householder & Jansen, 1999; Inge, Wehman, Revell, Erickson, Butterworth, &

Gilmore, 2009; Lindstrom, Doren, & Miesch, 2011; Silverberg, Warner, Fong, & Goodwin,

2004). The problem to be addressed in the proposed study is that Deaf/Blind students fail to

receive transition services that fully prepare them to be ready for training in post-secondary

educational institutions or post-secondary work environments (Arndt, 2010; Everson, 1995;

Hersh, 2013; Koscuilek, Prozonic, & Bel, 1995; Papay & Bambara, 2014; Peterson, Van Dycke,

Roberson, $ Sedaghat, 2013). This is important because these individuals have the ability to be

self-supporting and live independent and productive lives, but without adequate transition

services and the advocacy and support that they deserve in career exploring options, they too

often fall into the ranks of the under or unemployed (Antle, 2004; Arndt, 2005/2010; Everson,

1995; Moller & Danermark, 2007; Powers, Kashiwabara, Geenen, Powers, Balandran, & Palmer,

2005; Repetto, Webb, Garvan, & Washington, 2002). If a Deaf/Blind transition student is not

fully prepared for postsecondary life, they fail to become fully independent and become a strain

on the economy, by not realizing their own ability to become productive and self-actualized

(Betz, 2004; Butler, 1998; Everson, 1995; Madaus, Luby, & Dukes, 2011; Renzaglia, Karvonen,

Drasgow, & Stoxen, 2003; Rothman, Maldonado, & Rothman, 2008). The purpose of this study

is to determine the training needs of Deaf/Blind service providers in the areas of vocational

rehabilitation and independent living in Florida. It is hoped that if service agencies are provided

needed professional development for this population, the population will become more

independent, productive, and self-actualized, to better their chances of success in the future.

Problem statement. More research is needed in the area of best practices for all low-incidence disabilities such as Deaf/Blind in the area of secondary transition services. Although more research in secondary transition is needed in order to create best practices for Deaf/Blind, practical and economic issues have thwarted potential findings (Banda et al., 2007; Carter et al., 2014; Montgomery, 2006; Papay & Bambara, 2014). Even though further research needs to be done in areas of Deaf/Blind secondary transition and postsecondary education, researchers are reluctant due to its complexity (Carter, Brock, & Trainor, 2014; Kamenopoulou, 2012; Parker et al., 2007; Pena, 2014; Prain et al., 2011). Most studies in the field of Deaf/Blind have been conducted using single-subject design or observational data rather than replicable and more reliable and valid data from quantitative large scale studies which decreases the generalizability and reliability of the study to the Deaf/Blind population ((Kamenopoulou, 2012; Parker et al., 2007; Prain et al., 2011). Complexity of possible research has resulted in deficiencies in Deaf/Blind literature available due to different approaches to diagnose a Deaf/Blind individual. While there is research on disabilities and secondary transition services, there are only a few studies on Deaf/Blind and secondary transition services due to Deaf/Blind being a low incidence disability and the variability that can occur in a Deaf/Blind population (Banda, Davidson, & Parker, 2007). Due to variability within the Deaf/Blind population, and the small number of people diagnosed Deaf/Blind, empirical "randomized clinical trials" (Banda et al., 2007, p. 690) are not feasible, both economically and practically, and single-subject, mixed-method, or observational research is used instead of scientifically recognized research designs to study Deaf/Blind. While there has been a lot of research with students with learning disabilities and postsecondary education, and secondary transition, there has not been a lot of research into

particular disabilities such as Deaf/Blind (Dong & Lucas, 2014). Research complexities, such as small sample size and variability within the target population, have left the Deaf/Blind community, including providers and consumers, lacking *best practices* in education and transition services (Banda, Davidson, & Parker, 2007; Montgomery, 2006; Nelson, 2005).

Many studies have documented the lack of research into not only students with disabilities but students' secondary transition process from secondary school to postsecondary school or a job (Arndt, 2010; Carter et al., 2014; Papay & Bambara, 2014; Pena, 2014; Peterson et al., 2013; & Williams & Mavin, 2015). More experimental studies need to be conducted using more than one assessment tool for further research into best practices with secondary transition services (Carter et al., 2014). Best practices is defined as, "a number of components that are considered essential in planning and providing support for transition to adult life" (Papay & Bambara, 2014, p. 136).

Research problem. There are general goals for all students with disabilities to learn and aspire to before and while involved in secondary transition or postsecondary planning, but there are no specific guidelines for the low-incidence population of Deaf/Blind (Marks & Feeley, 1995). Other recommendations for all people with disabilities during secondary transition planning time include completing short-term occupational training and training in persistence and coping skills (Lindstrom et al., 2011). In addition, other services to students during secondary transition include postsecondary supports such as occupation specific activities or vocational assessments targeting a specific student's interests (Lindstrom et al., 2011), self-regulation skills learned through the Strategic Content Learning Approach (Butler, 1998), individualized postsecondary supports by disability service providers, teaching students self-

advocacy skills in order to receive needed accommodations in school or work, faculty mentors, involvement in internships and/or vocational training, and assistive technology help for work and or school have been found to positively correlate with better secondary transition outcomes (Dowrick et al., 2005). Additionally, required are better coordination of support services between different agencies, and continuing education for faculty on looking at abilities versus deficiencies in students with disabilities to reduce or eliminate discriminatory attitudes or assumptions (Dowrick et al., 2005) and secondary transition support programs offered in the summer or year-long for students with disabilities. Other recommendations include beginning the secondary transition period earlier in secondary school, the teaching of metacognitive, time management and organizational skills during the secondary transition program, and teaching the individual about the individual's specific disability (Rothman et al., 2008). Approaches to advocacy in postsecondary settings should also be addressed (Rothman et al., 2008) in combination with matching strengths and abilities of the individual with disabilities to a career goal (Rothman et al., 2008) and teaching students with disabilities how to approach getting needed accommodations and disclosure to faculty or employers during secondary transition (Madaus et al., 2011) should also be addressed as part of a secondary transition program according to previous research. These services can be provided in state and federal agencies, non-profits and for-profits, private agencies and other agencies not classified in one of the aforementioned categories. Typically, they are provided in vocational rehabilitation or independent living programs with professionals of varying backgrounds and training.

This quantitative research study addressed what needs to be done related to professional development for Deaf/Blind providers in Florida. The areas addressed were based upon six best

practices for students with disabilities in transition and independent living. Questions in the assessment instrument focused on areas of self-determination, relationship building, family support, inclusion in general education classroom, obtaining a high school diploma, and interagency collaboration. The findings suggested areas of strength and areas that Deaf/Blind providers perceive they need more professional development training.

Secondary Transition Overview

There are research studies into secondary transition period for people with disabilities (Banda et al., 2007; Carter et al., 2014; Lindstrom, Doren, & Miesch, 2011; Montgomery, 2006; Papay & Bambara, 2014). However, the research is missing studies involving populations that have multiple disabilities, such as the Deaf/Blind population, even though prior research found that secondary transition can be crucial in career-related activities and post school planning activities (Lindstrom, Doren, & Miesch, 2011). Williams-Diehm and Lynch (2007) recommended ensuring that teachers involved in the secondary transition process are aware of their roles and responsibilities and that teachers should allow students choice and the opportunity to self-determine their future. Wehmeyer, Shogren, Palmer, Williams-Diehm., Little and Boulton (2012) found that the Self-Determined Learning Model of Instruction had a positive impact on student goal attainment and student self-determination. Shogren, Palmer, Wehmeyer, Williams-Diehm., and Little (2012) suggested that the Self-Determined Learning Model of Instruction strategies could also work to improve students' self-determination in other areas than secondary transition or academic goal planning. Secondary transition is an important time for students with disabilities because, unlike in secondary education where the disability coordinators are advocates for the students, students have to become their own advocates after they leave

secondary school unless they proactively seek out services from an organization in the state of Florida that can assist them up until the age of 24 (Peterson et al., 2013). Every student with a disability, not solely the Deaf/Blind or Dual-Sensory Impaired population, has to self-disclose their disability or disabilities in order to receive services or other accommodations while in pursuit of postsecondary training or education (Peterson et al., 2013). If self-determination and other advocacy skills are not taught to students with disabilities during the secondary transition period, "it is very unlikely [the student] will receive the accommodations that are needed in the post-secondary arena" (Naugle, Campbell, & Gray, 2010, p. 14). Students may require the use of different accommodations based on current educational or vocational goals and accommodations that might have worked during secondary education might not work for all assessments or all courses in postsecondary education or vocational settings (Horvath et al., 2005).

Roles of School Districts and Government Agencies

When assisting a student during secondary transition there are different roles and services that the school district and government agencies are responsible for providing. For students between the ages of 14 and 17, the school district the individual attends is most likely to be responsible for most services in secondary transition ("Checklist for students"). Some people will have the assistance of a government agency also during this period called the pre-transition period. The tasks of the school district while the student is in school consist of teaching the student about the student's Deaf/Blind disability, assisting in creating and fulfilling goals of the Individualized Education Program, discussing what options the student has in order to receive a regular diploma or special diploma, meeting with the school district's vocational counselor,

attending an Individualized Education Program meeting, accumulating information from the postsecondary programs the student is interested in, learning about the student's interests in certain careers and assessing the anticipated job availability for the future, assisting the student in looking at careers, asking the student if any career exploration has occurred up to this point, and possibly applying for vocational services at 15 years old ("Checklist for students"). When the student is 16 and 17, it is the responsibility of the school district to invite all necessary parties including the student and vocational rehabilitation agencies if relevant, to update Individualized Transition Program plan, assist the student in looking at relevant skills for future employment, apply for other agency services that might be useful in the future, assist the student in registering to vote, apply for vocational rehabilitation services if not completed earlier, and look at guardianship possibilities for the future ("Checklist for students").

One problem is the lack of coordination between the students' counselor and advisor in high school and the training program or college program that welcome those students that are Deaf/Blind. Previous research by Agran, Cain, and Calvin (2002), Bowen and Glenn (1998), Deshler and Schumaker (2006), and Scarbourough and Gilbride (2006), argued that "collaboration with vocational rehabilitation counselors is necessary to ensure successful post-secondary transitions for students with disabilities, but often does not exist" (as cited in Naugle, Campbell, & Gray, 2010, p. 8). An important aspect of collaboration is collaborative problem solving. Collaborative problem solving is "fundamental to successful interactions with colleagues" and "the skills can be learned through practice" (Knackendoffel, 2005, p. 4). Collaboration between agencies and school districts is important during the secondary transition

period for students with disabilities. High school counselors and vocational rehabilitation specialists or counselors play an important role during the secondary transition period.

High school counselors play an important role for students with disabilities during the secondary transition period. Some tasks of school counselors could include providing resources or referrals where students can receive assistance in funding, or where to locate job coaches or job placement programs (Naugle et al., 2010). A counselor can also assist the student in contacting school or training programs and inform the student to as to what disability services the program offers (Naugle et al., 2010). Other services high school counselors can provide include teaching the student assertiveness by role playing different college likely scenarios, administer and explain results from aptitude or career tests, and assist in developing resumes and applications for future postsecondary ventures (Naugle et al., 2010). High school counselors are also able to provide group and individual counseling and review an individual's Individualized Transition plan in order to ensure that curriculum is being matched with the student's goals for the future (Naugle et al., 2010). According to the National Secondary Transition Technical Assistance Center (2008) there are three types of postsecondary goals (Mazzzotti, Rowe, Kelley, Test, Fowler, & Kohler, 2009). Types of postsecondary goals include education, employment, and independent living (Mazzzotti et al., 2009). Examples of education goals include enrolling in technical, vocational, short-term training program, or earning a certificate (Mazzotti et al., 2009). Employment goals may include obtaining a competitive occupation, enrolling in supported employment, or working on a part or full time schedule (Mazzotti et al., 2009). Independent living goals could include learning how to manage money, participate in the community and self-advocacy among many other possibilities (Mazzotti et al., 2009). Depending on when a student

applies for vocational rehabilitation, the postsecondary goals can be created with either the high

school counselor or the vocational rehabilitation counselor at a government agency.

Another problem with collaboration occurs between school district counselors and a state

agency is that "a consistent use of common terminology related to transition is needed. For

instance, a transition specialist in one district may have distinctly different duties from those of a

transition specialist in another district" (Repetto, Webb, Garvan, & Washington, 2002, p. 135).

Vocational rehabilitation counselors perform similar duties as school district personnel and

special educators, but they also perform duties to assist a student in finding work experiences,

job placement, job coaches, and job exploration, administer and interpret additional vocational

assessments, and assist in developing and implementing the employment plan ("Post-secondary

transition manual," 2011). Depending on if the student is still in secondary school or transitioned

into post-secondary education or training between the ages of 18 and 22, it is the school district's

or agency's responsibility to assist the student in getting some state form of identification, apply

for social security and if a male selective service, assist in voting or registering to vote, and assist

the student in identifying skills needed for desired occupation ("Checklist for students," 2015). If

a student is still in the school district, it is the district's responsibility to make sure that the

student is receiving a free and appropriate public education, assistive technology, and specialized

instruction before the student turns age 22, graduates with a regular diploma, or exits high school

with a special diploma ("A guide for transition youth," 2015).

Vocational rehabilitation specialists or counselors perform their own functions during the

secondary transition period for students with disabilities. After exiting high school, some

responsibilities of the government agency to assist the student are making sure the student has

the correct or best fit of assistive technology devices and training, assisting the student in finding on-the job training, work experience, job placement, and acting as a job coach ("A guide for transition youth"). In addition, the government agency should assist the secondary transition student if workplace accommodations are needed or short-term psychological or medical assistance is desired ("A guide for transition youth," 2015).

Postsecondary Goals. Postsecondary goals for individuals with disabilities vary based on the individual's Individualized Education Plan (IEP), and interests for his or her future (Carter et al., 2014; Nelson, 2005) One goal of a secondary transition programs is that all students, not just students with disabilities, need to become their own self-advocate, competent in their skills and become more independent in order to provide for themselves, which are ultimately goals of federal and state vocational rehabilitation programs (Bruce & Parker, 2012; Singletary, Goodwyn, & Carter, 2009; Zimmerman, 1990). Students with disabilities, unless already accepted into a secondary transition program through a state or federal program, or through a school are tasked with identifying themselves with a disability to obtain the services they need in order to be successful in school. Unless they have a counselor or advisor assisting them, students are responsible for obtaining their services during the secondary transition period.

Another goal of postsecondary training and education programs is that people become "productive members of society as adults" (Householder & Jansen, 1999, p. 52). The presence or absence of self-advocacy, self-efficacy, self-regulation, self-awareness, and self-determination skills influence the success of individual students during transition from secondary to post-school opportunities for people with disabilities (Butler, 1998; Hall & Webster, 2008; Lindstrom, Doren, & Miesch, 2011; Madaus et al., 2011; Reed et al., 2009). Independence, another goal of

secondary transition after secondary school for people with and without disabilities, along with self-determination, self-regulation, self-advocacy, self-efficacy and self-confidence, are important factors that influence the success of a person with disabilities in postsecondary education or vocational attainment (Betz, 2004; Bruce & Parker, 2012; Butler, 1998; Hall & Webster, 2008; Kleinert et al., 2014; Lindstrom et al., 2011; Madaus et al., 2011; Rothman et al., 2008; Shogren et al., 2012; Singletary et al., 2009; Wehmeyer & Abery, 2013; Wehmeyer & Gragoudas, 2004; Wehmeyer et al., 2012).

Best Practices

Best practice studies and predictor studies for all disabilities during the secondary transition period have been conducted using meta-analysis and correlational data, but not best practices or predictor variables for those that are Deaf/Blind (Mazzotti, Rowe, Sinclair, Poppen, Woods, & Shearer, 2015). Best practices in secondary transition for all disabilities in general consist of finding an individual student's strengths; learning about individual needs, and looking at the student with disabilities from many different perspectives in order to obtain a complete picture in order to improve the chance of post-school activities success (Carter et al., 2014). Prior research found that actively involving youth in secondary transition planning, family involvement in the secondary transition process, parental expectations for attending either postsecondary school or becoming employed, functional academics, ethnicity, family income, urbanity of the school attended, interagency involvement, work experience, instruction in life skills, guiding students in personal futures planning, and self-determination strategies are key strategies or factors for post-school success for students with intellectual, learning or

developmental disabilities (Carter et al., 2014; Hughes, Cosgriff, Agran, & Washington, 2013; Nelson, 2005; Papay & Bambara, 2014).

Every program will have "minimal" services provided but the ideal is to provide the "best" services possible, based on the "best practices" for special needs students. The following services should be provided by every Division of Blind Services district in the state of Florida. It is assumed that every district is providing these minimal services to all Deaf/Blind vocational rehabilitation clients:

information, advocacy, and referral to agencies with appropriate services, vocational evaluation, and career counseling, assessment and training in the use of software designed for persons with visual impairments so they can effectively use computers, use of low-vision devices that may maximize the use of existing vision, equipment needed for training or employment, training to safely explore new environments and utilize public transportation, training in self-care skills such as cooking, cleaning, measuring, and clothing identification, employment readiness and job search training, [and] summer programs encompassing social and work experience. (Florida Agency for Persons with Disabilities, 2010)

Services that are not assumed and considered best practice consist of self-determination, relationship building, and exiting high school with a diploma, inclusion in the general education classroom, interagency collaboration, and family support. Questions in the assessment instrument focused on areas of self-determination, relationship building, family support, inclusion in general education classroom, obtaining a high school diploma, and interagency collaboration.

Best practices during secondary transition and while in the secondary transition period are an important step in maximizing a student's potential after secondary school is completed (Diehm, W-. & Lynch, 2007). Research by Bird, Foster, and Ganzglass (2014) predicts that by 2020 approximately "two-thirds of jobs will require a postsecondary education" (p. 6) which makes the secondary transition period to postsecondary training or educational opportunities important to future success. From an economic standpoint, people with higher education or more credentials are more likely to earn higher wages and have reduced chances for unemployment (Bird, Foster, & Ganzglass, 2014).

Deficiencies in the evidence. Lack of trained specialists working with the Deaf/Blind population and poor communication between agencies working with the Deaf/Blind are reasons why research in *best practices* is limited for the specific Deaf/Blind population (Marks & Feeley, 1995). Papay and Bambara (2014) discussed best practices for students and service providers applying best practice to the secondary transition period of a student who either graduated from secondary school or aged out of the system. Papay and Bambara (2014) defined best practices as "a number of components that are considered essential in planning and providing support for the transition to adult life" (p. 136). There are many studies on student involvement or participation in secondary transition services with students with general disabilities but there are no studies on secondary transition services and a student's post graduate success if a student is Deaf/Blind and attending postsecondary education or training (Lindstorm et al., 2011; Madaus et al., 2011; Marks & Feeley, 1995; Phillips, Hile, & Jardes, 2013). Additionally, there are best practices for working with students with learning disabilities, developmental disabilities, intellectual disabilities, and special education in general but there are not best practices for students with

low-incidence disabilities such as Deaf/Blind or disabilities described as more severe in nature (Carter et al., 2014; Marks & Feeley, 1995; Montgomery, 2006; Papay & Bambara, 2014).

According to various studies, one reason why there is a lack of literature is due to the different ways of diagnosing Deaf/blindness (Dalby. Hirdes, Stolee, Strong, Poss, Tjam, Bowman, & Ashworth, 2009a; Dalby. Hirdes, Stolee, Strong, Poss, Tjam, Bowman, & Ashworth, 2009b; Dammeyer, 2010; Fellinger, Holzinger, Dirmhirn, van Kijk & Goldberg, 2009; Hoevenaars van de Boom, Antonissen, Knoors and Vervloed, 2009; McKenzie, 2009). People diagnosed with Deaf/Blindness can be diagnosed based on functional or medical assessments (Dammeyer, 2010; McKenzie, 2009; Moller, 2003; Moller & Danermark, 2007; Ronnberg & Borg, 2001). Different countries chose their own method to identify and diagnose a person that is Deaf/Blind (Ronnberg & Borg, 2001). Due to inconsistency in methods to diagnose Deaf/Blindness and misdiagnosis of intellectual disability or autism, the number of people identified as Deaf/Blind is very low (Dammeyer, 2010; Fellinger et al., 2009; Hoevenaars van de Boom et al., 2009; Vernon, 2010). If assessment of autism, intellectual disability and Deaf/Blindness were classified or differentiated even further there might be more people identified as Deaf/Blind (Dalby et al., 2009a; Dammeyer, 2010; Fellinger et al., 2009; Hoevenaars van de Boom et al., 2009; Vernon, 2010).

Another setback to identifying and researching the Deaf/Blind population is deciding who to include in the study. The study could include only those with congenital Deaf/Blindness, only those with acquired Deaf/Blindness or both groups of people identified as Deaf/Blind regardless of etiology (Dalby et al., 2009b; Dammeyer, 2010; Moller, 2003; Moller & Danermark, 2007). Communication and mobility are two additional hardships for both the

researcher and participant while conducting research but are feasible for the ensuing research study (Papay and Bambara, 2014; Pena, 2014; Vernon, 2010).

Self-Determination and Transition

Teaching students self-determination strategies while attending secondary school has become best practice in the field of special education and secondary transition services. Prior research suggested that "students with disabilities can learn the skills that enable them to become more self-determined" (Wehmeyer, 2014, p. 179). As required by law during the secondary transition process, students are required to attend meetings in order to provide input on what they want to accomplish in the future and with the Individualized Education Program team how that will be accomplished (Hughes, Cosgriff, Agran, & Washington, 2013). Discussing one's likes and passions is the first step in practicing self-determination strategies before use in postsecondary education or training (Agran & Hughes, 2008; Getzel & Thoma, 2008; Hughes et al., 2013). Self-determination strategies consist of "problem-solving skills, learning about oneself (and one's disability), goal setting, and self-management" (Getzel & Thoma, 2008, p. 80) in order to advocate for one's needs. In addition, focus groups as part of Getzel and Thoma's (2008) study suggested that seeking services, forming relationships, development of support systems, and self-awareness were important to student success in postsecondary education. Other self-determination skills or strategies that have been researched include setting goals, making choices, reinforcement of oneself, self-instruction, self-evaluation, self-monitoring, and problem solving (Agran & Hughes, 2008). All those strategies and skills assist a person in becoming self-determined suggesting that those skills and strategies will positively impact future success (Agran & Hughes, 2008; Getzel & Thoma, 2008). Self-determination in students has been found

to positively impact future success for students after completion of secondary school (Hall & Webster, 2008; Madaus, Luby, F-., & Dukes, 2011; Shogren, Palmer, Wehmeyer, Diehm, K.W-., & Little., 2012; Wehmeyer, Palmer, Diehm, W-., Shogren, Davies, & Stock, 2011; Wehmeyer, Shogren, Palmer, Diehm, W-., Little, & Boulton, 2012; Wehmeyer & Abery, 2013; Wehmeyer & Gragoudas, 2004). One goal of the secondary transition period is to "develop strategies for a high-quality lifestyle that provides the opportunity to live, work, and play in the community, and to have meaningful personal relationships" (Householder & Jansen, 1999, p. 53). Research by Wehmeyer, Palmer, Williams-Diehm., Shogren, Davies, and Stock (2011) suggested a positive correlation between use of technology during the secondary transition period and scores of students on the AIR Self-Determination Scale suggesting that technology use could positively impact and increase a student's self-determination. Technology use, through many different modes of presentation, which presents information through concepts of the Universal Design for Learning, has potential to engage more students in secondary transition planning exercises in turn increasing a student's self-determination skills and increasing the odds for success for the future (Wehmeyer, Palmer, Diehm, W-., Shogren, Davies, & Stock, 2011). More research in the area of technology's role in self-determination skills of students during secondary transition is needed because the relationship is in its early exploration stage (Wehmeyer et al., 2011).

Family Support

Family participation. The participation of family members can contribute positively to a student's increased chance for success after secondary school. Previous research has suggested that parent or family involvement is an important factor in transition and is considered a best practice (Zhang, Ivester, Chen, & Katsiyannis, 2005). Wehmeyer's (2014) research suggests that

"the support from families during adolescent development is critical in the development of greater self-determination, the emergence of which is an important aspect of becoming autonomous and self-governing" (p. 178). The Deaf/Blind population could be considered vulnerable because "the specific challenges they confront… [Are] over and above those faced by young people generally" (Osgood, Foster, & Courtney, 2010, p. 210). Parental or family support can be a protective factor and impact the student with disabilities' post-school success (Osgood et al., 2010). Parental involvement could include attending Individualized Education Program meetings, or being involved in his or her child's post-secondary planning (Test, & Cook, C-., 2012). Due to the multiple sensory impairments a Deaf/Blind child experiences, families of children with multiple disabilities often have to collaborate with many different agencies from which the child receives services (Chen, 2004). Oftentimes, facilities and other community agencies are part of a child's service plan (Riester, 1992). Interagency collaboration is involved in making sure all the student's needs are met and "involves developing relationships with multiple parties including students, parents, other family members, special educators, general educators, vocational rehabilitation counselors, independent living counselors and other adult service providers" (Test, & Cook.-C., 2012, pp. 34-35). With the introduction of multiple stakeholders, it is important for roles and responsibilities for each agency or person to be discriminant from other agencies that are collaborating for the good of the student in order for the likelihood of better success (Oertle, & Seader, 2015). Riesen, Morgan, Schultz, and Kupferman (2014) suggested that "training should be designed to help special education teachers, rehabilitation counselors, and adult service providers understand and appreciate each other's roles and responsibilities" (p. 41). It is important for responsibilities to be delineated and

clarified because training received by professionals working at community rehabilitation, and independent living programs can differ depending on the location and available resources (Oertle, & Seader, 2015).

Student Participation

Numerous studies have found that student involvement or participation in the secondary transition period can have a positive impact on the student's post-graduate success (Diehm & Lynch, 2007; Householder & Jansen, 1999; Rothman, Maldonado, & Rothman, 2008; Williams & Lynch, 2007). CRPs or Community Rehabilitation Providers, which are typically private, non-profits, such as the county's local Lighthouse, collaborate with state agencies, both Division of Blind Services and Vocational Rehabilitation programs (FLDOE, 2015) provide services to students with vision and hearing impairments. Services provided by CRPs for students in the secondary transition period, include

> Assessment, activities of daily living, assistive technology training, communication skills training, community integration, counseling services, information and referral, job coaching, job readiness, low vision training only if applicable, management of secondary disability [if needed], orientation and mobility training, recreation and leisure activities training, related transition activities and self-advocacy training. (Lighthouse Central Florida, n. d.)

Depending on the disability that is more severe in a Deaf/Blind client, hearing or vision, the client is referred to either the Division of Blind Services or Vocational Rehabilitation (J. Whitehead, personal communication, June 12, 2015). The client can also be placed as dually diagnosed under both the Division of Blind Services and the Division of Vocational

Rehabilitation (J. Whitehead, personal communication, June 12, 2015). The party responsible for

the client's funding is the party in which the client's disability was considered most severe; in

certain situations, funding can be split between the Division of Blind Services and the Vocational

Rehabilitation program (J. Whitehead, personal communication, June 12, 2015).

When students join a secondary transition program or a vocational rehabilitation

program, depending on the age in which they apply and qualify for services, a comprehensive

vocational evaluation is required by federal and state law (Koscuilek, Prozonic, & Bell, 1995;

Price, Harley, & Alston, 1996; Rehabilitation Act, 1973; Sitlingtonm 1994). The responsibility

of the Individualized Transition Education Planning Program resides with the Individualized

Education Program Plan Team, the Functional Assessment Team, or a Personal Futures Planning

Team, which are comprised of multidisciplinary members (Everson, 1995). The Rehabilitation

Act of 1973 states:

> A vocational assessment is an individualized process that reflects an individual's
>
> physical, mental, and emotional abilities, limitations, and tolerances. In accordance with
>
> federal law, the rehabilitation counselor is required to conduct a comprehensive
>
> vocational assessment for the purpose of gathering information that will assist and
>
> empower the individual in making decisions. The assessment provides information on the
>
> unique strengths, resources, priorities, concerns, interests, abilities, capabilities, and the
>
> potential need for supported employment. This information is used to increase the
>
> individual's knowledge of his/her capacities so appropriate and informed choices can be
>
> made during the rehabilitation process. It enables the individual to identify an optimal
>
> vocational outcome and to reach their maximum potential. The comprehensive vocational

assessment must be limited to information that is necessary to determine eligibility, identify the rehabilitation needs of the individual, and to plan services or activities that are required to assist the individual to become employed. (Rehabilitation Act, 1973)

Based on the more severe sensory problem in a Deaf/Blind person, the appropriate agency will set up the comprehensive vocational assessment and create an Individualized Transition Education Program Plan in accordance with other relevant state and non-profit agencies (J. Whitehead, personal communication, June 12, 2015). If a person's disabilities are too severe for a comprehensive vocational assessment which "assesses the individual's strengths, interests, and support needs, [the functional assessment] focuses on the abilities of the individual" and is utilized rather than standardized assessments given to those without disabilities (Decola, 1997, p. 51). A functional assessment is used when a students' disability does not allow for the use of standardized assessments (Decola, 1997). In addition, functional assessment can be described as looking to see what the person has mastered, and what steps need to occur before the person can move on to the next step (Browning & Brechin, 1993; Decola, 1997). A functional limitation is defined as "the inability to perform an action or a set of actions, either physical or mental, because of a physical or emotional restriction" (Szymanski & Parker, 2003, p. 203). Even though a person with a disability was administered a comprehensive vocational assessment or functional assessment does not mean that the person's Individualized Transition Education Planning Program will align with the individual's comprehensive vocational evaluation, recommended work experiences, skills training, and job employed after successful closure (90 days working) of the individual's case (Kosciulek, Prozonic, & Bell, 1995). Kosciulek, Prozonic, and Bell (1995) studied the relationship between what is a client's

Individualized Transition Education Program Plan and the individual's comprehensive

vocational evaluation and found that "less than half of the subjects obtained jobs that were

congruent with the jobs recommended in their vocational evaluation reports" (p. 22) which

could potentially affect future employment success rates. After finding successful closed cases,

which were comprised of individuals who had received a comprehensive vocational evaluation

and participated in vocational skills training, the researchers looked at the client's closed cases at

the state agency and compared them based on the client's job at successful closure, vocational

training given to the client, results from the comprehensive vocational assessment, and job

recommendations (Kosciulek et al., 1995).

Supportive Employment

There is an alternative option available to people with the most severe disabilities while

in a transition program. The alternative option for the people with the most severe disabilities is

supported employment. Supportive employment can be defined as:

Ongoing support services, sometimes called follow-up, are intended to enhance the long-term

maintenance of skills that are directly or indirectly critical to the job and enhance the flexibility

of the supported employee in adapting to changes. Ongoing support also continually reassesses

the appropriateness of the match between the person and the job. To ensure they meet these

goals, providers work with employers to identify potential problems and intervene early by

providing on-the-job intervention or coordinating intervention by others. (Szymanski, & Parker,

2003, p. 395)

Supportive employment is different than typical vocational rehabilitation because an

"essential aspect of [supportive employment] is that without support services, these individuals

are unable to obtain and maintain competitive employment" (Szymanski & Parker, 2003, p. 376).

One big difference between supported employment for individuals with severe disabilities and

integrated competitive employment is the duration of the support services. For instance, "in

supported employment, ongoing support is not time limited because of the nature and severity of

the disabilities of the supported workers. Ongoing support services are provided to the individual

and the environments that support his or her work" (Szymanski & Parker, 2003, p. 376).

Supportive employment is an option for people with the most severe disabilities.

    Secondary transition planning period. Bruce and Parker (2012), Kleinert et al. (2014),

Madaus et al. (2011), Shogren et al. (2012), Wehmeyer et al. (2012), Wehmeyer and Abery

(2013), and Wehmeyer and Gragoudas (2004) discussed the importance of self-determination

and decision making by the individual with a disability in the secondary transition planning

period and its positive impact on independence and future goal attainment in the educational and

vocational spheres. Rothman et al. (2008) and Singletary et al. (2009) discussed the importance

of student self-confidence during the secondary transition period for students with disabilities

future success. Butler (1998) and Hall and Webster (2008) explored the need for metacognition

and self-regulation in tackling the secondary transition planning process which consists of many

tasks and specific goals that need to be utilized for a successful postsecondary transition to occur.

Betz (2004), Lindstrom et al. (2011) and Madaus et al (2011) discussed the importance of self-

efficacy to a postsecondary student's future independence in education and work success through

self-advocacy of needs and services required for success.

    Background and justification. The research in the study will use a quantitative survey

design. Studies by Arndt (2010), Pena (2014), and Williams and Mavin (2015), discussed the

need for more research in the areas of postsecondary education and academic careers of those with disabilities. Even though many people with disabilities, including Deaf/Blind students, attend secondary or postsecondary vocational education, there is not a lot of research about what the Deaf/Blind population encounters in postsecondary education and the secondary transition period. According to Getzel and Thoma (2008), "although the gap for high school completion is closing between individuals with and without disabilities, this trend is not the case in higher education" (2008, p. 77). Pena (2014) and Williams and Mavin (2015) discussed the need for more scholarly research and how an impairment or a disability affects a person's success after completion of secondary school. In addition, Carter, Brock, and Trainor (2014) discussed the importance of transition services for students from completion of secondary education to the beginning of postsecondary education. Arndt (2010) also addressed the need for more information for Deaf/Blind students and service providers before postsecondary decisions are made. According to a content analysis by Pena (2014)

Articles about students with disabilities published from 1990 to 2010 represent only 1 % of the articles published in *The Review of Higher Education*, *The Journal of Higher Education*, and *Research in Higher Education*, and *The Journal of College Student Development*. (p. 36)

 It is important to note that *The Journal of College Studies Development* contained the most articles about students with disabilities published from 1990 to 2010 (Pena, 2014). Pena (2014) pointed out the discrepancy between articles of studies with disabilities in top-tier articles with the increasing number of students with disabilities attending postsecondary education as a cause for concern due to the articles' impact on policies, procedures and overall impact on students with disabilities or in marginalized groups.

Studies discussed lack of knowledge about secondary transition services from both providers, in secondary and postsecondary institutions, and students' lack of awareness and understanding of available resources have been barriers for students and providers in the past to transition students into the next phase of their life (Peterson et al., 2013). Williams and Mavin's (2015) research discussed how people with disabilities' perception of the world shaping around them and response to them can affect future employment choices and opportunities after secondary school. Peterson et al. (2013) also discussed the importance of people with disabilities being knowledgeable about their rights and responsibilities after graduation from secondary school which is in accordance with Arndt's (2010) research specifically working with the Deaf-Blind. Arndt's study (2010) focused on Deaf/Blind and postsecondary education recommendations for best practices for students and providers based on respondents' answers to semi-structured interview questions. The concept of secondary transition services was addressed by the Individuals with Education Act of 1990 to increase success of youth with disabilities after secondary school (Carter et al., 2014; Papay & Bambara, 2014). After completing research, Papay and Bambara (2014) discussed the need for more experimental and qualitative research into secondary transition services but other factors such as time, and resources available could impede further research (Kamenopoulou, 2012; Parker et al., 2007; Prain et al., 2011). More research is needed in order to increase the chance for academic success for students with disabilities. (Ebanks, V.-T., 2014). Research is especially warranted in specific low-incidence disabilities such as Deaf/Blind in order to create best practices or procedures for providers and students that are Deaf/Blind and in the secondary transition process. (Marks & Feeley, 1995).

Audience. This research is intended to benefit the Deaf/Blind in Florida through dissemination to state, non-profit, for-profit, private, and federal agencies that work to assist these special populations in obtaining education, and becoming more independent and ideally obtaining a job or career.

Purpose of the Study

The purpose of the study is to assess the training needs of Deaf/Blind service providers in the areas of vocational rehabilitation and independent living in Florida. The findings will show what will need to be done related to professional development for Deaf/Blind providers in Florida. The findings will suggest areas of strength and areas that Deaf/Blind providers perceive they need more professional development training. The end outcome of the study will to be to assist state, and federal agencies along with non-profits and for-profits in meeting the needs of the Deaf/Blind population receiving vocational rehabilitation and independent living services in Florida. This research study is intended to assist providers in improving services to the Deaf/Blind population in Florida through professional development.

Objectives of the Study

In the past five to ten years research in the general area of Deaf/Blindness has increased but there are still some deficiencies. The purpose of the proposed study is for the principle investigator to assess the training needs of Deaf/Blind service providers in the areas of vocational rehabilitation and independent living in Florida. One objective of the study was to use the study's findings to improve professional development and therefore provided services to the Deaf/Blind population in Florida through dissemination of information to relevant agencies. A

second objective of the study was to add to the limited or scant literature on best practices for

Deaf/Blind providers in Florida.

Definition of Terms

Some important terms when dealing with the state or federal government are defined below.

Adult education. Is defined as "academic instruction and education services below the postsecondary level that increases an individual's ability to read, write, and speak in English and perform mathematics or other activities necessary for the attainment of a secondary school diploma or its recognized equivalent; transition to postsecondary education and training; and obtain employment" (Bird, Foster, & Ganzglass, 2014, p. 32).

Axial coding. Is used to "explore how categories and subcategories relate to each other" (Saldana, 2009, p. 209).

Best practices. Are "a number of components that are considered essential in planning and providing support for the transition to adult life" (Papay & Bambara, 2014, p. 136).

Career pathways approach. Is defined as "the organization of rigorous and high-quality education, training, and other services to align with state or regional needs and help individuals with different needs accelerate their educational and career advancement" (Bird et al., 2014, p. 11). The career pathways approach utilizes best-practice service models (Bird et al., 2014).

College. The term college is allowed to be used "in its name if it offers, or if a new applicant for licensure proposes to offer, as the majority of its total offerings and student enrollments, an academic associate degree, a baccalaureate degree, or a graduate or professional degree" (Standards and Procedures for Licensure, 2014).

Deaf-Blindness. According to the Code of Federal Regulations Deaf-Blindness is defined as "concomitant hearing and visual impairments, the combination of which causes such

severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness" (Child with a Disability, 2004).

Deaf or Hard-of-Hearing. "A student who is deaf or hard-of-hearing loss aided or unaided, that impacts the processing of linguistic information and which adversely affects performance in the educational environment. The degree of loss may range from mild to profound" (FLDOE, 2015). Deaf or Hard-of-Hearing is defined as "a sensorineural hearing loss with an unaided pure tone average, speech threshold, or auditory brainstem response threshold of 20 Decibels hearing level (HL) or greater in the better ear or a conductive hearing loss with un aided pure tone average or speech threshold of 20 Decibels hearing level (HL) or greater in the better ear persisting over three months or occurring at least three times during the previous 12 months as verified by audiograms with at least one measure provided by a certified audiologist or a unilateral sensorineural or persistent conductive loss with an unaided pure tone average or speech threshold of 45 Decibels hearing level (HL) or greater in the affected ear. Or a sensorineural hearing loss with unaided pure tone thresholds at 35 Decibels hearing level (HL) or greater at two or more adjacent frequencies (500 Hertz, 1000 Hertz, 2000 Hertz, or 4000 Hertz) in the better ear" (Minnesota Resource Center for the Deaf and Hard of Hearing, 2008).

Dual-Sensory impairment. "A student who has dual-sensory impairments affecting both vision and hearing, the combination of which causes a serious impairment in the abilities to acquire information, communicate, or function within the environment, or who has a degenerative condition which will lead to such an impairment" (Florida Department of Education, 2015).

Florida student. Is "any student enrolled at a Florida campus of a licensed institution and for distance education, a student whose mailing address for purposes of receiving distance education lessons and materials from the school, is a Florida address" (Definition of Terms, 2014).

Individuals with Disabilities Education Act. Stated "transition services must be addressed within the Individualized Education Program (IEP) of each student 16 years of age and older—or younger, if the IEP team considers it to be appropriate" (Powers et al., 2005, p. 47).

Institution. Is defined as "any college, university or postsecondary career school under the jurisdiction of the Commission" (Definition of Terms, 2014).

Integrated education and training. Is defined as "a service approach that provides adult education and literacy activities concurrently and contextually with workforce preparation activities and workforce training for a specific occupation or occupational cluster for the purpose of educational and career advancement" (Bird et al., 2014, p. 34).

Minor modification. Is defined as "a change to programs and curricula intended to keep educational material up to date and relevant to the changing needs of employers, when such modifications affect less than 20 % of the program or curriculum and do not change the purpose or direction of the program; or providing a previously approved program as contract training" (Definition of Terms, 2014).

Noncollegiate. "A nonpublic career school licensed by the Commission to offer certificate or diploma programs" (Definition of Terms, 2014).

Occupational completion point. Is "the occupational competencies[s] that qualify a person to enter an occupation that is linked to a career and technical program" (Definitions, 2014).

Postsecondary educational institution. As "an institution of higher education that provides not less than a 2-year program of instruction that is acceptable for credit toward a bachelor's degree; a tribally controlled college or university; or a nonprofit educational institution offering certificate or apprenticeship programs at the postsecondary level" (Cornell Law School, 2015).

Secondary Transition. Is defined by the Florida Department of Education as "the process a student with a disability goes through as they move from high school to whatever comes next, including postsecondary education, employment, and independent living. In Florida this begins at age 14 or earlier and may not end until 22 for students with significant disabilities" (2015).

Self-Advocacy. Is "understanding the nature of one's disability, being aware of legal rights and responsibilities, and competently communicating needs and rights to persons in authority" (Madaus et al., 2011, p. 78).

Self-Determination. Is "[exerting] control in one's life by promoting goal setting, problem solving, decision making and self-advocacy skills" (Wehmeyer & Gragoudas, 2004, p. 54).

Self-Efficacy. Is "context-specific judgments regarding one's ability to complete future academic tasks" (Madaus et al., 2011, p. 77) or the competence of an individual to perform a task (Hall & Webster, 2008).

Self-Regulation. Is used by people who "set task-specific goals, which they use as a basis for selecting, adapting, or even inventing appropriate strategies to accomplish their objectives" (Butler, 1998, p. 682).

Skill gains. Is used as an instrument to measure skills gained while in an education or training program (Bird, Foster, & Ganzglass, 2014).

Transition. Is "a process of preparation and support involving educators, vocational counselors, adult service agencies, parents and employers throughout secondary education leading into post-graduation experiences" (Householder & Jansen, 1999, p. 52).

Transition services. The term from IDEA 2004 means "a coordinated set of activities for a student with a disability that is designed within a results-oriented process that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living or community participation; is based upon the individual's student's needs, taking into account the student's preferences and interests; and includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation" (Johnson, 2005, pp. 60-61).

University. The term University can be used "if it offers, or if a new applicant for licensure proposes to offer, as the majority of its total offerings and student enrollments, a range of undergraduate degree programs and multiple graduate degree programs; of if only graduate

degrees are offered, a minimum of three graduate degree programs" (Standards and Procedures for Licensure, 2014).

Visual Acuity. As "the clinical measure of the eye's ability to distinguish details of the smallest identifiable letter or symbol. This measurement is usually given in a fraction and is based upon visible print size. Typical visual is 20/20. If an individual sees 20/200, the smallest letter that this individual can see at 20 feet could be seen by someone with typical vision at 200 feet" (AFB, 2015).

Visually Impaired, Blind, or Partly Sighted. As "students who are blind, have no vision, or have little potential for using vision or students who have low vision. The term visual impairment does not include students who have learning problems that are primarily the result of visual perceptual and/or motor difficulties" (FLDOE, 2015). A visual impairment is defined as "a visual acuity of 20/70 or worse in the better eye with best correction, or a total field loss of 140 degrees" (AFB, 2015). Legally blind defined as "central visual acuity must be 20/200 or less in the better eye with the best possible correction or that the visual field must be 20 degrees or less" (NFB, 2015).

Vocational education. As "preparation for careers requiring less than baccalaureate degrees" (U.S. Department of Education, Office of the Under Secretary, 2014, p. 5). In addition, vocational education is defined as a contributor to "high school completion, entry into postsecondary education and training, postsecondary degree completion, and employment and earnings. Programs funded under the [Perkins Law] are expected to increase participation and success in programs leading to nontraditional training and employment" (U.S. Department of

Education, Office of the Under Secretary, 2004, p. 9). Vocational education in the postsecondary level compared to the secondary level is defined as, "to provide or improve job-related skills that enable individuals to enter the labor market, switch jobs, or advance in their current field. Policy encourages participants to complete a postsecondary program and earn a certificate, associate degree, or higher degree as a way to enhance their earnings" (U.S. Department of Education, Office of the Under Secretary, 2004, p. 165).

  Workplace adult education and literacy activities. Is defined as "adult education and literacy activities offered by an eligible provider in collaboration with an employer or employee organization at a workplace or an off-site location that is designed to improve the productivity of the workforce" (Bird et al., 2014, p. 34).

Chapter 2: Literature Review

Vocational Rehabilitation Programs Adapting to Current Needs

Vocational Rehabilitation programs have been a part of the nation for a long time and adapt depending on what the current economy's needs are that must be met (U.S. Department of Education, Office of the Under Secretary, 2004). From training people to work in factories and farms to keep up with the increasingly technological society and as a bridge to college success, vocational rehabilitation programs, both state and federal, have changed and adapted and will continue to change and adapt their goals and policies (U.S. Department of Education, Office of the Under Secretary, 2004). Vocational rehabilitation or education goals also depend on the current administration's funding priorities The general goal of vocational education is to "improve students' academic and technical skills, enhancing high school completion, promoting postsecondary enrollment and completion, and ensuring successful labor market entry and retention" (p. xxxviii). Other goals have been job-training and workforce development in order to create a competitive and international job market. Career goals over the years have moved from emphasizing training to be entry-level work for a specific job to training to be in a certain industry or work in a certain career. Depending on the location of the vocational education, secondary or postsecondary institutions, different career academies or certification programs are offered. Location and current economic and education trends also impact what types of vocational, secondary and postsecondary options are available for current students (U. S. Department of Education, Office of the Under Secretary, 2004).

Federal and the State of Florida Vocational Rehabilitation Programs

Federal and state funded programs have certain goals to meet each year in order to be held accountable and continue to receive funding from the federal and local government. One way to meet the goals of the federal and state programs to employ more people is through vocational education. The goal for federal and state funded vocational rehabilitation programs is to, "assist an individual in achieving or maintaining an employment outcome that is consistent with his or her unique strengths, resources, priorities, concerns, abilities, capabilities, interests, and informed choice" (State of Florida, n.d). Some strategies used in vocational education in order to improve employability for students include, "integration of academic and vocational instruction, and all aspects of the industry emphasis, linkages between secondary and postsecondary programs, collaboration with employers, and expanding the use of technology" (U.S. Department of Education, Office of the Under Secretary, 2004, pp. xxviii-xxix). The Rehabilitation Services Administration "considers competitive employment in integrated settings the optimal employment outcome of persons with disabilities" (Warren, Giesen, & Cavenaugh, 2004, p. 16). Bell (2010) and the U.S. Department of Education, Office of the Under Secretary's Report (2004) also emphasized the importance of competitive employment when working with persons with disabilities as part of the Rehabilitation Services Administration and the importance of competitive employment in obtaining insurance and a regular paycheck. Studies found that there is a positive correlation between vocational courses taken by a student one year after graduation and annual earnings. The studies found that "seven years after graduation—students earned almost 2 percent more for each extra high school occupational course they took. That translates into about $450.00 per course, based on average earnings of about $24,000" between 1994 and 2000 (U.S. Department of Education, Office of the Under Secretary, 2004, p. xxii).

The studies by the U.S. Department of Education, Office of the Under Secretary (2004) showed that postsecondary education and training benefitted those with disabilities, considered economically and educationally disadvantaged and to both men and women. The U.S. Department of Education, Office of the Under Secretary (2004) results suggested that "vocational education in community colleges appears to produce a substantial positive effect on earnings for the vast majority of participants" (p. xxxi). Additionally, according to research by Grubb (2002), those who earn a credential when completing vocational education earn more than those who only earn high-school diploma (as cited in U.S. Department of Education, Office of the Under Secretary, 2004). Historically, those that are male with disabilities or come from a rural or economic disadvantaged background are more likely to pursue vocational education (U.S. Department of Education, Office of the Under Secretary, 2004).

Workforce Training Programs

The Workforce Innovation and Opportunity Act (WIOA) signed into law July 2014 has been adapted to help the most vulnerable populations find jobs after the initial Workforce Investment Act (WIA) was made into law in 1998 (Bird, Foster, & Ganzglass, 2014). WIOA increases funding for on-the-job training, requires more funding spent on paid and unpaid work experience, creates a program for credential attainment, starts to measure skill gain, adjusts expectations for states, and steps up accountability by using the threat of financial sanctions (Bird et al., 2014). The new WIOA expands eligibility from ages 14 to 21 for in-school youth that are eligible and expands eligibility from age 16 to 24 for youth that are out-of-school but still eligible for WIOA assistance (Bird et al., 2014). WIOA also expands the definition of adult education by expanding to assist more vulnerable populations that face barriers that impede

economic success (Bird et al., 2014). Restrictions for funding for integrated education and training and workplace adult education and literacy activities is more lax than previously in the Workforce Investment Act allowing more individuals to receive funding (Bird et al., 2014). The Workforce Innovation and Opportunity Act also utilizes the career pathway approach to train and educate students with differing abilities in order to assist them in their career and education goals (Bird et al., 2014).

Theoretical Perspective

The U.S. Department of Education, Office of the Under Secretary (2004) suggested that "about one-third of all students in undergraduate postsecondary education are considered to be in postsecondary vocational programs" (p. xxxiii). Despite those numbers of people with disabilities in vocational, secondary, and postsecondary education, research is scarce due to problems with collecting data and diagnosis of special populations such as Deaf/Blind or Dual-Sensory impaired. According to Arndt (2005), there is a deficiency in research about how to successfully assist the Deaf-Blind population in navigating the challenges of college and other forms of higher education when independence and identity become important to a person's growth, self-efficacy and future success (Arndt, 2005/2010). At a young age, the "need for collaboration between teachers certified in visual impairment and those certified in hearing loss is critical in meeting the child's communication needs" (Chen, 2004, p. 278). The services provided to students that have been diagnosed as Deaf/Blind are important for a student's future successes (Chen, 2004).

A dual sensory disability like Deaf/Blindness has an impact on all facets of a person's life and impacts a person's future. Even though average physiological development was interrupted

due to the low incidence condition of Deaf-Blindness (Gesell & Thompson, 1938), and can cause

problems in the development of a person's self-identity, according to Kohut and Wolf's Self

Psychology Theory (1978), optimal development is still the goal (Gesell & Thompson, 1938;

Kohut & Wolf, 1978). Jacobson (1964) discussed growth and overcoming feelings of shame and

inferiority when a person is not meeting their idea of an ego ideal. Due to Deaf/Blindness,

adaptation is an important factor in optimizing one's growth potential (Anandalakshmy &

Grinder, 1970; Freedman, 1972, 1979; Slavin, 1990). Options to take to become an optimally

developed and independent person can include attending postsecondary training, continued

education or finding an occupation. Many different agencies provide vocational rehabilitation

and independent living services.

The theory based on the problem of irregular physiological development is grounded in

the Study of Child Development (Gesell & Thompson, 1938), Self-Psychology Theory (Kohut &

Wolf, 1978), adaptation (Anandalakshmy & Grinder, 1970; Freedman, 1972, 1979; Slavin, 1990)

and overcoming feelings of shame and inferiority (Jacobson, 1964). Hall (1898) researched the

basis of the study of development. The Study of Child Development Theory was originally

developed by Arnold Gesell and Helen Thompson and was primarily used to study different

approaches to measuring children's growth and the optimization of growth even if a person has

disabilities (Gesell & Thompson, 1938). The Theory of Everyday Competence by Willis (1996)

indicated that every person strives for everyday competence in activities of daily living and

independent living. Before that, Heinz Kohut and Ernest Wolf developed a theory of the

Psychology of the Self (1978), in which the goal is for a "firm and healthy structure [to emerge]"

(p. 414). One important step in developing identity is attending college or receiving higher

education after high school. However, college and postsecondary education are not the only paths to the development of an identity. The military, as are trade schools, and apprenticeship or training in a particular trade are also other possibilities; unfortunately, depending on the severity of the disability, these avenues may be closed to this population. Earning some form of higher education or completing a training program successfully are just two of many ways an individual with a disability can validate their self-worth and build their self-esteem. The person overcomes feelings of inferiority by adapting to the environment in order to sense a feeling of accomplishment. By adapting this individual can become productive, and self-sufficient.

Development

The relationship between a caregiver, usually the mother, and the baby is important "for early social and intellectual development" (Chen & Haney, 1995, p. 216). Due to the failure, in many cases, of hearing and sight to develop normally, some individuals with sight and hearing needs were not always met because communication between parents and child was not always feasible. Self-identity and self-esteem formations are different for people with disabilities, people without disabilities, and people that have multiple disabilities. When parents or caregivers connect or respond to a child who does not have disabilities, self-esteem and self-acceptance starts to emerge forming the child's starting steps to self-identity (Kohut & Wolf, 1978). Due to the inability of the parents to connect or respond to the Deaf/Blind child, the formation of the child's self-esteem is interrupted or fragmented, the child's sense of self can be impeded and result in the child not forming a "firm or healthy structure" as a foundation for self-acceptance (Kohut & Wolf, 1978, p. 414). If a child's needs can't be met when forming an initial sense of self and identity, further problems of self-acceptance, formation of future aspirations, and self-

actualization could present further problems for the future because a firm and healthy self-image did not develop (Goldberg, 1980: Greif, 2000: Jacobson, 1964: Kohut, 1977, 1996: Kohut & Wolf, 1978: Lee & Martin, 1991: Rowe & Issac, 1989: Siegel, 1940: Teicholz: 1999: Wepman & Heine, 1963: White & Weiner, 1915).

Participation in Educational Activities

Participation is an important part of life and educational experiences. According to research by Axelsson, Granlund, and Wilder (2013) "participation is known to be of great importance for all children's development and emotional well-being" (p. 523). Previous research by Hoogsteen and Woodgate (2010) argued that

In order to participate, a child with disabilities must take part in something or with someone, they must have a sense of inclusion, control over what they are taking part in, and be working toward obtaining a goal or enhanced quality of life. (As cited in Axelsson et al., 2013, p. 524)

Participation for those with disabilities, such as the Deaf/Blind, with family members and other people without disabilities is important to developing a sense of self. Moller and Danermark (2007) researched the components and characteristics of the person and the environment in order to find the factors that most influence the educational experience of a student with Deaf/Blindness. For their research Moller and Danermark (2007) used the 1980 Nordic definition stating, "a person is Deaf/Blind when (s) he has a severe degree of combined visual and auditory impairment. Some Deaf/Blind people are totally deaf and blind, while others have residual hearing and residual vision" (p. 43). All students in this study had acquired Deaf/Blindness and not congenital Deaf/Blindness. A questionnaire and checklist was developed with the Association of the Swedish Deaf/Blind and covered areas of contextual or personal and

environmental factors such as demographics and education and lighting and assistive technology available. Functional factors including other environmental aspects not found in the contextual aspects of environmental factors were also addressed (Moller & Danermark, 2007). Moller and Danermark's (2007) research suggested that environmental factors such as lighting, color usage around and in the classroom, hearing devices available, adapted school books available, slower signing by teacher or interpreter and teacher's awareness of special communication needs were environmental factors that could be potential obstacles for Deaf/Blind students. Recognition or awareness of special communication factors and considerateness of the differences in Deaf/Blind students' needs were also significant areas of students' needs according to the Moller and Danermark research study. Research suggested specific factors for each Deaf/Blind student need to be looked at independently in order to address potential postsecondary educational problems that may arise (Moller & Danermark, 2007).

Student Factors on Participation

Kamenopoulou (2012) studied participation and inclusion education practices in a way that is similar to Moller and Danermark's (2007) research. Kamenopoulou utilized mixed method design using direct observation for four case studies, interviews and administering a questionnaire for the head teachers, teaching staff, parents and young people interviewed in the United Kingdom. The research suggested that socially Deaf/Blind students can be excluded due to contextual or personal facets of the student with Deaf/Blindness (Kamenopoulou, 2012). Inclusion and mainstreaming in collaboration with participation are important factors in the success of a Deaf/Blind student in postsecondary educational settings (Kamenopoulou, 2012; Moller & Danermark, 2007). Assessment of Deaf/Blind students' needs was another important

factor in addressing potential academic, social and emotional needs (Horvath, Bohach, & Kearns, 2005). Research by Horvath, Bohach, K.-, and Kearns (2005) examined the use of accommodations in a large-scale assessment system with a Deaf/Blind student population. Horvath et al. (2005) suggested that individual student's needs were not always met, there was a discrepancy between accommodations utilized across settings and what was written down on the Individual Education Program Plan or the student's 504 Plan and that during the observation portion of the research students who are Deaf/Blind were lacking in showing self-determination strategies.

Statistics on Deaf/Blindness

It was estimated in 2010 that there are 9320 Deaf/Blind people between the ages of birth and twenty-one in all 50 states and Puerto Rico (The National Consortium on Deaf/Blindness [NCDB], 2011). One of the challenges of collecting data for the Deaf/Blind population is that there are different approaches to defining or classifying if a person is Deaf/Blind (Dammeyer, 2010; Fellinger, Holzinger, Dirmhirn, Dijk, & Goldberg, 2009; Kamenopoulou, 2012; McKenzie, 2009; Moller, 2003; Ronnberg & Borg, 2001; van de Boom, Antonissen, Knoors, & Vervloed, 2009; Vernon, 2010). Some approaches are functional while others are only based on the medical degrees of visual acuity and hearing loss. In a Canadian research study conducted by Dalby, Hirdes, Stolee, Strong, Poss, Tjam, Bowman, & Ashworth (2009a), 182 participants diagnosed with congenital or acquired Deaf/Blindness were assessed using the standardized interRAI Community Health Assessment and the Deaf/Blind Supplement which were previously deemed as reliable and valid (Dalby, Hirdes, Stolee, Strong, Poss, Tjam, Bowman, & Ashworth, 2009b). In addition, Dalby et al. (2009a) used survey research to find the common needs of the

people with congenital Deaf/Blindness and acquired Deaf/Blindness. The results suggested that even though congenital Deaf/Blind and acquired Deaf/Blind people are often grouped together each group and individual has different needs and challenges in daily living (Dalby et al., 2009b). The study by Dalby et al. (2009a) wanted to obtain information about specific needs and characteristics of the Deaf/Blind population in a systematic way in order to improve government programs and offerings to the community. One reason why it is hard to collect the exact number of people or students who are Deaf/Blind is due to misdiagnosis resulting in incorrect placement, different approaches to diagnosing a person as Deaf/Blind and similarity of physical characteristics between autism spectrum disorders, intellectual disability, and those who are Deaf/Blind (Fellinger et al., 2009; van de Boom et al., 2009). Not only are students who are Deaf/Blind misdiagnosed or not identified, there are many challenges for students obtaining postsecondary training or education that students without disabilities don't have to contend with on a daily basis (Bruce, Godbold & Gold, 2004; Parker, 2009; Torres, 2008; Watkins, Borning, Rutherford, Ferris, & Gill, 2013). Communication, transportation, equity in needs being met, and access to equal educational assessments are just some problems that the Deaf/Blind community faces in completing postsecondary education or training.

The goal of secondary transition programs for those with disabilities is to prepare students for postsecondary training and postsecondary education leading to competitive employment in order for the student to meet his or her goals and to become self-sufficient and rely very little or not at all on public assistance (Boutin & Wilson, 2009; Bowe, 2013; Garay, 2003; Giesen & Cavenaugh, 2012; Walter & Dirmyer, 2013). One barrier to successful transitioning into a career or other postsecondary pursuits are the views of the person with the

disability and the views of other people about the student's disability during transition (Garay, 2003). When students with disabilities acquire negative or positive perceptions of themselves, it can impede the student's interests in goals for the future (Punch, Creed, & Hyde, 2006). Expectations of those with disabilities can have a positive and negative effect on the student's future goals created and met (Boutin & Wilson, 2009; Bowe, 2003; Maurer, 2013; Omvig, 2007; Punch, Creed, & Hyde, 2006; Schroeder, 1993/2001; Vermeij, 2004; Wunder, 2009). Ignorance and low expectations are other potential barriers that can lead to unequal treatment, unfair judgment, and sometimes discrimination for employees with disabilities (Garay, 2003; Jernigan, 2007; Lewis, 2011; Maurer, 2013; Omvig, 2007; Punch, Creed, & Hyde, 2006; Schroeder, 1993/ 2001/2011; Vermeij, 2004). Federal and State programs were developed to assist in funding training or postsecondary education for people with disabilities in order to acquire an ideally competitive job with competitive pay rates (Boutin & Wilson, 2009).

Stated differently, a goal of secondary transition service providers "is to guide students through the choices they must make and to teach [the secondary transition students] the skills they must possess for success as adults" (Bowe, 2003, p. 486). The Deaf, Blind, and Deaf/Blind all have one critical issue in common because the student doesn't possess the ability to use incidental learning (Garay, 2003). Incidental learning, usually acquired through the use of sight and sound is not available or is distorted for those with sensory problems (Garay). One important component of secondary transition service for students that are Deaf is to teach the students how to use an interpreter correctly, advocate for themselves, make their own decisions, communication techniques, and how to participate in the transition process to obtain the most benefits from the process (Garay). Teaching students to make eye contact, and pay attention are

also recommended for successful transitioning after secondary school (Garay). Other research found that teaching self-efficacy, addressing and providing solutions to potential barriers, realistic expectations, disclosure and the use of accommodations and modifications would be beneficial to students who are Deaf or Hard-of-Hearing needing to find jobs (Punch, Creed, & Hyde, 2006). Luft's (2014) research found that focusing on residential transition centers and "[focusing] on long-term planning issues to ameliorate the disability-specific struggles and extended timelines required by young adults to achieve commensurate success" are important during the [secondary] transition process "(Luft, 2014, p. 189).

Finding Occupations for Deaf

Federal and state agencies assist people with disabilities in finding jobs or occupations in order for the person to become self-sufficient. Deaf or Hard-of-Hearing researchers suggested that job placement, rehabilitation technology, and job search assistance were three key factors correlated with competitive employment (Boutin & Wilson, 2009). Recommendations for assisting with the development of skills required in the work place for those who are Deaf or Hard-of-Hearing are to start in the secondary transition process towards the end of middle school or start of high school, and to provide a greater emphasis on independent living skills and vocational training than is currently provided (Bowe, 2003). Isolation can be an impediment to finding competitive employment for those with disabilities. In order to curb isolation problems of those with disabilities, orientation and mobility training often accompanies vocational or educational training (Saunders, 2012).

Finding Occupations for Blind

The goal of federal and state agencies is to assist people with disabilities in finding a job or occupation that pays high enough for the person with a disability to reduce or eliminate receiving public assistance. One problem when assisting to help Blind students transition into jobs or occupations is low expectations (Omwig, 2007; Vermeij, 2004). Historically, the Blind population and people with other disabilities have been

Regarded as inferiors who are incompetent, inept, and virtually immaterial, if not irrelevant. [They] have been thought of as wards and as people who need to be taken care of rather than as employable citizens. [They] have not been expected to do for [themselves] or even care for [themselves] and [they] certainly have not been expected to participate fully in or contribute markedly to society. (Omvig, 2007, p. 4)

Finding jobs for the Blind is not new; in 1850 programs were created to provide vocational rehabilitation services to the Blind in New York City (Omvig, 2007). The National Federation of the Blind among other non-profits, federal and state vocational rehabilitation programs or divisions train and educate the Blind population in order to obtain or maintain employment (Omvig, 2007). Even with all those vocational and training programs, Blind people are underemployed and an estimated seventy percent of the working age Blind population is unemployed (Omvig, 2007; Wunder, 2009). People that are blind are able to participate in employment because of accommodations required by the Americans with Disabilities Act. Because of legislation and advanced technology, people that are blind are increasingly developing skills that enable them to become lawyers, working in the medical field, becoming scientists, teachers and competing for competitive jobs (Asch, 1991; Cordes, 2010; LaBarre, 2012; Nemeth, 1989; Riccobono, 2012; Vermeij, 1988).

Communication in Education

Communication is a factor that has been studied in the elementary, middle, and high school years of the Deaf/Blind population. There have been some communication and accommodating studies that have assessed certain problems encountered by the Deaf/Blind population. Bruce, Godbold and Naponelli-Gold (2004) discussed different communication techniques, while Correa-Torres (2008) discussed different communication opportunities available for students depending on their educational environment. In the Correa-Torres (2008) pilot study, researchers used mixed methods research by using direct observation and interval recording for four students between the ages of four and ten that had been diagnosed by a medical doctor or an educational institution as Deaf/Blind. Four settings were used to observe the children: mainstream or inclusive setting where everyone is included; classroom with only visually impaired students; classroom with only hearing impaired students and a classroom for students with severe disabilities (Torres, C.-, 2008). The research suggested that many Deaf/Blind students interacted during the school day primarily with adults who are assisting them with everyday educational activities or social activities. Danermark and Moller (2007) discussed participation of Deaf/Blind students in different educational settings. Farnsworth and Luckner (2008) describe different technology accommodations for those students who use braille. Horvath, Kamper-Bohach, and Kearns (2005) discussed different accommodations available while assessing larger groups of the Deaf/Blind population. Kamenopoulou's (2012) research focused on mainstreaming students that are Deaf/Blind while McKenzie (2009) looked at developing literacy at a young age for the Deaf/Blind child. Previous research on Deaf/Blindness and education has been focused on the elementary through high school age on

communication, literacy, accommodations, and different educational environments for the Deaf/Blind student (Danermark & Moller, 2007; Farnsworth & Luckner, 2008; Horvath et al., 2005; Kamenopoulou, 2012; Madaus et al., 2011; McKenzie, 2009; Torres, C-., 2008). Factors that influence a person that is visually impaired or blind's chance to gain competitive employment include severity of the disability, if there any additional disabilities present, early work-experiences, job placement, and vocational services (Giesen & Cavenaugh, 2012). Recommendations for those working with the Blind advocate for teaching self-efficacy, guiding the student in collecting more research about an occupation or occupations, the use of assertive training in order to teach the student how to self-disclose, high expectations across all levels, and the value of work experience (Punch, Hyde, & Creed, 2004).

Mobility and Education

Communication is not the only hardship faced by the Deaf/Blind population; transportation is another issue that challenges a Deaf/Blind person's independence and growth. Transportation has been found to negatively impact a person with disabilities' decision to attend a postsecondary program (Mazzotti, Rowe, Sinclair, Popppen, Woods, & Shearer, 2015). Parker (2009) and Watkins, Borning, Rutherford, Ferris, and Gill (2013) discussed mobility challenges for a person to become independent and form a self-identity. The Deaf/Blind population is not allowed to drive so the Deaf/Blind population has to rely on public transportation, family, or a friend, which impedes independence and growth as an individual. Watkins et al. (2013) studied the OneBusAway (OBA) public transportation system in the Seattle-Tacoma area. The goal of their research, using real time information from a OneBusAway database was to ascertain how the bus transportation system was being utilized and areas that need improvement. Watkins et al.

utilized mixed method data with the use of surveys which are quantitative and semi-structured

interviews which are qualitative (Watkins et al., 2013). Data was collected randomly from bus

drivers from the Amalgamated Transit Union in Seattle, Washington in June and July of 2010.

Of the 500 surveys mailed to the randomly selected bus drivers, 253 were sent back to

researchers to review. Six bus drivers or operators were interviewed for the semi-structured

interview. One question in the semi-structured interview was intentionally geared toward blind

and deaf-blind consumers of the bus company. Watkins et al.'s (2013) research illustrated that

bus drivers think there is a need for "building apps to aid blind and Deaf/Blind (89%) and

identify physical stop, shelter and bus issues (88%)' during the semi-structured interviews (p.

975). Watkins et al. (2013) suggested from the research that increasing applications for the blind

and Deaf-Blind community would increase the mobility and independence of the population.

Public transportation, while steadily improving, can be a potential barrier for the Deaf/Blind

communities' access to higher educational institutions.

Federal Rules on Disabilities

Federal, state and laws in education continually need to be amended based upon the

current needs of the education system. The first law to support the creation of vocational

education was the Smith-Hughes Act of 1917. Other laws such as the Federal Workforce

Investment Act of 1998 and the Carl D. Perkins Vocational and Technical Education Act of 1998

combined with the Tech-Prep Education Act followed the Smith-Hughes Act of 1917 in order to

expand the role of vocational education in secondary and postsecondary education (U.S.

Department of Education, Office of the Under Secretary, 2004). Federal Laws such as the

Americans with Disabilities Act of 1990, Individuals with Disabilities Act of 1975, and Section

504 of the Rehabilitation Act of 1973 have been enacted in order to improve accessibility for people with disabilities when attending public institutions or federally funded programs. Section 504 of the Rehabilitation Act of 1973 states

That no qualified individual with a disability in the United States shall be excluded from, denied the benefits of, or be subjected to discrimination under any program or activity that either receives Federal financial assistance or is conducted by any Executive agency—Each Federal agency has its own set of section 504 regulations that apply to its own programs. Agencies that provide Federal financial assistance also have section 504 covering entities that receive Federal aid. Requirements common to these regulations include reasonable accommodation for employees with disabilities; program accessibility; effective communication with people who have hearing or vision disabilities and accessible new construction and alterations. (U. S. Department of Justice, 2009)

While some federal legislation has assisted people with disabilities in becoming more independent, one law, The Fair Labor Standards Act, allows some employers of people with disabilities to pay their workers with disabilities under the federal minimum wage, if the employer receives a certificate prior to the employee's start date from the Wage and Hour Division (Lewis, 2011; Schroeder, 2011; U. S Department of Labor, 2008). Secondary transition into competitive employment, either through postsecondary education or postsecondary training is important in order for a person with disabilities to earn equal pay of non-disabled peers and live independently not relying on government assistance.

Free and Appropriate Public Education

The federal law mandates that students up to age 22, or that have graduated from secondary education receive free and appropriate public education regardless of any disabilities (Hadley, 2011; Peterson, Van Dycke, Robertson, & Sedaghat, 2013). Students can become ineligible for continuing education services from the public school system if they fail to graduate school before the age of 22 (Hadley, 2011; Peterson et al., 2013). Depending on the state, vocational rehabilitation programs are available for students with disabilities up until the age of 24 or 26 (B. Michaels, personal communication, 2015). Florida stops special education at age 22 but allows students up to age 24 to participate in vocational rehabilitation programs through the newly enacted The Workforce and Innovation Opportunity Act legislation (B. Michaels, personal communication, 2015).

WIOA allows students and youth under age 24 to be a part of the youth program but after age 24, the individual will have to apply for regular vocational rehabilitation services not considered part of secondary transition. After a student in special education graduates or ages out of services, special education for continuing training or schooling is not available (Michaels, 2015; Peterson et al., 2013). After secondary education is completed or the student is 22 years old, free and appropriate education is no longer offered under special education and instead is only offered under the Workforce and Innovation Opportunity Act which involves vocational rehabilitation agencies and not the public school system (Papay & Bambara, 2014: Peterson et al., 2013). It is important that students learn their rights about support services available to them, Section 504 and ADA, during the secondary transition process and after graduation or aging out of the system because "once students graduate from high school or reach the age of 22, IDEIA— along with its rules and regulations—no longer applies" (Peterson et al., 2013, p. 100) but the

Workforce Innovation and Opportunity Act still applies to youth until age 24 in the state of Florida.

The Individuals with Disabilities Education Act, formerly the Education of All Handicapped Children Act of 1975, "requires public schools to make available to all eligible children with disabilities a free appropriate public education in the least restrictive environment appropriate to their individual needs (Jimenez, Graf, & Rose, 2007, p. 41). IDEA, now the Individuals with Disabilities Education Improvement Act (IDEIA) requires public school systems to develop appropriate Individualized Education Programs for each child (Hadley, 2011). The specific special education and related services outlined in each IEP reflect the individualized needs of each student (U. S. Department of Justice, 2009). The Americans with Disability Act of 1990, requires that

One must have a disability---An individual with a disability is defined by the ADA as a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such impairment. The ADA does not specifically name all of the impairments that are covered. (U. S. Department of Justice, 2009)

The Individuals with Disabilities Education Improvement Act of 2004, mandates that "secondary school districts develop special education programs and services, including a free and appropriate public education in the least restrictive environment" (Hadley, 2011, p. 77). After secondary school is completed, the same supports are not available to students with disabilities unless the student becomes a self-advocate and seeks out eligible rights and responsibilities for students attending postsecondary school (Hadley, 2011; Peterson et al., 2013). The goal of secondary transition is to train and educate the student with disabilities so that

he or she will be proactive and seek out and self-identify own needs during post-secondary

training or education. According to the Americans with Disabilities Act of 1990, people with

disabilities are allowed certain rights, accommodations and modifications. The Office of Civil

Rights continues with additional information on the Americans with Disabilities Act of 1990

adding:

Public accommodations such as—libraries, parks, private schools and day care centers, may not

discriminate on the basis of disability—auxiliary aids and services must be provided to

individuals with vision or hearing impairments or other individuals with disabilities so that they

can have an equal opportunity to participate or benefit, unless an undue burden would result.

Physical barriers in existing facilities must be removed if removal is readily achievable (i.e.,

easily accomplishable and able to be carried out without much difficulty or expense). If not,

alternative methods of providing the services must be offered, if those methods are readily

achievable. (U.S. Department of Justice, 1990)

       According to the Commission for Independent Education,

An institution shall not deny admission or discriminate against students enrolled at the institution

on the basis of race, creed, color, sex, age, disability or national origin. Institutions must

reasonably accommodate applicants and students with disabilities to the extent required by

applicable law. (Standards and Procedures for Licensure, 2014).

       Federal legislation like the Carl D. Perkins Vocational and Technical Education Act of

1998 was also enacted to make sure every student, even those considered in special populations

like those with disabilities, receives equal access to the legislation granted by the U.S.

Department of Education, Office of Vocational Education (U.S. Department of Education, Office

of the Under Secretary, 2004). The Carl D. Perkins Vocational and Technical Education Act of 1998 and other measures are important to keeping the federal and local government accountable for equal access and equal opportunity to vocational education programs (U.S. Department of Education, Office of the Under Secretary, 2004).

Vocational rehabilitation programs can be offered in the public school systems and in federal and state agencies through different programs. Typically, vocational rehabilitation programs at public schools are for people with disabilities or people that want to learn a trade and offered through the school or special education department. Usually, vocational rehabilitation programs in federal and state agencies are through the Florida Department of Education, Vocational Rehabilitation or the Division of Blind Services. Separate eligibility rules apply for those individuals seeking vocational rehabilitation programs in the public school systems and federal and state agencies. The youth vocational rehabilitation program as part of secondary transition in combination with the Workforce Innovation and Opportunity Act allows students to receive services from special education student up to age 22, WIOA allows students to receive services up to age 24. Depending on the individual with disabilities, the individual can receive services from the public school system, federal or state agency, or both.

Advanced Deaf/Blind Students

Gifted Deaf/Blind students are often overlooked and not placed correctly in educational environments (Phillips, Hile, & Jardes, 2013). Phillips, Hile, and Jardes (2013) conducted a case study during a student's transition from middle school to high school and then looking at the future of postsecondary education. The student, named "John" in the research article, was supplemented with extra support from an Orientation and Mobility specialist, a hearing impaired

specialist, a visual impaired specialist, a speech-language pathologist and an occupational

therapist. Prior to middle and high school, a transition timeline was made by student's visual

impaired specialist. One common theme among the case study of "John" was that "John" needed

to be prepared and meet with his teachers and educational team members more frequently and

earlier than the average student. In addition, "John" had to meet one-on-one with more

specialists and be taken out of the mainstream or inclusion classroom more often than the

average student (Phillips et al., 2013). Because of "John's" Deaf/Blindness, and the challenge of

incidental learning that comes about, "John's" math curriculum was modified and instead of

doing regular classwork, "John" was able to visit the community with his vision impaired

specialist and the orientation and mobility specialist to receive practical experience. There are

some studies on secondary transition services and secondary education but additional research in

postsecondary education and secondary transition planning services for all disabilities especially

low-incidence disabilities such as Deaf/Blindness are needed (Madaus et al., 2011) as are for

those with disabilities that are advanced or gifted (Phillips et al., 2013).

Educational Assessments

Assessment is an important and controversial part of education. Whether assessments

include the Scholastic Aptitude Test (SAT), American College Testing (ACT) or a state

examination required to pass in order to graduate, assessments are used for many different

reasons in education. Accommodations for assessment can be requested as part of the Individuals

with Disabilities Education Act of 1997 and the No Child Left Behind Act of 2002. An

accommodation is defined as, "a change in the way a test is administered without altering the

content of the test" (Horvath et al., 2005, p. 178). Students in Horvarth's et al. (2005) mixed

method research study data were obtained from three southeastern states for ages 3 through 21. The researchers wanted to look at the similarity or congruence between students' Individual Education Plan (IEP), and 504 Plan if necessary, and the use of accommodations in the regular classroom environment and when the student is being assessed. Horvarth et al. (2005) interviewed students, parents, and teachers about accommodations in the classroom and assessment settings. In addition, students were observed in both settings and individual state policies were reviewed by the researchers. The results suggested that, due to the variability in the students' answers, each Deaf/Blind child should be assessed independently based on individual attributes rather than the label assigned of Deaf/Blindness (Horvarth et al., 2005). In addition, the research suggested that students should have more choice and input into what accommodations they can and cannot use that the information on the Individualized Education Plan (IEP) and that the 504 were not always congruent with the accommodations used by the student in the classroom or assessment setting (Horvarth et al., 2005). Deaf/Blind students can also be assessed in different ways using the learning media assessment approach.

Learning Media Assessment

One new approach to assess students that are Deaf/Blind is using the relatively new learning media assessment approach as opposed to traditional assessment approaches. A learning media assessment approach is an alternative form of evaluation where students with multiple disabilities are assessed on their literacy skills by collecting data from "direct observations, interviews, and reviews of documents" (McKenzie, 2009, p. 294). The data collected from a learning media assessment is used to create the student's instructional program (McKenzie, 2009). McKenzie (2009) conducted survey research to determine the number of teachers

working with Deaf/Blind students who use learning media assessment as part of their

ᵢₙdividualized Education Plan (IEP). Any child in the public educational system with a

documented disability, including college age students, is allowed to have an Individualized

Education Plan (IEP) or a 504 Plan depending on his or her specific disability and needs. One

reason why learning media assessments for literacy are not administered with visual and hearing

assessments is because of the lack of qualified and trained Deaf/Blind specialists (McKenzie,

2009). With dual sensory impairment in Deaf/Blind students, extra information is needed in

assessing a student's abilities. First, the visual impairment specialist needs to obtain all recent

eye medical reports from ophthalmologist or optometrist, and then a functional vision assessment

is done, along with a visual field assessment in different environments to discover what

environments work best for whatever residual vision is left if any. Then the audiologist needs to

use any methods available and appropriate for the student's vision and hearing impairment to

assess different environments in which hearing ability is optimal. After the functional hearing

and vision assessments are done, it is important to conduct a functional literacy assessment with

the Deaf/Blind student to see if the student functions better with braille or large print media

(McKenzie, 2009). If a functional literacy assessment is too advanced at the student's level of

emerging literacy, individual sensory assessments should be conducted to ascertain the student's

sensory preference in different daily and educational activities. McKenzie recommends using

learning media assessment for people with multiple and sensory disabilities over the type of

assessment currently used to assess literacy.

Florida Deaf-Blind Education and Training

There are many options in Florida for people with disabilities, including the Deaf/Blind population, to find assistance with obtaining a job or training. Some options where people can look into obtaining job training, assistance, or placement include public and private colleges or universities, postsecondary institutions, vocational institutions or centers, institutions licensed by the Commission for Independent Education classified as independent, non-profits and for-profit institutions, religious institutions, and state and federal agencies. In total, give or take that schools lose accreditation, close down, and can have a change in status that may not be immediately reported, as of June 17, 2015, there are an estimated 1700 public, private, postsecondary, vocational, independent, non-profit, for-profit, religious and state and federal agencies in the state of Florida (Castino, 2015). Some may be classified into more than one category but they were only counted one time. All were found on the internet through federal, state, and other government agencies starting in spring 2014.

The Florida School for the Deaf and the Blind and the Career Education and Transition High School work together to guide students who are deaf/hard of hearing or blind/visually impaired through the transition process. The Florida School for the Deaf and Blind is "a fully-accredited state supported school for children residing in Florida who are deaf/hard of hearing or blind/visually impaired" (Florida School for the Deaf and the Blind, 2015). Florida School for the Blind, in partnership with the Career Education and Transition High School, offer career development programs through the school to work program, technical training, and continuing education (Florida School for the Deaf and the Blind, 2015). Placement of students in the Florida School for the Deaf and the Blind or the Career Education and Transition High School depends on "the [student's] Transition Individual Education Plan as well as the Florida Standards, Access

Points, the Florida State Diploma options, and the Florida School for the Deaf and the Blind

diploma requirements" (FSDB County School Board, 2015, pp. 23-24). The Florida School for

the Deaf and the Blind and the Career Education and Transition High School provide

opportunities for work experience, internships, vocational training and education and supported

employment based on the student's individual Transition Education Plan and the student's

interests, passions, needs, and aptitudes (FSDB County School Board, 2015). During work

experience, supported employment, and internships, rehabilitation counselors and the client's

supervisor look at factors of punctuality and attendance, personal appearance, attitudes towards

work, and supervisor, the ability to stay on task, care of equipment, work quality, and work

quantity when observing the strengths and weakness of each student in work experience,

internship, or supported employment (Florida Division of Blind Services, n. d.). Sometimes

problem arise when collaborating between agencies. Secondary transition planning and

execution can be challenging because

> [Secondary] transition services must be coordinated by groups of service providers and
>
> family members who often have too little time and too few resources to commit to the
>
> process. In addition, [secondary] transition planning is often obstructed by the multiple
>
> requirements of various agencies and pieces of legislation. (Everson, 1995, p. 40)

 The Individuals with Disabilities Education Act mandates that the student discussed be

present in Individualized Education Program meetings where secondary transition is being

discussed and that even if the student is not present, which is not preferred, the secondary

transition team while creating the Individualized Education Program Plan takes the student's

individual's desires and interests into the decision making (Sitlington, 1994).

Training of Service Support Providers

Service Support Programs train service support providers to work with the Deaf/Blind population. Currently, as of July 2015, Florida does not have a Service Support Program (Evans, 2015). The National Federation of the Blind asked the state government to create a Service Support Program in 2009 but they were denied (Evans, 2015). According to Chris Woodfill, Service Support Providers (SSP) are important because they allow a Deaf/Blind person access to the environment, facilitate communication, give a Deaf/Blind individual information to make his or her own choices, and are the eyes and ears of a Deaf/Blind person (2015, July). One of the possible reasons why Florida doesn't have an SSP program could be because there are no national standards, certifications, or training programs for Service Support Providers; instead, each state can train and certify their SSPs any way they see fit (Dabry, 2015, July). Another reason why Florida may not have a Service Support Program for Service Support Providers is funding. Some funding for other Service Support Programs has been through private donations, bequeaths, grants, vocational rehabilitation, state departments, social services departments, Commissions for the Blind and Medicare (Woodfill, 2015, July). Lack of uniform Service Support Programs, and lack of resources to initiate Deaf/Blind or Service Support Providers training, due possibly to the low incidence of the disability, can affect potential research relating to Deaf/Blind consumers.

Another area affected by lack of resources is the number of faculty teaching and researching low-incidence disabilities that handle people with low-incidence disabilities. There is a lack of personnel to teach special education courses about the Blind, the Deaf, and the Deaf/Blind (Walsh, G-., Kemmery, & Compton, 2014). One concern affecting special education

personnel is the quality of the instruction they receive to become special educators (Walsh et al., 2014). As a result of the shortage of faculty in the low incidence concentrations, the National Leadership Consortium in Sensory Disabilities was created to recruit and train more quality special education personnel (Walsh et al., 2014). There are lower numbers of doctoral candidates in the specialization areas of low incidence disabilities than in master's or undergraduate programs (Walsh et al., 2014). Even in "preservice teacher education, specializations in low-incidence sensory disabilities often have small class sizes and peer groups due to these fields' focus on populations that are, by definition, limited in number" (Walsh et al., 2014, p. 60). There are best practices for vulnerable youth including the populations of

The mental health system, the foster care system, the juvenile justice system, the criminal justice system, special education, the health care system (for youth with physical disabilities and chronic illness), and (though these youth really have no comprehensive system of care) runaway and homeless youth. (Osgood, Foster, & Courtney, 2010, p. 210)

There are no empirical best practices for the specific low incidence group of Deaf/Blind or Dual-Sensory Impaired. However, there are "best practices" for students with disabilities. There are "minimal" services that every district should be implementing but the ideal is for the "best" practices" to be provided to students with disabilities (Florida Agency for Persons with Disabilities, 2010). According to Landmark, Ju, and Zhang (2010) "transition best practices include the development of an effective Individualized Education Program planning document and process addressing IDEA transition services language requirements; student self-determination, advocacy, and input in transition planning; and family/parent involvement in transition planning" (p. 166). In the vulnerable population barriers such as finances, housing,

child care, attending higher education or secondary vocational training programs, lack of family support, and emotional and social problems could impede a vulnerable person's success (Osgood et al., 2010). One challenge with physically disabled youth such as the Deaf/Blind is that they "often must arrange medical services or assistive devices. Taking on these extra burdens makes it that much more difficult to get a college education…some of the [vulnerable] populations have only limited ability to perform daily tasks" (Osgood et al., 2010, p. 212). Historically, vulnerable groups are less likely to attend postsecondary education which can lead to a wider variety of job opportunities (Osgood et al., 2010) According to research by Robert Blum, the vulnerable population of "young adults with multiple physical disabilities have only a one in twelve chance of completing higher education" (as cited in Osgood et al., 2010, p. 217). Research suggests that there are protective factors that are more likely to result in success for a student after high school. The factors include "success in school…support from family and friends…healthy interpersonal relationships… [And] certain personality traits, such as persistence and confidence…enable some vulnerable youth to make a successful transition to adulthood" (Osgood et al., 2010, p. 218). Research has also focused best practices for secondary transition students that have all types of disabilities.

Research has been conducted assessing quality indicator criteria and post-school outcomes for people with all types of disabilities. Best practices are empirically researched to assist in ensuring that the student gets as positive an outcome as possible. The research suggests that

> Career awareness, community experiences, exit exam requirements/high school diploma
>
> status, inclusion in general education, interagency collaboration, occupational courses,

paid employment/work experience, parental involvement, program of study, self-advocacy/self-determination, self-care/independent living, social skills, student support, transition program, vocational education, and work-study" are predictors of successful post-school outcomes. (Landmark, Ju, & Zhang, 2010, p. 172)

Research by Repetto, Webb, Neubert, and Curran (2006) suggested similar best practices of "self-determination, academic, and vocational skills, relationship building, consumerism, self-maintenance, community experience, individual planning, family involvement and interagency coordination" (Lubbers, Repetto, & McGorray, 2008, p. 281). Zhang, Ivester, Chen, and Kaysiyannis (2005) identified best practices as

Interagency collaboration, interdisciplinary collaboration, integrated schools, classrooms, and employment, functional life-skills curriculum and community-based instruction, social and personal skills development and training, career and vocational assessment and education, business and industry linkages with schools, development of effective Individualized Education Program planning documents and processing addressing IDEA 1997 transition services language requirements, and student self-determination, advocacy, and input in transition planning. (p. 16)

Wehman, Brooke, and Wittig (1998) the two areas that secondary transition should focus are "in-school activities involving both preparation and planning for living and working in the community…[and] post-school objectives and services that provide and maintain the supports necessary for individuals to make a successful transition from school to work" (p. 23). There are best practices for assessment, and the use of augmentative and alternative communication services.

Research has been conducted on best practices for providing augmentative and alternative communication services. Best practices for the use of augmentative and alternative communication services include

Teaching AAC skills that foster membership in the school community…collaboration between general and special educators…collaboration between educators and related service providers…family involvement…tie [AAC Programs] to both the general education curriculum and functional life skills…combine AAC objectives with broader curricular goals in and out of the classroom…[conduct] evaluations in natural settings..[And] [incorporate] more integrated practices. (Calculator & Black, 2009, p. 336)

The use of augmentative and alternative communication services is important to the Deaf/Blind student population or multiple physically disabled population because it enables them to communicate. Assistive technology services is one aspect of assessment services for students.

There are best practices for assessment of students with disabilities. Researchers suggest that "information to develop the individual's instructional program be drawn from a variety of sources, including adaptive behavior measures, CRTs of academic skills, ecological inventories, and parent input" (Siegel & Allinder, 2005, p. 347). Assessment of a student with disabilities in all areas is important when developing instructional programs for the Deaf/Blind student or students with multiple physical or sensory disabilities.

There is research on best practices in secondary transition for vulnerable students, and students with all types of disabilities. The low incidence group of Deaf/Blind needs to be researched separately among the vulnerable populations to extrapolate the best practices to use

with that specific disability group. There are best practices for transition for the blind and visually impaired and the deaf or hard of hearing but the combination of disabilities needs to be researched. Best practices are identified through empirical research which makes it challenging for the researcher since the population of Deaf/Blind is lower in incidence than other disabilities such as Autism Spectrum Disorders resulting in a small sample size. This research study will be a starting point in identifying best practices for the Deaf/Blind student population during the secondary transition period. During the Transition program which can start at age 14, it is assumed that all Florida Division of Blind Services will be minimally following protocol to provide

> Information, advocacy, and referral to agencies with appropriate services, vocational evaluation, and career counseling, assessment and training in the use of software designed for persons with visual impairments so they can effectively use computers, use of low-vision devices that may maximize the use of existing vision, equipment needed for training or employment, training to safely explore new environments and utilize public transportation, training in self-care skills such as cooking, cleaning, measuring, and clothing identification, employment readiness and job search training, [and] summer programs encompassing social and work experience. (Florida Agency for Persons with Disabilities, 2010)

Research Questions

What do Deaf/Blind providers perceive they need related to professional development in the areas of vocational rehabilitation and independent living in the Florida?

What do Deaf/Blind providers perceive as areas of strength and areas that they need more professional development training in Florida?

Chapter 3: Methodology

Aim of the Study

This quantitative study used a survey to collect data on the perceived areas of need for Deaf/Blind service providers in Florida in the areas of vocational rehabilitation and independent living. The central question for the research was what needs to be done related to professional development in the areas of vocational rehabilitation and independent living in Florida. The initial research questions for the survey were based on the central question for the research, which is to determine in which of the "best practices" services Deaf/Blind service providers perceive they need more professional development, in the areas of vocational rehabilitation and independent living (See Appendix A for Survey Questions). The survey questions were developed based upon the areas of best practice in providing services to students with disabilities in the areas of interagency collaboration/relationship building, self-determination, parental involvement/parent support, and additional training areas based on the meta-analysis of best practices in transition services for students with all disabilities researched by Landmark, Ju, and Zhang (2010).

Quantitative research was used because of the quantitative survey's ability to "generalize about an entire population by drawing inferences based on data drawn from a small portion of that population" (Rea & Parker, 2005, p. 7). Survey research using quantitative data and the scientific method is an appropriate approach to collecting data because "the researcher is using the only method of gaining this information to a known level of accuracy" by obtaining "opinions…with defined and determinable reliability" (Rea & Parker, 2005, p. 5). The principal investigator believed that enough "general information is known or can conveniently be obtained

about the subject matter under investigation to formulate specific questions" (Rea & Parker, 2005, p. 4).

The quantitative design was based in interpretive inquiry and action research because action research is used "as a way to improve practice" (Glesne, 2016, p. 24). The quantitative research design was also be based on action and community-based research (Glesne) because any changes resulting from the answers to the quantitative interview protocols will first be assessed in the community after all data is collected, analyzed, and reflected on by the key stakeholders (Glesne, 2016).

Participants

There was one group of participants for the quantitative survey. This group consisted of 30 individuals who provided services to the Deaf/Blind population in Florida, through government and/or private agencies. The participants were recruited using email (See Appendix B for the Invitation Message), snowballing, and looking at Deaf/Blind Florida websites and intranet websites in order to acquire emails for potential participants (See Appendix C for the Participant Letter). The study contained participants from state, non-profits, for-profits, private, and federal agencies in the State of Florida that are age 18 or older that deliver vocational rehabilitation and/or independent living services to the Deaf/Blind population. Completion of the survey by participants constituted consent, and anonymity was assured by the commercial database that posted the survey. The participants were informed that their participation was voluntary and that they were able to withdraw at any time. The participants were recruited through Deaf/Blind contacts the researcher has made within the state of Florida through the Florida and Virgin Islands Deaf/Blind Consortium and the Division of Blind Services, and the

Division of Vocational Rehabilitation. In addition, the principle investigator researched agencies

online to find potential participants' emails since that information is considered public.

Purposeful sampling and snowball sampling were used in the study to decide which participants

and sites participated (Creswell, 2013).

Sampling

Purposeful, convenient sampling and extreme case sampling was utilized because it was

appropriate "that the inquirer select[ed] individuals and sites for study because they [could]

purposefully inform an understanding of the research problem and central phenomenon in the

study" (Creswell, 2013, p. 156) and the participants that the researcher wanted to improve

services for through professional development of service providers were considered "unusual or

special in some way" (Glesne, 2016, p. 51). The ages of the Deaf/Blind provider varied. In order

to recruit more potential participants, anyone age 18 or older that provided services to the

Deaf/Blind population in Florida qualified. Snowball sampling was utilized to find more

potential participants who might meet the research criteria and assist in researching a goal

number of sixteen to thirty participants (Glesne, 2016). The population size was calculated by

adding up all the emails that the researcher could find online, the emails that the researcher

collected using the snowballing recruitment technique, and the estimated number of Deaf/Blind

Providers' emails that the researcher knew she wasn't able to obtain through online searching or

snowballing recruitment. The number of emails that the researcher found online and through the

snowballing technique was 489 participant emails. Due to lack of access to the Division of

Vocational Rehabilitation case managers in the State of Florida, the principle investigator was

only able to find a few emails from that specific provider, the researcher estimated that she

couldn't find at least 10 emails for Deaf/Blind providers thus the population size of the study was 500 in order to calculate a sample size of 29. Janice Hanvey at Helen Keller estimated that their agency is currently working with 242 agencies in Florida, with 367 contact emails (personal communication, January 9, 2017). Janice Hanvey stated that the numbers were only of those agencies that they were currently providing service to and not all Deaf/Blind providers in Florida. She stated that the Helen Keller number of 367 is probably under and that the number collected, of 489 emails, seemed more accurate (personal communication, January 9, 2017). In discussion with a Helen Keller Representative, the population of Deaf/Blind providers estimated at 500 seems accurate.

Instruments

The instrument was developed by the principal investigator from research on best practices for people with all disabilities (Calculator & Black, 2009: Landmark & Zhang, 2010: Lubbers, Ju, & McGorray, 2008: Osgood, Foster, & Courtney, 2010: Siegel & Allinder, 2005: Wehman, Brooke, & Wittig, 1998: Zhang, Ivester, Chen, & Katsiyannis, 2005). In addition, the instrument was adapted from the questions based on the research of Brooke, Revell, and Wehman (2008/2009) and the research of Virginia Commonwealth University. Brooke, Revell, and Wehman developed the Quality Indicators for Review of Competitive Employment Job Outcomes for Transitioning Youth with Disabilities Checklist from "current best practices in employment services for persons with disabilities" (2009, p. 60). The instrument used to determine the needs of participants was a survey based on best practices that attempted to determine whether providers believe they have had adequate training or whether they believe they need additional training in an area of best practice. The survey questions were quantitative

and supplied with a dropdown option to choose from a set of numbers in the first question, what type of agency they work at, and selecting their highest level of degree attainment in the third question. Questions four to eighteen ask the participant to choose from four answer choices: Not at all; Somewhat; Mostly; Completely in what areas they perceive they need more professional development when administrating services to the Deaf/Blind population in the areas of vocational rehabilitation and independent living in the State of Florida. There were 18 total survey questions which should have taken 10 to 15 minutes for the participant to complete. The questions were revised and updated on the advice of the principle researcher's Institutional Review Board consultant and previous professor, Dr. Silvia Ortiz, and the researcher's Dissertation Chair, Dr. Kathleen Kardaras.

Procedures

The investigator researched potential participants' email addresses from public conferences, online websites, and state, federal and non-profits in Florida. Each potential participant received a survey in addition to an Invitation Message (See Appendix B for Invitation Message and Appendix C for the Participant Letter). Informed consent was assumed if the participant filled out the survey. There were 18 questions on the survey, and response time should have been no more than 15 minutes (See Appendix A for Survey Questions). The principle data collection tool was an 18 question survey using a Likert-type scale response set. Respondents choose from "Not at all", "Somewhat", "Mostly" or "Completely", with regard to their personal assessment of training and preparation for providing services to this population. SurveyMonkey anonymously collected data for the researcher about how many potential participants did not respond. The researcher then sent a reminder email to the anonymous

individuals that did not respond from SurveyMonkey (See Appendix D) in order to potentially increase the number of respondents.

The study was a quantitative design with the use of survey research. The quantitative approach is looked upon based upon a critical theory perspective and community based action research perspective because the objective of this type of research is to empower a disadvantaged social group, the Deaf/Blind population, through the use of providers that provide services in the areas of vocational rehabilitation and independent living. Originally, this researcher hoped to survey Deaf/Blind consumers directly, but due to many months of attempting to receive state approval and continually being denied, the researcher chose to attempt research that will still assist the Deaf/Blind but in a more indirect manner (Locke, Silverman, & Spirduso, 2010). After collecting data, the research will be disseminated to Deaf/Blind providers in the State of Florida in order to develop more targeted professional development and hopefully improve services to the Deaf/Blind population served by that agency (Glesne, 2016). A commercial platform known as "SurveyMonkey" that removes any identifiers was used to ensure confidentiality and sent to state, federal, non-profit, for-profit, private, and federal agencies that provide vocational rehabilitation and/or independent living services to the Deaf/Blind population in Florida. The researcher chose this platform because many people are familiar with using it, it is accessible for people with and without disabilities, it is efficient, and if chosen by the principle investigator, any identifiers can be removed to ensure confidentiality.

First, the researcher sought approval from the Nova Southeastern Institutional Review Board after approved by researcher's dissertation committee, and then concurrently sought approval from the District Administrator of the Division of Blind Services, Jeffery Whitehead

and the Director of the Division of Blind Services for the State of Florida, Robert Doyle III. The

initial dissertation proposal was approved by the Nova Southeastern Institutional Review Board

but after months of trying to placate the State of Florida for state approval from the Director of

the Division of Blind Services for the State of Florida, the researcher's original proposal had to

be revised. The proposal was amended to ask perceptions of training needs of Deaf/Blind

providers instead of asking Deaf/Blind consumers because the alternative proposal didn't require

state approval which was being denied. The research survey questions were straightforward

assessments of perceptions of training needs, and it was not believed that the questions posed

would cause any undue discomfort or pain to the respondents. The questions did not probe for

emotionally-laden responses, and it was believed that no one would be adversely affected by the

questioning in any way. After approval was granted to pursue research with Deaf/Blind providers

and not Deaf/Blind consumers, researcher started developing a survey using SurveyMonkey, to

maintain anonymity on October 20, 2016.

A test of the invitation message, participant letter, and survey was sent to a colleague of

the researcher's on October 20, 2016. Another copy of the invitation message, participant letter,

and survey was sent to the researcher's Dissertation Chair and the Institutional Review Board

Consultant for approval. Denial of State approval to contact consumers necessitated a slight

change in the focus of the study, which resulted in a more direct assessment of needs as

perceived by the providers rather than the consumers. This study was modified to be completed

by the service providers directly and while this resulted in a smaller number of participants, it is

believed that the service providers were best able to identify areas in which they, themselves,

would benefit from additional training in meeting the needs of their students.

SurveyMonkey has a reputation of being accessible for people with disabilities. Before and during the concept paper and proposal portions of the research paper, the researcher had studied approaches to researching and working with the Deaf/Blind population by reading previous research, manuals used by agencies that work with the Deaf/Blind, peer collaborators and facilitators, and other state agencies to ensure that participant and researcher are comfortable in their specific roles (Glesne, 2016). SurveyMonkey can be read by JAWS software or enlarged by using Zoomtext software which should already be on the participant's computer through state, federal, or non-profit funding if they are an individual with a disability providing services to the Deaf/Blind in Florida. Some Deaf/Blind providers when answering the survey needed to use assistive technology such as JAWS or Zoomtext because they had been diagnosed with a vision or hearing impairment. Online data collection is important because the use can reach participants that have difficulty with communication or language barriers (Creswell, 2013). Data was collected anonymously from the quantitative survey on SurveyMonkey and data was analyzed using descriptive statistical measurements.

Data Analysis

Data was analyzed using descriptive statistical measurements provided by the platform SurveyMonkey and included percentages and other data that found key areas in which providers to the Deaf/Blind need additional training in the areas of vocational rehabilitation and independent living in Florida. If the anonymous data needs to be printed for final analysis, the data will be locked in a cabinet and destroyed after three years by a professional shredder.

Chapter 4: Results

Initial emails to potential participants were sent October 24, 25, 27, November 4, and

December 5, 6, and 9, 2016 for a total of 489. Reminder emails to those potential participants

from which principle investigator didn't obtain responses were sent November 28, 2016,

December 12, 2016, and January 4, 2017. The principle researcher's final day for collecting data

was January 8, 2017. A final cut-off date for responses allowed for data analysis and publication

of findings in a timely manner.

In addition, with the emails already collected through online research and the use of the

snowball recruitment technique at 489, and the estimated number of participants' emails at 10

that the researcher estimates she was unable to find from Division of Vocational Rehabilitation

in the State of Florida, the estimated population size was 500. If the population size of

Deaf/Blind Florida providers is estimated at 500, and the confidence level is set at 90 percent

with a 15 % margin of error, the target sample size for this research was 29. The researcher

arrived at this confidence level and percent margin of error by using the SurveyMonkey Sample

Size finder and inputting different confidence levels and percent margin of errors in order to find

the number closest to the amount of respondents that the investigator received. However, the

population of the group remained at 500. If the researcher conformed to that standard, the results

were representative because data was collected from 30 participants completing the survey with

one partial completion.

Response Rates

The completion rate of 32 completed surveys with 148 opened surveys was 21.62 % . Of

those participants that opened the survey almost 22 % completed the survey. However of the 489

emails that were sent, only 30.27 % opened the email. Of those that opened the email, 21.62 % completed the survey, 43.24 % clicked through, and 4.05 % opted out of the survey. Out of the 489 emails sent to potential participants, 13 or 2.66 % bounced back and were never received by the individuals. In total 65.85 % of the emails sent were unopened by the potential participants.

Demographics

The first 3 questions of the survey focused on the estimated number of people that the Deaf/Blind provider has provided services to, the type of agency in which he or she provides services, and the educational degree of the Deaf/Blind provider. In this sample of Deaf/Blind providers, 76.67 % had personally provided services to between 1 and 20 Deaf/Blind people. Next at 16.67 % were individuals who had provided services to 21 to 40 people, and then 41 to 60 and 101 and more tied at 3.34 % (see Table 1).

Table 1

Participant Characteristics Population Number Served

Answer Choices	Responses	Percentage
1 to 20	23	76.67
21 to 40	5	16.67
41 to 60	1	3.33
61 to 80	0	0.00
81 to 100	0	0.00
101 and More	1	3.33

Note. Answers, responses, and percentages from question 1 on survey instrument.

The next question asked about the type of agency for which the Deaf/Blind provider delivers services. This sample was primarily from non-profit agencies at 50 %, with state agencies at 40 %, other types of agencies at 6.67 %, and for-profit at 3.34 % (see Table 2). No one indicated that he or she worked at a private or federal agency.

Table 2

Participant Characteristics Type of Agency

Answer Choices	Responses	Percentage
State	12	40.00
Federal	0	0.00
Non-Profit	15	50.00
For-Profit	1	3.33
Private	0	0.00
Other	2	6.67

Note. Answers, responses, and percentages from question 2 on survey instrument.

The last demographic question asked the Deaf/Blind provider what his or her highest level of degree attainment was. The most popular answer was a Master's degree, with 46.67 percent. The next most popular was Bachelor's at 30 percent, then Doctorate and Associates at 10 and 6.67 percent, respectively. The Specialist and Other degrees were tied at 3.34 percent. Based on these findings, the majority of this sample has personally provided services to 1 to 20 Deaf/Blind people, most likely works at a non-profit or state agency, and has a Master's or Bachelor's degree (see Table 3).

Table 3

Participant Characteristics Education Attainment

Answer Choices	Responses	Percentage
Associates	2	6.67
Bachelors	9	30.00
Masters	14	46.67
Specialist	1	3.33
Doctorate	3	10.00
Other	1	3.33

Note. Questions, answers and percentages from question 3 of survey instrument.

Training Question Data

The next set of questions, 4 through 18, addressed perceptions of Deaf/Blind providers' training strengths and needs. The first question was, "To what extent would training be useful in helping you provide your clients' needs for communicating with other agencies?" Participants responded with "Somewhat" at 41.38 % and "Completely" at 34.48 %. The second question was, "To what extent would training in discriminating the roles and responsibilities of your agency from other agencies that also assist the Deaf/Blind population be helpful?" Half of all respondents reported that they "Somewhat" want more training in discriminating the roles and responsibilities of their agency from other agencies that also assist the DeafBlind. The next

question was "To what extent would training be useful in helping you develop trust in a relationship with a new client?" "Somewhat" was at 30 %, "Not at all" at 26.67 %, "Mostly" at 23.33 %, and "Completely" at 20 % indicating that a combined 73.33 % of respondents believed that training in developing a trusting relationship with a new client would be useful (see Figure 5).
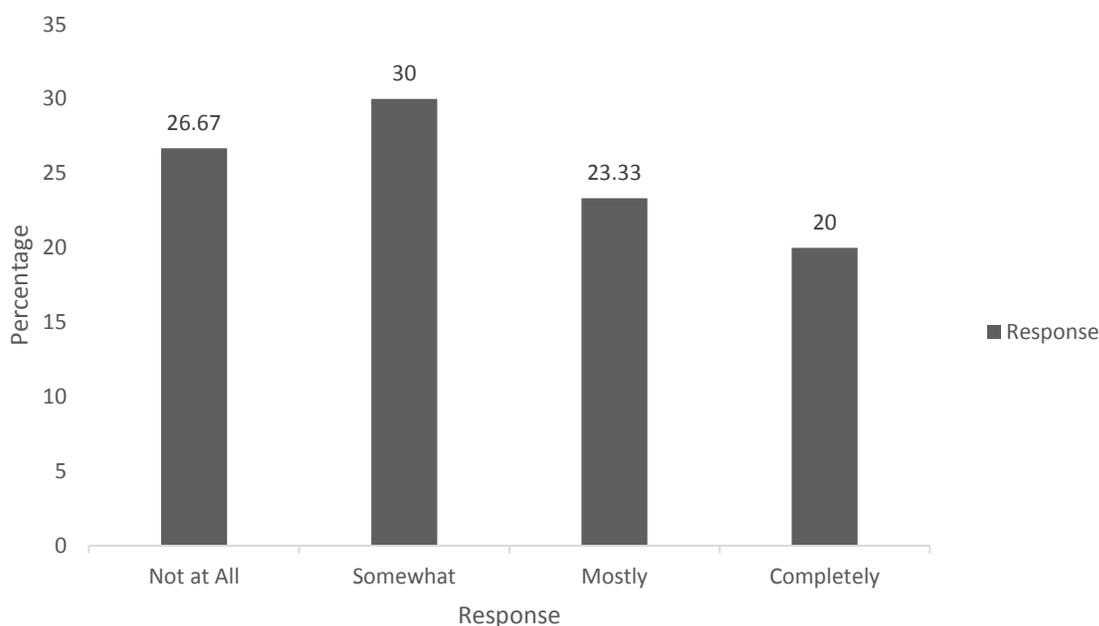
Figure 5. Results from, "To what extent would training be useful in helping you develop trust in a relationship with a new client?"

The subsequent question was, "To what extent would training be useful in helping you communicate with a dual sensory impaired person using assistive technology?" With almost half of the respondents answering "Completely", then "Mostly" at 34.48 percent, and "Somewhat" at 17.24 percent, it was clear that most of the respondents perceive they need more training in communicating with a DeafBlind person using assistive technology (see Figure 1).
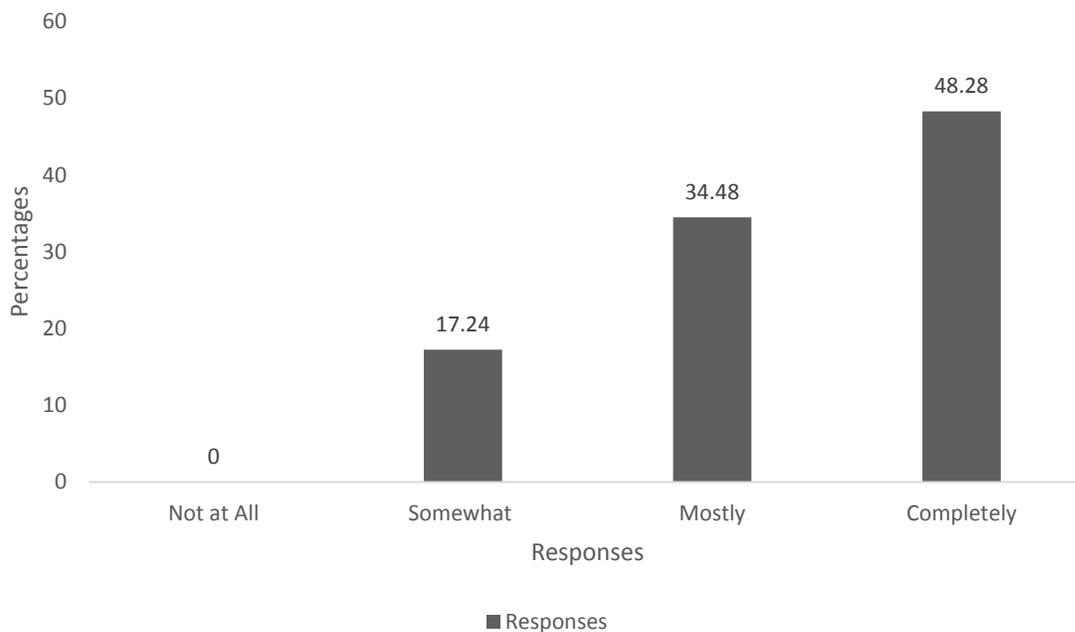
Figure 1. Results from, "To what extent would training be useful in helping you communicate with a dual sensory impaired person using assistive technology?"

The next question was, "To what extent would training be useful in helping you communicate with a dual sensory impaired person when using an interpreter?" "Mostly" was 34.48 % while "Completely" was 24.14 %. "Not at all" and "Somewhat" were tied at 20.69 %. Then the question was, "To what extent would training in your ability to prepare your clients to self-advocate for their needs after they have left your services be helpful to you?" "Mostly" was 37.93 % and "Somewhat" and "Completely" tied at 24.14 %. Only 6.9 % chose "Not at all." Then, "To what extent would training in your ability to prepare your clients to find additional resources after they have left your services be helpful to you?" At 40 % respondents chose "Completely", 30 % for "Mostly", and "Somewhat" at 26.67 %. Only 3.33 % chose "Not at all."

The next question was, "To what extent would training in working collaboratively with the parents of your clients be helpful to you?" "Completely" and "Somewhat" were tied at 33.3

%, with "Mostly" at 26.67 %. Then, "To what extent would training in working with clients that

are culturally or linguistically diverse be helpful to you?" Two-thirds of respondents chose

"Completely", 30 % chose "Mostly", 23.33 % chose "Somewhat" and 13.33 % chose "Not at

all". Next, "To what extent would training be useful in helping you provide your clients' needs

for a sense of belonging in the community?" "Somewhat" landed at 43.33 %, "Mostly" 30 %,

"Completely" 23.33 %, and "Not at all" at 3.33 % (see Figure 2).
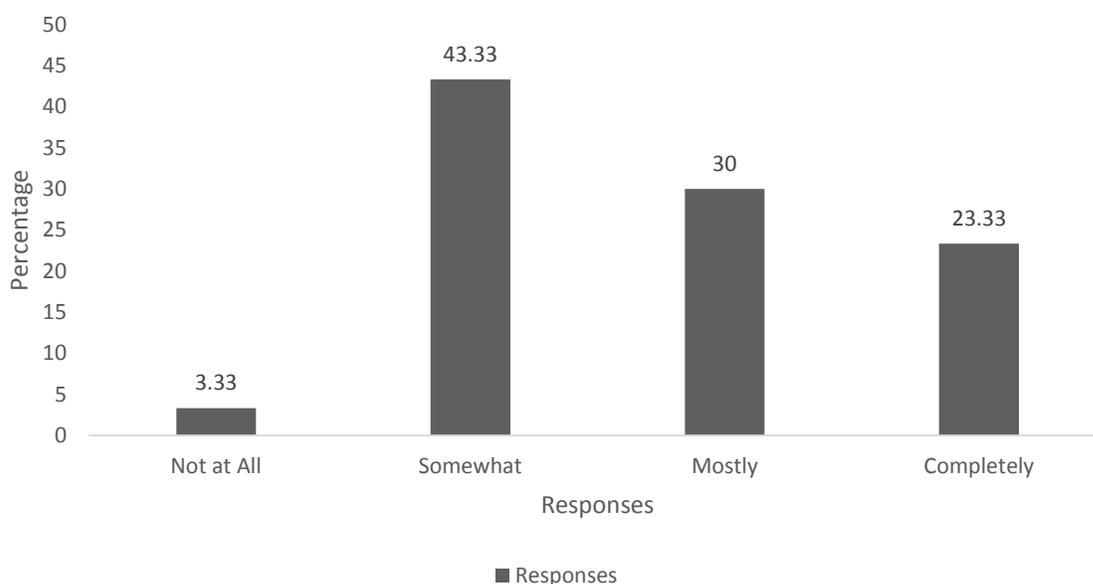
Figure 2. Results from, "To what extent would training be useful in helping you provide your clients' needs for a sense of belonging in the community?"

Then, "To what extent would training in explaining graduation requirements to your

clients be helpful to you?" "Somewhat" landed at 40 % while "Not at all" was at 26.67 %.

"Mostly" and "Completely" were tied at 16.67 %. The next question was, "To what extent would

training in explaining post-secondary options to your clients be helpful to you?" Forty percent of

respondents answered that they "Somewhat" want more training in explaining post-secondary

options to their clients, while "Completely" was at 23.33 % and "Mostly" at 20 % with "Not at

all" at 16.67 %. Then, the next question, "To what extent would training in participating at Individualized Education Plan meetings for your clients as a representative of your agency be helpful to you?" Forty percent of all respondents answered "Somewhat" to training in explaining an Individualized Education Plan to their clients, with 23.33 % answering "Not at all". "Completely" landed at 20 % and "Mostly" at 16.67 %. The next question of the survey was, "To what extent would training be useful in helping you provide your clients' needs for explanation of an Individualized Education Plan?" The majority of respondents for training in participating at Individualized Education Plan meetings for their client as a representative of their agency responded "Not at all" at 33.33 % (see Figure 3).
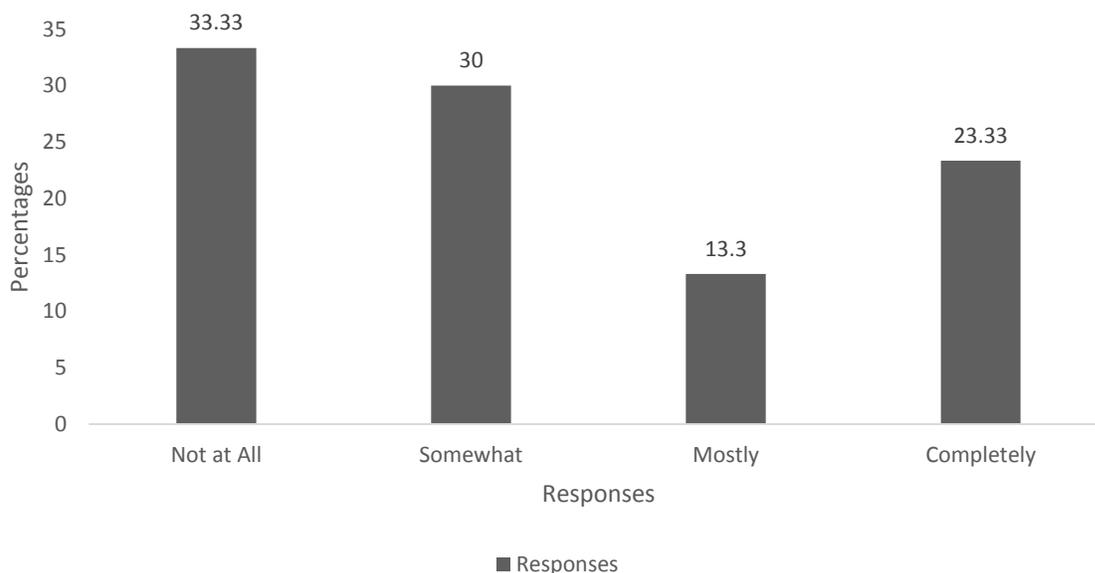
Figure 3. Results from, "To what extent would training in participating at Individualized Education Plan meetings for your clients as a representative of your agency be helpful to you?"

Then "Somewhat" at 30 %, followed by "Completely" at 23.33 % and "Mostly" at 13.33%. The last question of the survey was, "To what extent would training be useful in helping you provide your clients' needs for parental or family involvement?" The majority of

respondents, 46.67 %, answered that they "Somewhat" perceive that training would be useful in

helping them provide their clients' needs for parental or family involvement (see Figure 4).
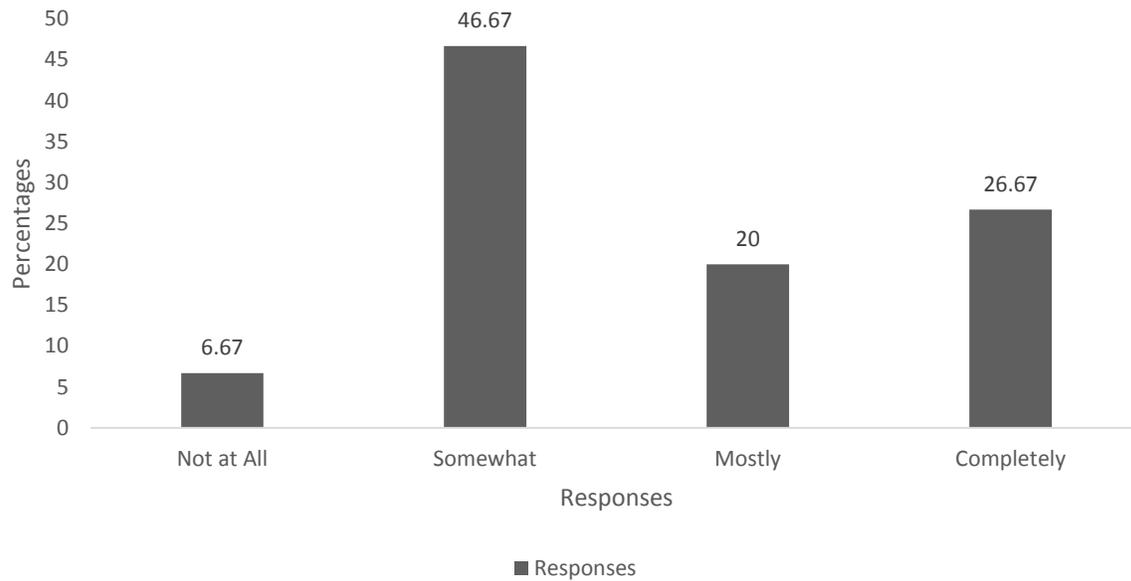
Figure 4. Results from, "To what extent would training be useful in helping you provide your clients' needs for parental or family involvement?"

Chapter 5: Discussion

This research was conducted to assess where Deaf/Blind providers in Florida perceive their strengths and weaknesses and where they perceive more training is needed in the areas of best practice in transition, vocational rehabilitation, and independent living programs.

Summary and Interpretation

Results of the study indicated that areas of perceived strengths were participating as a part of their agency at Individualized Education Plan (IEP) meetings, and explaining graduation, post-secondary options, and Individualized Education Plans to clients. Areas of perceived weaknesses included developing a trustful relationship with a new client, communicating with a Deaf/Blind client using assistive technology and/or an interpreter, communicating and discriminating roles and responsibilities with other agencies, teaching their clients how to self-advocate and find resources after leaving the program, working collaboratively with parents, and meeting their clients' needs for a sense of belonging in the community.

This research suggests areas of perceived strengths among Deaf/Blind providers in Florida. With one-third of respondents answering "Not at all" for training perceived needed for Deaf/Blind providers at Individualized Education Plan meetings representing their agency, this could be considered a strength of Deaf/Blind providers in Florida. Out of all the results, the highest "Not at all" answer at 33.33 % was for perceived training needed for Deaf/Blind providers at Individualized Education Plan meetings representing their agency.

While this research suggests strengths, it also suggests perceived needs for further training. This research suggests that communication with a dual sensory impaired person using assistive technology or an interpreter is an area of perceived weakness among Deaf/Blind

providers. With almost half of the respondents suggesting at 48.28 % that they "Completely" perceive more training in communicating with dual sensory impaired persons using assistive technology useful, that is an area that professional development trainers need to assess in their programs. Similar to more training when using assistive technology with a dual sensory impaired person, communication with an interpreter is an area where respondents "Mostly" perceived more training would be helpful.

Another area of potential need is communicating with other agencies and discriminating roles and responsibilities. In question four, 41.38 % of participants responded that they "Somewhat" perceived more training in communication with other agencies as potentially helpful. Almost 35 % of participants responded that they "Completely" perceived training in communicating with other agencies as potentially helpful, suggesting that Deaf/Blind providers perceive more training in communicating with other agencies that work with Deaf/Blind as an area of need. Half of all respondents answered that they "Somewhat" perceive more training in discriminating roles and responsibilities of their agency from others, suggesting that it is an area that professional development personnel might want to investigate.

Another area that this research suggests be investigated is the training Deaf/Blind providers receive to assist their clients after they have left their program. Almost 38 percent of respondents perceived that they "Mostly" thought that training would be useful in preparing clients to self-advocate for their own needs after they have left the providers' program. In addition to the 37.93 %, at 27.59 % for "Somewhat" and "Completely" in this sample suggested that more training could possibly be perceived as helpful for providers in order to prepare their clients to self-advocate after they complete the provider's program. With the majority of

respondents answering "Completely," and "Mostly" at 40 and 30 %, respectively, this suggests that training in helping clients find additional resources might be perceived as helpful for Deaf/Blind providers.

This research suggests that parental involvement and collaboration is a perceived area of weakness. With two-thirds of respondents answering "Completely" and "Somewhat" and "Mostly" at almost one-third of the respondents, the results suggest that Deaf/Blind providers might perceive they need more training in working collaboratively with parents of their clients. There were also similar answers when the Deaf/Blind providers were asked if they perceived if more training would be helpful in explaining the Individualized Education Plan to their clients and families. With almost half of respondents stating they "Somewhat" perceive that training in getting parental or family involvement would be helpful, it suggests that it is an aspect of professional development that needs to be looked into for the future.

This research also suggests that Deaf/Blind providers perceive more training in involving their clients in the community as a perceived area of need. With "Somewhat" at 43.33 %, and "Mostly" at 30 %, the results suggest that there is a perceived need for more training in helping clients to have a sense of belonging in the community.

Some results were not clear because of the small sample size collected. There were mixed results for Deaf/Blind providers' perceptions of their need for more training working with culturally and linguistically diverse clients. There were mixed answers when asking Deaf/Blind providers if they perceived that more training would be helpful in explaining graduation requirements to their clients. There were also mixed answers when asking Deaf/Blind providers if they perceived that more training would be helpful in explaining post-secondary options to

their clients. The mixed results could indicate that because every provider's education background is different, there are too many inconsistencies or differences within the population to come to a succinct conclusion.

Context

This research suggests that Deaf/Blind providers in Florida come from many different training backgrounds. While the majority of the sample (46.67 %) had Master's degrees, other participants obtained Associates', Bachelor's, Specialists', Doctorate's, and Others' suggesting that the individual level of Deaf/Blind providers is very diverse. This research aligns with Leko and Brownell (2009) stating that Deaf/Blind providers' needs can vary depending on the specific clients they are serving and the context in which the services are being provided. Oertle and Seader's (2015) research that needs of Deaf/Blind providers can be different based on location and context also agreed with this researcher's findings. Horrocks and Morgan (2011) agree with this research finding that providers to people with multiple profound disabilities do not always start with the same skill sets and may not have the same skill set as others in the profession.

Even with different backgrounds and training, perceived strengths and weaknesses were clear in the majority of the respondents' answers. The areas of best practice this research focused on were interagency collaboration/relationship building, self-determination, parental involvement/parent support, and additional training areas based on the research of Landmark, Ju, and Zhang (2010). This research assessed six areas of best practice in providing vocational rehabilitation and/or independent living services to the Deaf/Blind population in Florida. This research suggested that the majority of the research sample was comfortable in their ability to participate in Individualized Education Plan meetings as a representative of his or her agency,

perceived competence in explaining Individualized Education Plans, graduation, and post-secondary options to clients. The results suggested that those areas of professional development are working for most Deaf/Blind providers in Florida. However, the research suggested areas of perceived training needs. Areas in which the Deaf/Blind professional development curriculum should be investigated include developing a trusting relationship with a new client, communicating with a Deaf/Blind or dual-sensory impaired individual using assistive technology and interpreters. Other areas that may be helpful to refresh for providers include discriminating roles and responsibilities between agencies that provide services to the Deaf/Blind, working collaboratively with parents, providing a sense of belonging in the community for clients, and teaching providers how to instill self-determination in their clients through self-advocacy and the ability to look for outside resources after the individual has left a program.

Implications

If Deaf/Blind providers are expected to deliver "best practices" to their clients and perceive they are not currently doing so, something has to be changed in pre-professional development training, continuing education training, or at the individual agency. If "special educators are expected to implement current best practices without adequate institutional support and the necessary resources" added stress and strain could occur due to inadequate training of both the provider and the Deaf/Blind individual (Wisniewski, & Gargiulo, 1997, p. 327). If professional stress and strain continue in a provider's professional life, eventual burnout could occur, causing possible exhaustion and attrition (Wisniewski, & Gargiulo, 1997). Professional development and support is important in retaining providers and teachers of individuals with low-incidence disabilities such as Deaf/blindness (Billingsley, 2004). This research stresses the

importance of professional development for Deaf/Blind providers and the individuals receiving their services.

This research suggests areas that professional development personnel in Florida that develop the curriculum for Deaf/Blind providers or deliver the professional development should look into, areas where more training would have been perceived as potentially helpful. This suggests that professional development for Deaf/Blind providers' needs to address different approaches to building trusting relationships with new clients, communicating with a person or client that is dual sensory impaired with assistive technology, or an interpreter. In addition, this research suggests communication with other Deaf/Blind providers, and the discrimination of roles and responsibilities between the two agencies would be potentially helpful to Deaf/Blind providers. In the area of parental involvement, this research suggests that training might be helpful in teaching providers how to work collaboratively with their client's parents and encourage parental or family involvement.

In the area of preparing their clients to self-advocate and find additional resources, Deaf/Blind providers in Florida perceived that training might be helpful. Self-advocating and the ability to find outside resources are important to independence of an individual with disabilities and if providers do not know how to adequately teach those skills to their clients' potential independence for their client could be hindered. Deaf/Blind Florida providers' answers suggest that training in helping their clients to feel a sense of belonging in the community was another area where training might be helpful. Feeling a sense of belonging in the community can be positive in helping a person with disabilities find community resources and lead to independence.

This research is significant because it suggests that Deaf/Blind providers are aware that they are not appropriately or adequately trained in providing the "best practices" to the clients they serve in their profession. This suggests that the curriculum of formal classroom trainings and continuing education classes needs to be assessed and aligned in these areas of best practice in order to eliminate the gaps between training and providing the actual service to the Deaf/Blind population. This research suggests that providers perceive or know their shortcomings and could be building better relationships with their clients and providing more beneficial services to their clients. If Deaf/Blind providers need assistance with a basic foundation of establishing a trusting relationship with a new client, added stress could be put upon the client and the provider. If according to Janssen, Schuengel, and Stolk (2002) "professionals in educational settings who are not sensitive to subtle communication cues, reactive to the needs or the children, or who lack skills that promote quality relationships may contribute to the stress experienced by children who are deaf/blind" (as cited in Nelson, Greenfield, Hyte, & Shaffer, 2013, p. 140). This research suggests that inadequate services could be provided to Deaf/Blind persons seeking assistance, which could lead to additional stressors not already experienced by the individual with disabilities. If inadequate services are being provided to Deaf/Blind persons, it could negatively affect a student's learning. According to Billingsley (2004), "the hiring of unqualified special educators is especially costly for students with disabilities—those students who need the most assistance lose critical learning opportunities as these new teachers struggle to figure out what to do" (p. 370). If Deaf/Blind providers are struggling with what to provide or how to provide best services for their clients, there is a possibility that the individual with disabilities could suffer. Even if a special educator receives professional development, "some who receive [special

development] opportunities do not find them helpful" (Billingsley, 2004, p. 374). The professional development opportunities that special education professionals might receive might miss certain areas that special educators or providers deem helpful.

Areas of strength indicated by this research suggest that Deaf/Blind providers perceive working and explaining the Individualized Education Plan of their clients as a strength. While explaining graduation requirements, post-secondary options, developing a trusting relationship with clients that are new, and working with culturally and linguistically diverse clients, the topics are too varied for a clear answer. A possible hypothesis why answers were not clear could be because of the diversity of needs within Deaf/Blind providers in Florida.

Potential Research Bias

There is always potential for research bias when the researcher is doing the study with potential participants that can be at the researcher's work site. Potential researcher bias was contained by using SurveyMonkey. Due to the low incidence of the Deaf/Blind population, there should be little if any role confusion for participants of the role of the researcher because the researcher has had little interaction with this population; Rehabilitation Specialists often go to the client and not vice versa (Glesne, 2016) and the principle investigator is not a Rehabilitation Specialist. An advantage for the researcher was the ability to apply action research in the work environment to improve the everyday experience for clients (Glesne, 2016). The researcher's role as a member provider to the Deaf/Blind didn't hinder her research but instead motivated the researcher to improve current Deaf/Blind training programs for providers of vocational rehabilitation and independent living services in Florida.

Limitations

There were potential limitations and delimitations. Limitations included problems with external validity and generalizability if the Deaf/Blind provider sample size was not representative of the larger population because of the diversity within the Deaf/Blind population's needs and procedures that providers use to address those needs (Creswell, 2015; Glesne, 2016). The problem of a potentially small sample size was addressed by using snowball sampling to obtain potentially more qualified research participants (Glesne, 2016) and the researcher "ask[ed] as many people to participate as possible within the resources and time that both the researcher and participants [could] provide" (Creswell, 2015, p. 606). One potential problem with using employer emails was that attrition can occur and websites are not always up to date on employee turnover so some of the emails the researcher sent could have been sent to previous employees who quit, moved, or are no longer working at that company. If they are working for a different Deaf/Blind provider their new employee email address might not have been updated to their current employer. The researcher's optimal sample size was between 16 and 30 participants because of feasibility which was affected by time, money, and energy (Creswell, 2015; Glesne, 2016). Online data collection through Survey Monkey assisted in reducing some time and energy and reduced anticipated problems (Glesne, 2016). Since this was action research, the outcomes of this research will likely assist those Deaf/Blind providers in Florida the most (Creswell, 2015; Glesne, 2016). The researcher expected to gather all data by fall 2016 semester while taking her last class and to complete the final dissertation report in spring of 2017.

Future Research

There are many potential research studies that can stem from this research. If a researcher wants to continue the research in Florida they could develop a survey looking into areas of best practice in secondary transition that were not feasible for this study. This study was able to look only at areas of identified best practices in interagency collaboration, community engagement, student self-determination, advocacy, development of effective Individualized Education Program planning documents, and processing addressing IDEA 1997 transition services language requirements (Zhang, Ivester, Chen, & Kaysiyannis, 2005). Feasibility and potential length of the survey prevented the principle investigator from assessing secondary transition best practices areas of interdisciplinary collaboration, integrated schools, classrooms, and employment, functional life-skills curriculum, social and personal skills development and training, business and industry linkages with schools, and input in secondary transition planning (Zhang et al., 2005). In addition, future research could add the option for "not applicable" in the survey in order for potential participants to choose that option instead of potentially skipping the question. Other future research could include trying to find if there are best practices for providing early intervention services to Deaf/Blind children. There are many areas that can be researched with Deaf/Blind providers that assist students who are receiving early intervention services. The principle researcher's occupation and experience with secondary transition students influenced her to focus on secondary transition and not early intervention services.

There are options for future research if a researcher doesn't want to keep the research in Florida. As long as the other state the researcher is looking into provides the same services in a similar fashion, the survey could be used in other states. However, if other states are structured differently, the survey questions might have to be modified. The researcher could look at how

professional development is typically provided in each state and then compare each state's needs for additional training. If information from enough states is collected, the researcher could assess if there are national trends for professional development training needs for Deaf/Blind secondary transition or early intervention providers.

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Appendix A

Survey Questions

Demographics

1. Please estimate the number of DeafBlind people that you personally have provided

   services for. A) 1 to 20 B) 21 to 40 C) 41 to 60 D) 61 to 80 E) 81 to 100 F) More than

   101

2. What type of agency do you work for? A) State B) Federal C) Non-Profit D) For-Profit

   E) Private F) Other

3. What is your highest level of degree attainment? A) Associates B) Bachelors C) Masters

   D) Specialist E) Doctorate F) Other

Interagency Collaboration/Relationship Building

4. To what extent would training be useful in helping you to provide your clients' needs for

   communicating with other agencies? A) Not at all B) Somewhat C) Mostly D)

   Completely

5. To what extent would training in discriminating the roles and responsibilities of your

   agency from other agencies that also assist the DeafBlind population be helpful? A) Not

   at all B) Somewhat C) Mostly D) Completely

6. To what extent would training be useful in helping you develop trust in a relationship

   with a new client? A) Not at all B) Somewhat C) Mostly D) Completely

7. To what extent would training be useful in helping you communicate with a dual sensory

   impaired person using assistive technology? A) Not at all B) Somewhat C) Mostly D)

   Completely

8. To what extent would training be useful in helping you communicate with a dual sensory impaired person when using an interpreter? A) Not at all B) Somewhat C) Mostly D) Completely

Self-Determination

9. To what extent would training in your ability to prepare your clients to self-advocate for their needs after they have left your services be helpful to you? A) Not at all B) Somewhat C) Mostly D) Completely

10. To what extent would training in your ability to prepare your clients to find additional resources after they have left your services be helpful to you? A) Not at all B) Somewhat C) Mostly D) Completely

Parental Involvement/Parent Support

11. To what extent would training in working collaboratively with the parents of your clients be helpful to you? A) Not at all B) Somewhat C) Mostly D) Completely

12. To what extent would training in working with clients that are culturally and linguistically diverse be helpful to you? A) Not at all B) Somewhat C) Mostly D) Completely

13. To what extent would training be useful in helping you provide your clients' needs for a sense of belonging in the community? A) Not at all B) Somewhat C) Mostly D) Completely

Additional Training Areas

14. To what extent would training in explaining graduation requirements to your clients be helpful to you? A) Not at all B) Somewhat C) Mostly D) Completely

15. To what extent would training in explaining post-secondary options to your clients be helpful to you? A) Not at all B) Somewhat C) Mostly D) Completely

16. To what extent would training in participating at Individualized Education Plan meetings for your clients as a representative of your agency be helpful to you? A) Not at all B) Somewhat C) Mostly D) Completely

17. To what extent would training be useful in helping you provide your clients' needs for explanation of an Individualized Education Plan? A) Not at all B) Somewhat C) Mostly D) Completely

18. To what extent would training be useful in helping you provide your clients' needs for parental or family involvement? A) Not at all B) Somewhat C) Mostly D) Completely

Appendix B

Invitation Message

Dear potential participant:

My name is Kelly Castino and I am a doctoral student at Nova Southeastern University. I am engaged in research for the purpose of satisfying a requirement for a Doctor of Education degree. My research title is An Analysis of the Training Needs for DeafBlind Service Providers and the purpose is to assess the training needs of DeafBlind service providers in the areas of vocational rehabilitation and independent living in the State of Florida. The findings will identify areas of strength and areas that DeafBlind providers perceive they need more professional development training. Recommendations based on the findings, should support policy makers' decision on this regards.

You are being asked to participate because you provide vocational rehabilitation and/or independent living services to DeafBlind individuals in the State of Florida. You could work at a state agency, non-profit, for-profit, private, or federal agency.

Please read the attached participation letter to decide if you would like to take part in the study voluntarily by completing the survey.

Sincerely,

Kelly Castino

Appendix C

Participation Letter

Participation Letter

Title of Study: **An Analysis of the Training Needs for Deafblind Service Providers**

IRB Protocol # ARC EDU 16-025

Principal investigator
Kelly Castino, Ed.S

Co-investigator
Kathleen Kardaras, PsyD
c/o Ashley Russom, EdD
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800-986-3223, Ext. 28500

Institutional Review Board
Nova Southeastern University
Office of Grants and Contracts
(954) 262-5369/Toll Free: 866-499-0790
IRB@nsu.nova.edu

Description of Study: Kelly Castino is a doctoral student at Nova Southeastern University engaged in research for the purpose of satisfying a requirement for a Doctor of Education degree. The principle investigator will assess the training needs of DeafBlind service providers in the areas of vocational rehabilitation and independent living in the State of Florida. The findings will show what will need to be done related to professional development for DeafBlind providers in the State of Florida. The findings will suggest areas of strength and areas that DeafBlind providers perceive they need more professional development training.

You are being asked to participate because you provide vocational rehabilitation and/or independent living services to DeafBlind individuals in the State of Florida. You could work at a state agency, non-profit, for-profit, private, or federal agency. You will be requested to share personal perceptions and will not be representing any institution.

If you agree to participate, you should answer an anonymous survey. The purpose of the survey is to assess the training needs of DeafBlind service providers in the areas of vocational rehabilitation and

independent living in the State of Florida. You may access the survey using the link at the bottom of this letter. It will take approximately 10 to 15 minutes to complete the survey.

Risks/Benefits to the Participant: There may be risks for participating in this study related to your privacy and confidentiality. Administering an anonymous survey will minimize those risks. There are no direct benefits for agreeing to be in this study. Please understand that although you

may not benefit directly from participation in this study, you have the opportunity to enhance services provided to your DeafBlind consumers If you have any concerns about the risks/benefits of participating in this study, you can contact the investigators and/or the university's human research oversight board (the Institutional Review Board or IRB) at the numbers listed above.

Cost and Payments to the Participant: There is no cost for participation in this study. Participation is completely voluntary and no payment will be provided.

Confidentiality: Information obtained in this study is strictly confidential unless disclosure is required by law. However, your participation is anonymous and there will be no information that could be linked to you. The platform used to administer the survey ensures confidentiality as well.

Participant's Right to Withdraw from the Study: You have the right to refuse to participate in this study and the right to withdraw from the study at any time by not completing or submitting the survey.

Voluntary Consent to Participate

I have read this letter and I fully understand the contents of this document and voluntarily consent to participate. All of my questions concerning this research have been answered. If I have any questions in the future about this study they will be answered by the investigator listed above or his/her staff.

I understand that the completion of the survey implies my consent to participate in the study An Analysis of the Training Needs for Deafblind Service Providers

Link to access the survey

Appendix D

Reminder Letter

Subject Line: I want your opinion.

If you have already responded I want to thank you for your time and assistance. If not, please take a few moments to help me understand the kinds of professional development topics that would help you to feel confident that you are providing the very best service to your clients!

I'd really appreciate your participation.

Click the button below to start or continue the survey. Thank you for your time.