

PERCEPTIONS ON PROFESSIONAL DEVELOPMENT

**A MIXED METHODS STUDY:
INVESTIGATING THE PERCEPTIONS OF PRESCHOOL EARLY
INTERVENTION INTERMEDIATE UNIT STAFF ON PROFESSIONAL
DEVELOPMENT**

A Doctoral Capstone Project

Submitted to the School of Graduate Studies and Research

Department of Education

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Requirements for the Degree of
Doctor of Education

Brandi Lee Binakonsky

California University of Pennsylvania

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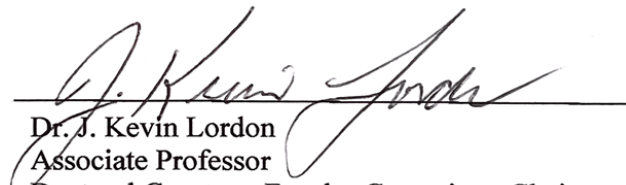
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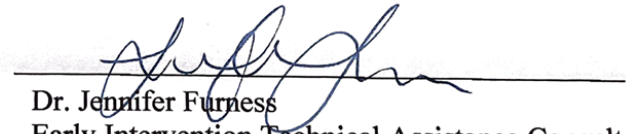
Brandi Lee Binakonsky

Candidate for the Degree of Doctor of Education

7/11/22


Dr. J. Kevin Lordon
Associate Professor
Doctoral Capstone Faculty Committee Chair

7/11/22


Dr. Jennifer Furness
Early Intervention Technical Assistance Consultant
Doctoral Capstone External Committee Chair

Dedication

This work is dedicated to my family, who have shown unending support throughout my journey. I know that each of you have been willing to make sacrifices for me and provided me with the grace and space I needed to pursue my goal. For this, I am forever grateful. To my husband Jeremey and my son Elijah, thank you for walking beside me every step of the way. Your understanding, patience, and love were exactly what I needed. To my mother and father, thank you for always believing in me, providing me with a strong foundation, and your unconditional love. To my friend and colleague, Jennifer Furness, thank you for inspiring me and your gentle prompts when I needed encouragement. You have always been willing to freely give of your time to help me remain on track and your words of wisdom have continuously provided me with a list of reminders of my “why” and the importance of this work. To my father-in-law and mother-in-law (I know you are looking down from heaven), my brothers, and my friends who have given me a listening ear and generous advice when I needed to refocus my attention on what matters the most. God has blessed me with so many wonderful people and I could not have done it without you all! “I can do all things through Christ, who strengthens me” (Philippians 4:13, NKJV).

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Abstract

Research encompassing the characteristics of effective professional development and the influence on supporting educators in delivering high-quality instructional services is more prevalent within the context of school-age and early childhood programs. The Westmoreland Intermediate Unit (WIU), a regional educational service agency that provides preschool Early Intervention (EI) special education services, utilizes professional development as a means by which to support engagement, retention, and development of talent. This non-experimental mixed methods capstone research study investigated the effects of professional development on the perceptions WIU Preschool EI staff as it relates to their job skills. The problem addressed by the research is the ability of the WIU to deliver professional development that satisfies the requirements set forth through state-level initiatives while meeting the needs of Preschool EI staff in a fiscally responsible manner. This supports the WIU's transition from traditional face-to-face professional development to the increase in asynchronous professional development implemented in part due to the COVID-19 pandemic. This research sought to address the gap in literature specifically focused on key characteristics that positively influence the professional development experiences of the targeted staff. Data was collected through administration of the Early Intervention Professional Development Survey (EIPDS) and semi-structured interviews revealing a satisfactory response to the current professional development offerings. While analysis of survey results did not reveal statistically significant differences when comparing responses by job titles, years of experience, and years employed by the WIU, recommendations are included for the EI program in developing a plan of action along with recommendations for future research.

CHAPTER I

Introduction

Student achievement is at the forefront of conversations relative to the desired outcome of education. To accomplish this goal and many others, it is critical to support the needs of educational staff. This helps to facilitate their ability to meaningfully contribute to the school's mission and increase the likelihood that students will experience success. Professional development is one component that allows educators to enhance their skills, remain current in research-based practices, and focus priorities on new local, state, or federal initiatives.

Given the significant impact professional development may contribute to the retention of high-quality teaching staff and workforce development, it is critical to investigate staff perception relative to this topic. Studies investigating teacher attrition specific to special education have identified many factors influential in a teacher's decision to remain in their position, including the level of administrative support, school climate, and professional development (Billingsley, 2004). The National Professional Development Center on Inclusion (NPDCI) states that "professional development is facilitated teaching and learning experiences that are transactional and designed to support the acquisition of professional knowledge, skills, and dispositions as well as the application of this knowledge in practice" (National Professional Development Center on Inclusion [NPDCI], 2008, p. 3). In the same framework, research focused on the collection and analysis of relevant data is inherently valuable in ensuring that the time, money, and human capital invested in professional development produces the desired results.

Framework

The Westmoreland Intermediate Unit 7 (WIU) places a high level of interest and attention on employee engagement, retention, and talent development. Within the 2019-2022 WIU Comprehensive Plan, efforts are directed toward this area within the goal action plans section for the Human and Fiscal Resource Allocation and Stewardship System (Westmoreland Intermediate Unit [WIU], 2021, p. 2). Therefore, it is essential to make a concerted effort to improve those areas that can positively affect and enhance the professional development opportunities offered by the WIU.

The WIU student services division desires to evaluate the effectiveness of professional development, specifically regarding the transition to a more extensive use of online professional development platforms that increased slightly over the past few years and much more extensively as a result of the pandemic. Traditionally, following professional development, the trainer provides staff with a post-workshop training survey that uses a 5-point Likert scale to rate the overall program, organization and flow, quality of materials, and the degree to which the stated objectives were met. In addition, attendees are provided with open-ended questions that probe into what they found most valuable, other uncertainty or concerns they may have, and suggestions for improvement. While this information has been beneficial, the feedback focuses on a specific training. It is of more value to the trainer as it assists them in developing an understanding of the areas that may be improved or strengthened when facilitating the same training in the future. It also does not reflect how the training may impact the job skills of the staff. With this as one of the areas of interest within the study, a deeper examination can potentially influence the broader scope of professional development provided by the WIU.

Background

The student services division of the WIU operates several programs, including the Early Intervention (EI) preschool program, which serves children ages three to five with developmental delays and disabilities. During my 18 years employed by the WIU, I was afforded the opportunity to serve in multiple roles, including special education teacher, educational consultant, supervisor of special education for both EI and school-age, and finally administrator of the EI program. These roles allowed me to experience adult professional development from various lenses, as both a recipient and as one responsible for the training development, implementation, and presentation. Having transitioned from the WIU in 2019, I took on the role of an Early Intervention Technical Assistant Consultant, allowing me to engage with the WIU staff in another capacity, focused extensively on supporting EI inclusive practices and facilitating collaborative adult learning experiences. As the WIU staff are afforded opportunities to guide individual and independent learning, there are many instances in which the desired outcome is predetermined and does not lend itself to allowing them to self-select topics or formats.

In the past, in-service professional development days were primarily held in a face-to-face format. During the 2020-2021 school year, all in-services were held online and included a mix of synchronous and asynchronous options. When considering these factors and the increase in asynchronous professional development due to the pandemic, the problem is how can the WIU act in a fiscally responsible manner when delivering professional development. This concern is coupled with the need to satisfy the state-level expectations and provide staff with skills required for performance respective of their role and responsibility in EI. The administration is left with a desire to evaluate the

effectiveness of these changes in online professional development pertaining to asynchronous versus synchronous activities across the canvas of different presentation formats (e.g., visual materials, audio/listening, or kinesthetic experience) with options of altered delivery times.

The administration must strategically focus resources to positively impact staff understanding and service delivery. After receiving the professional development, it is intended that EI staff implement the newly acquired or refined knowledge and skills within their respective roles. As such, this study will explore the relationship between these areas and support the administration in determining how to utilize the data to develop a plan of action for effectively providing professional development that satisfies all areas.

Research Outcomes and Questions

This study will investigate the effects of professional development on the perceptions of Westmoreland Intermediate Unit (WIU) Early Intervention (EI) staff regarding their job skills. Quantitative and qualitative data collected from both an electronic survey and semi-structured interviews will be analyzed to facilitate the research process. Three overarching questions will guide the research and include:

1. What are the current perceptions of EI staff relative to the Professional Development (PD) opportunities available to them?
2. What changes do the EI staff recommend to enhance the PD that is currently offered to them?
3. How do the PD experiences that are provided to the EI staff impact their perception of their job skill level?

The projected outcome is to capitalize on the information gleaned from the data and utilize it to support the WIU student services division in developing an action plan for future EI professional development. Subsequently, the plan would consider staff perceptions to build a comprehensive system of professional development that meets organizational, program, and staff needs, with the intent to positively impact services for eligible young children in the EI program.

Fiscal Implications

When planning and delivering professional development, the administration must consider a variety of factors. These aspects include but are not limited to the board-approved school calendar, the topic to be covered, the most appropriate delivery method, the location where the training will be provided, and the number of hours of continuing education the staff will accrue. Each of these elements is influenced by outside factors. This may involve the WIU collective bargaining agreement (CBA), which defines the number of ACT 48 and paraeducator training hours the WIU must afford EI staff, the availability and appropriateness of the training location, as well as any associated costs that must be incorporated within the budget.

The training topics must be targeted and appropriate for the needs identified by the administration relative to the EI program or related to EI state-level initiatives. These can include topics such as the Pennsylvania State Performance Plan Indicators including indicator 6, preschool environments or least restrictive environment, indicator 7 improvements of learning outcomes for preschoolers with disabilities, and indicator 12 effective transition at age 3 (United States Department of Education, 2019b). Moreover, there is also a need to consider any discipline-specific training related to staff who hold

specialized certification such as speech/language pathologists compared to special education teachers or the incorporation of recommended practices that come from the Council for Exceptional Children Division for Early Childhood. Ultimately, there are overlaps, given the potential time, location, cost, and CBA constraints.

The financial implications of professional development include the cost of the location, training materials, presenter fees, and the time associated with the employee's engagement in professional development activities. This translates to the money allocated towards an employee's salary, and as appropriate, any benefits provided to the WIU employees. The EI staff considered within this study include administration, special education teachers, paraeducators, speech/language pathologists, evaluation team members, secretarial staff, as well as the contracted occupational therapists/assistants and physical therapists assigned to the EI program.

The data gathered through this study will be valuable in assessing the effectiveness of the WIU's current professional development model in satisfying the need for training that meets the state-level requirements and provides staff with skills required for performance respective of their role and responsibility in EI while acting in a fiscally responsible manner.

Summary

For the WIU to retain high-quality professionals, engage staff in focusing on the needs of the students they serve, and cultivate a collaborative and dynamic environment for employees to develop their talent, effective professional development is one area that is to be prioritized. As professional development has transformed at the WIU over the past few years, it is necessary to assess the impact on staff. This action research will

contribute data and information that will facilitate the WIU's ability to ensure that they are providing staff with training that supports them in fulfilling their responsibility to the eligible young children in the EI program and enables them to grow professionally while considering the impact from a fiscal perspective.

As the first chapter provided an introduction, established the framework, reviewed the anticipated outcome, identified the questions explored by the study, and discussed the fiscal implications, the second chapter will review the literature that describes Preschool EI and the foundational aspects of professional development.

CHAPTER II

Literature Review

The phrase ‘professional development’ is often used interchangeably with other terms such as “staff development, in-service, training, professional learning, or continuing education” (Mizell, 2010, p. 5). As this is a prominent topic in education, Early Childhood Special Education (ECSE), also known in Pennsylvania as Preschool Early Intervention (EI), has distinctive characteristics based on the intricate nuances of the program. This uniqueness lends to question whether current approaches to professional development can be applied in the same manner to Preschool EI. With an overarching intent to improve the development and learning of children, this is an area worth investigating (Diamond et al., 2013).

Likewise, the delivery of effective professional development for Preschool EI staff is an area of interest to the Westmoreland Intermediate Unit (WIU). It is relevant to the WIU Preschool EI program due to an increased use of asynchronous professional development using online platforms. Wherein this modality had been used infrequently in the past, considering the changes experienced as a result due to the pandemic, it has become increasingly more common. In turn, the WIU is interested in determining the staff’s perception of this change and how research in this area can categorically inform future planning across staff (M. Thomas, personal communication, April 23, 2021). In considering the broader perspective, the problem the WIU needs to address is how they can act in the most fiscally responsible way when delivering professional development, while at the same time satisfying the specific parameters for training. Subsequently, this

includes fulfilling the state-level training requirements and providing staff with unique skills relevant to their roles and responsibilities within the organization.

The literature review will discuss the foundational components of Preschool EI and the underlying premise of professional development concerning the field. The exploration will begin by providing a background on the history of Preschool EI related to Pennsylvania, the contributing theoretical framework including adult learning and characteristics of professional development, the implementation of professional development, and the components of Preschool EI topics.

History of Early Intervention

Before 1975, young children with disabilities were not afforded the same rights and opportunities as their same-age peers to access educational programming. This changed, however, as the education of children with disabilities was propelled forward federally through the passage of Public Law 94-142, the Education for All Children Handicapped Act (EHA), at which point children, ages 3 to 21, were afforded the right to a free and appropriate public education (FAPE). In the years following the EHA, several changes were made, including the 1986 passage of Public Law 99-457, which mandated preschool programming for children with disabilities ages 3 through 5 as well as the inclusion of EI services for infants and toddlers with delays or disabilities, thereby providing additional rights and protections under the law (Congress.gov, 2021).

Individuals with Disabilities Education Act

In 1990 the EHA was reauthorized, and the Individuals with Disabilities Education Act (IDEA) was established (United States Department of Education, n.d.-a). The 2004 reauthorization of IDEA provided states with the ability to also use the term

developmental delay for children ages 3 through 5 in addition to the disability categories utilized by school-age programming (Individuals with Disabilities Education Act [IDEA] Partnership, n.d.). Broken into two parts, IDEA Part B encompasses children ages 3 to 21, and IDEA Part C includes children younger than 3 years old. While the provision of special education services includes a wide age range, young children ages 3 to 5, are covered explicitly by the Section 619 federal grant. Section 619 Part B provides the foundation upon which states apply for funding to provide special education services to this population. EI programming for children younger than 3, who meet the eligibility criteria, receive infant and toddler services through Part C. Both section 619 Part B services and Part C services are intended to support each child in developing the skills they need to achieve success (Early Childhood Technical Assistance [ECTA], 2020).

Given the broad focus and expectations within the IDEA, the United States (US) Department of Education's Office of Special Programs (OSEP) ensures oversight of the federal guidelines. It provides formula grants to assist states with compliance. States, as the recipients of the federal grants, are expected to comply with the IDEA to ensure children ages 3 to 21 receive FAPE in the least restrictive environment (LRE), and children ages birth to 3 also meet the desired outcomes of the law. While each state is responsible for providing services to all children with disabilities who meet the eligibility requirements from ages 3 to 21, children ages 3 to 5 fall specifically under the applicable guidance found in Section 619 (United States Department of Education, 2021).

OSEP also holds states accountable by establishing a Results-Driven Accountability System (RDA). This process requires states to develop performance plans that include measurement criteria relevant to child and family outcomes, enforced at the

local level. Subsequently, states receive a rating based on their compliance (United States Department of Education, n.d.-b). The State Performance Plan (SPP) encompasses 17 indicators relative to Part B programming; however, three indicators focus exclusively on preschool special education. They include indicator 6, which measures the LRE where preschoolers with disabilities are receiving special education services and whether the locations include participation with typically developing peers; indicator 7, which focuses on improvements in learning outcomes for a child across three developmental areas; and indicator 12, which focuses on eligibility and IEP compliance for children who are transitioning from Part C to Part B at age 3 (United States Department of Education, 2019a).

Pennsylvania Early Intervention Services System

IDEA is the federal law that serves as the foundation of special education regulations. In Pennsylvania, Act 212 of 1990, the EI Services System Act, defines EI services for eligible young children. Act 212 includes both Part C Infant and Toddler programming and Part B programming for children 3 years old to the age of beginners, which is the age when a child can attend first grade in a school district (Early Intervention Services System Act, 1990). In addition to law, the regulations that guide programming for preschoolers with disabilities in Pennsylvania are contained within Title 22 of the Pennsylvania School Code, specifically Chapter 14, Special Education Service and Programs (Early Intervention, 1990).

Pennsylvania differs from many other states in that the Pennsylvania Department of Education (PDE) and the Pennsylvania Department of Human Services (DHS) united in partnership to create the Office of Child Development and Early Learning (OCDEL).

Under mutual direction of both departments, OCDEL is responsible for governing the Bureau of Early Intervention Services and Family Supports (BEISFS). The BEISFS is responsible for the management of both Infant/Toddler EI programs and Preschool EI programs (Early Intervention Technical Assistance, 2020b, p. 7). Under Act 212, a “mutually agreed-upon written arrangement” or MAWA holder such as “intermediate units, school districts or other public or private agencies” is responsible for providing FAPE for preschool children identified with a developmental delay or disability, who are eligible for EI services (Early Intervention Services System Act, 1990). According to the Pennsylvania Association of Intermediate Units (PAIU), the majority of MAWA holders are Intermediate Units (IUs), serving 80% of children receiving EI services. As such, PAIU works with local IUs to provide support and advocacy, as demonstrated by their efforts to ensure adequate Preschool EI funding (Pennsylvania Association of Intermediate Units, 2019). References to the term MAWA are frequently replaced with “Preschool EI program grantee” to clarify the language. This is further supported through the annual assurance document that is part of the EI special education plan submission. Preschool EI programs must sign this to guarantee that they comply with “22 PA Code Chapter 14, 11 P.S. 875, 34 CFR Part 300 and with the policies and procedures of PDE” (Office of Child Development and Early Learning, 2021a).

Funding Mechanisms

Funding allocation for Preschool EI programs comes from several sources including federal and state funds allocated by OCDEL, local funds, and when applicable, medical assistance reimbursement. Wherein most funding comes from the state, federal funding, under IDEA Part B, includes both 611 Component 1, which is based on the

number of children ages 3 to 5 eligible during a December 1 child count, and IDEA Part B Section 619 supplemental funding based on children who are identified for special education services (Early Intervention Technical Assistance, 2020b, pp. 18-19). As the state funding is established through the state EI grant, “total allocation per program is established by OCDEL minus the federal funds and medical assistance funds” (Early Intervention Technical Assistance, 2020b, p. 19). The state and federal funding are in addition to any local revenue that is generated by the program. While IUs do not have the ability to leverage taxes, local funds can come from other sources, such as services provided by the EI program to support member school districts (Early Intervention Technical Assistance, 2020b). Information pertinent to these areas can be found within the OCDEL fiscal contract guidelines for EI. It states, “when the child has reached the year of kindergarten eligibility, does not enroll in any kindergarten program, and remains in Early Intervention until the age of beginners, the funding for Early Intervention services then becomes the responsibility of the resident school district” (Office of Child Development and Early Learning, 2021b, p. 5). As a result, this is one of the ways IUs can generate revenue to support programming. Finally, the School-Based ACCESS Program also serves as a funding stream. It allows programs to receive reimbursement for delivering medically related services as part of the provision of a student’s IEP (Pennsylvania Department of Human Services, 2021b). Preschool EI program grantee holders must utilize funds generated from medical assistance to support the overall budget according to the number of children that the Preschool EI program grantee serves who are eligible for MA reimbursement. Accordingly, the related service providers listed on the IEP bill SBAP to support the Preschool EI program grantee in recouping a portion

of the cost for the medically related service (Early Intervention Technical Assistance, 2020b; Pennsylvania Department of Human Services, 2021b).

Staffing Composition

As special education encompasses children with disabilities ages 3 to 21, there are subtle differences in language regarding the implementation of EI compared to school-age programming, although the regulatory guidance is the same. The expectation is to comply with both the federal and state regulations for special education services. This then moves beyond the fiscal responsibility to include the expectation that Preschool EI will conduct child find activities, complete evaluations as well as IEPs within established timelines, and ultimately provide FAPE within the LRE. Therefore, programming and services are to be based on the individual needs of the child with a plan that provides the supports required for the child to participate to the greatest extent possible with their peers and be afforded opportunities that enable them to experience educational success (Pennsylvania Department of Education, 2009).

The staffing composition of both EI and school-age programs is based on what is necessary to fulfill the requirements established through the laws and regulations. The team members required to conduct an evaluation must have the qualifications necessary to determine eligibility for the child. For example, while a school psychologist is required when evaluating for specific disability categories per § 14.123 such as “autism, emotional disturbance...[intellectual disability]...multiple disabilities, other health impairments, specific learning disability or traumatic brain injury” other team members that may be included, such as speech-language pathologists, occupational or physical therapists would

be added according to the reason for the evaluation (Rosa's Law, 2010; Pennsylvania Department of Education, 2009, p. 40).

The same concept applies to the individualized education plan (IEP) team in that § 300.321 defines the IEP team as not only the parents of the child but also a regular education teacher, special education provider, and a local education agency (LEA) representative, as well as any other service providers that would be required based on the child's needs and related services (Pennsylvania Department of Education, 2009, pp. 49-50). Ultimately, while required team members must be part of the multidisciplinary team and IEP team for compliance, there are differences between and among programs in the responsibilities of both direct and in-direct service providers based on local procedures. Direct service providers for the WIU Preschool EI program are responsible for evaluation and IEP service implementation. This may include and is not limited to school psychologists, special education teachers, and related services such as speech-language pathologists, occupational therapists, physical therapists, and paraprofessionals. Indirect service providers include secretarial staff and the supervisors or directors responsible for compliance and other management activities needed to fully operate (M. Thomas, personal communication, April 23, 2021).

In order to provide EI services in Pennsylvania, Preschool EI grantees are organized according to the geographic region covered. While there are a few school districts serving as Preschool EI grantees included, the majority are IUs and are organized across 29 service regions (Pennsylvania Association of Intermediate Units, 2019). The WIU provides EI services for eligible young children residing in one of the seventeen school districts in Westmoreland County (WIU, 2021). Staff are distributed based on a

geographic area according to the number of children in need of services in that area as well as their assignment defined by the WIU administration and bargaining unit contracts respective to the WIU Education Association PSEA/NEA and WIU Classroom Assistants Education Support Personnel Association PSEA-NEA (M. Thomas, personal communication, April 23, 2021).

The training requirements are also contained within the fiscal guidelines that state that “at least 1 percent but not more than 2 percent of the state EI allocation” is to be attributed to costs associated with the required training (Office of Child Development and Early Learning, 2021b, p. 7). This demonstrates the fiscal attention that programs are expected to give to professional development.

Principles of Adult Learning

Training is an expectation for EI programs that is coupled with fiscal accountability. Seeking to maximize these fiscal resources, programs are best served to identify the key components surrounding adult learning principles to ensure learning is geared toward the appropriate audience and the participants are receiving the intended outcome.

Key Components

Research related to this area can be attributed to the adult learning theory, andragogy, developed by Malcolm Knowles, which focuses on the variances in acquisition of knowledge associated with adults in comparison to children (New England Institute of Technology, 2021). It is essential to understand the characteristics, as they serve as the foundation for the principles. The first characteristic, self-concept, is related to the shift that transpires when one is no longer reliant on outside influences to drive

decisions and instead refers to internal choices that one makes. The second pertains to the extent to which experiences over time directly influences learning. The final three correspond to learning from the concept that as adults, there is a shift in one's desire to learn associated with a level of maturation, motivation, and understanding of the need to learn to increase our capacity to handle life (Smith, 2002).

While this theory provides a foundation, the principles derived from the characteristics imply shifting to support adult needs rather than relying on teaching methodology geared solely toward children. These include allowing adults to be directly involved in all aspects of their learning from the onset. In this way, they can determine what topics are relevant to their needs and be driven to select training experiences that help them act in a problem-solving capacity pertaining to their unique role (New England Institute of Technology, 2021).

Learning Styles

The learning process is commonly linked to the way individuals are inclined to select one style of learning over another. Garavan et al. (2020) defines it as “the preferential way(s) in which a learner absorbs, processes, comprehends, and retains knowledge. These styles can focus on what the learner sees, what the learner hears by listening, and what the learner acquires by touching and doing” (p. 148). Contained within the work of Fleming and Mills (1992), they are commonly referred to as a modality centered on visual, auditory, reading/writing, or kinesthetic. Within each of these styles, the implication is that individuals have an inherent lean towards one, and with each, the dominant preference is associated with the modality. For example, those who use kinesthetic methods often need to be directly involved in the activity and use a

variety of senses to engage. In contrast, those who use auditory methods need to hear the content (pp.141-143). Similarly, David Kolb developed the experiential learning theory, which demonstrates the intersection of four stages and four styles of learning. The convergence of these dimensions seeks to define the preferential nature of an individual towards a specific style of learning (McLeod, 2017). Despite the volume of models in existence, there are overlapping areas with implications for use to support the learner in the acquisition of knowledge (Garavan et al., 2020).

While learning styles prove to be a popular method for which educators develop instructional lessons, multiple research studies have found results that conflict with the theories associated with learning styles, and as such, the utilization of these as a primary method of designing learning outcomes is questionable (Cuevas, 2015; Dekker et al., 2012; Nancekivell et al., 2020). A contribution from the National Research Council to this work considered the need to employ similar practices used in the classroom to those in situations for professional development. These include providing an opportunity for teachers to contribute to the topic, moving beyond information sharing to implementation and application of a concept to the classroom coinciding with the ability to evaluate the effectiveness as well as contribute to the larger audience of learners (Bransford et al., 1999, p. 27).

Perceptions of Professionals

Another consideration when implementing training intended for educators is their perception of the following: opportunities available, the effectiveness, and the impact on their instruction according to the professional development. In 2012, a survey was conducted by MetLife for school-age principals and teachers. Findings from teachers

revealed that those who reported lower levels of job satisfaction also were correlated with responses that showed higher levels of stress and budget decreases, thereby also reducing the amount of time allocated for professional development and decreased opportunities for collaboration (Metropolitan Life Insurance & Harris Interactive, 2013, p. 6).

However, research has found that the higher level of understanding a teacher has about content, the more significant the impact on their instructional techniques that potentially transcends to impact student achievement positively. Therefore, this impacts their belief of the positive correlation between professional development and their knowledge as determined from interviews used to gather qualitative data from elementary teachers associated with this area (Morewood et al., 2010). Research conducted nationally with elementary, middle, and high school teachers pertaining to online professional development found that the majority of teachers had favorable responses to the opportunity. In the review, it was noted that not only could they complete it according to a timeframe of their choice, but they also were able to complete it at their preferred pacing, moving as quickly or slowly as they needed. Teachers who indicated that it was advantageous were motivated to participate in an online format based on their preference instead of having it set as an expectation (Parsons et al., 2019).

When considering what professional development format infant/toddler EI staff believe directly correlates to their desire to alter the way they deliver services, it was important to have both the time to work together in a collaborative manner and an extended opportunity to consider how to apply what they learned in their daily work was of importance (Spence & Santos, 2019).

As online professional development methods continue to become more prominent, this is another area for consideration. When early childhood (EC) teachers were provided with both access to videos showing high-quality teaching with preschoolers and well-targeted, online guidance and opportunities for reflection regarding how they worked with preschoolers, the outcomes were favorable (Pianta et al., 2008). In one study conducted with high school teachers, their views on this delivery approach were revealing. In it, they found a lack of the substance necessary to be of significant value. The factors that led to this revelation included that it was not incorporated into their daily work. Even more concerning was that it lacked relevancy to their duties as it showcased grade levels for which they were not responsible for educating, once again reducing the applicability. The implication of this study is the need to become more focused on the unique needs of the educators who are the recipients of the professional development and to ensure the carry-over necessary to support their distinct educational roles is provided (Powell & Bodur, 2019).

Professional Development in Early Intervention

The theoretical framework of professional development is vital to understanding the field's characteristics, forms, and relevancy. In 2009, a national survey conducted by Early Childhood Technical Assistance (ECTA) involving state-level representatives of Preschool EI was conducted. At that time, only twenty-three out of forty-nine states met the expectations for all facets of the identified professional development attributes. Subsequently, the recommendations justified the need to provide professionals with training that not only considered both aspects linked to the needs of adult learners but also conducted jointly with EC stakeholders. The focus would be to ensure that the topics

correlated to those items that would support the OSEP indicator that measured improvements of learning outcomes for preschoolers with disabilities (Bruder et al., 2009).

Definition of Professional Development

To fully understand the concept of professional development, it is essential to have a clear and consistent definition. Many organizations have sought to synthesize the research or provide a foundational definition. The National Professional Development Center on Inclusion (2008), a project funded by OSEP, has established that professional development is "...facilitated teaching and learning experiences that are transactional and designed to support the acquisition of professional knowledge, skills, and dispositions as well as the application of this knowledge in practice" (p. 3).

While there are many ways in which it is defined, there is a common theme identified. Many definitions include the learning gains that children achieve as a prominent feature of effective professional development. The emphasis is also on the educator relative to the impact it has on their learning, and subsequently, the changes and enhancements to instruction that the educator employs as a direct result of the training (Wei et al., 2009, p. 3). ECTA extends this by including "...effective training and technical assistance to retool, extend, and update the knowledge, skills, and competencies of the workforce" (ECTA, 2015, p. 26). Ultimately, even fields outside of education address the inherent value that is derived from training, and as such, it can be considered "...an investment in an organization's human capital," and failure to adequately address it is, in essence, detrimental (Salas et al., 2012).

Characteristics of Professional Development

The characteristics of effective professional development have been studied extensively. Thus, it is imperative to know that research has revealed what can be considered 'effective' relative to professional development. Effectiveness includes fundamental factors such as including staff as contributors to the process in a collaborative manner and includes the delivery of learning to the adults over time instead of the typical short-term opportunities that take place over a few days. Moreover, there is a concerted effort to include topics geared toward enhance instruction and increasing student gains (Wei et al., 2009, pp. 58-59).

As the underlying principle is to enhance quality programming for the inclusion of young children with disabilities, the National Professional Development Center on Inclusion (2009) outlined important professional development features related to what is termed as the who, what, and how. Specifically, these include:

1. Consider the characteristics (the who) of both the learners and the providers of professional development in the context of the quality improvement movement.
2. Redefine the content (the what) of professional development to reflect what is currently known about program quality standards, practices, and measures.
3. Employ the most effective professional development methods (the how) to facilitate experientially-oriented learning that will promote improvements in both global program quality and quality inclusive programming. (p. 5)

The who, what, and how are features essential to planning and reviewing before implementing professional development.

When looking at it from the perspective of providing Preschool EI staff with training that supports their ability to increase outcomes for children, research has found that it is beneficial to provide consistent, ongoing training as opposed to limiting it to a singular event in time (Dunst, 2015). Additionally, it must be set up to provide engagement by the Preschool EI staff that overtly identifies the targeted strategies and practices in a way that allows them to go forth and use the skills in their service delivery and work with fidelity (Snyder et al., 2018). This can be found with other programs in the EC field that work with young children, specifically Head Start teachers. Findings revealed that the more frequently a teacher receives assistance through professional development or mentoring, the higher the teacher's response related to the pleasure they associate with their job and the increased likelihood that they will have a more favorable attitude (Harding et al., 2019). While this was an associational study and had limitations, the results further reinforce the need to incorporate multiple types of trainings within professional development plans, moving beyond those that are strictly informational and occur only once or infrequently to a more comprehensive series (Dunst et al., 2015; Snyder et al., 2018).

Forms of Professional Development

The forms of professional development vary and include face-to-face, online, and a hybrid of these and other types. Researchers have sought to investigate the impact of different formats for future application, such as when comparing the effects of EC coaching delivered face-to-face versus that provided through the internet. Crawford et al. (2021) found that while face-to-face offerings yielded higher results, those areas that were different were negligible. This suggests the need to incorporate coaching within

professional development to support the ability of the teacher to enhance high-quality teaching activities within the classroom, thereby positively influencing the gains children make relative to EC outcomes. Another form, mentoring, can be considered embedded within the context of professional development. Mentoring is a consideration for novel teachers, especially when the focus is on the retention of educators. Providing them with a greater volume of training that is specifically tailored to be of more outstanding quality is essential. Consequently, a mentor can then support professional development opportunities (Marshall et al., 2013).

Relevancy to Teacher Effectiveness and Evaluation System

The concept of professional development is found within law at the national level that directly flows into state expectations for action that outline teacher effectiveness and evaluation at the local level. The Elementary and Secondary Education Act (ESEA) that was amended in 2015 through the Every Student Succeeds Act (ESSA), defined professional development and provided state education agencies with clear and consistent language surrounding the term (Every Student Succeeds Act, 2015). This impacted Pennsylvania's consolidated plan, where it is reiterated that ESSA "...includes activities that provide educators, including teachers, principals, other school leaders, specialized instructional support personnel, paraprofessionals, and as applicable, early childhood educators, with knowledge and skills to help students succeed in a challenging, well-rounded education. This includes strategies that are designed to give teachers and instructional staff the tools and skills to provide instruction and support to English Learners, students with disabilities, gifted and talented students, and students with low literacy levels" (Pennsylvania Department of Education, 2019, p. 78). It is further

elaborated that Pennsylvania is also working to make the changes necessary to provide “high-quality” professional development that is designed to not only provide educators that are equipped to meet the needs of children but also to consider how implementing changes such as these can support educator retention (Pennsylvania Department of Education, 2019, p. 82).

The relevance of professional development to teacher effectiveness is central. Contained within the Pennsylvania School Code, local education agencies (LEA), including IUs, are required to develop a three-year “professional education plan” that explicitly contains information about professional education and how the LEA will support and facilitate professional development opportunities (Continuing Professional Education, 1985). These plans correspond directly to the educator requirements that come through Act 48, a law defining professional development established in 1999. Under Act 48 educators must accrue 180 hours of continuing education or six credits worth of college-level coursework within a five-year timeframe. This can be earned in several ways, including completing college-level credits or engaging in professional development activities to maintain “active certification status” (Pennsylvania Department of Education, 2021).

Included in the amendments to the Pennsylvania School Code, several Acts conceptually bring professional development and teacher evaluation together. Act 13 of 2020, which revised Act 82 of 2012, provided regulatory mandates for compliance with the educator effectiveness evaluation system and impacted three different groups. This includes those with a teaching certificate responsible for instructing students, a non-teaching professional to include those who are not classroom teachers but are responsible

for providing services, and those with principal certification, including those with certification as a supervisor of special education. Embedded within the performance ratings are four domains. These include planning, the classroom environment, student instruction, with the final domain targeting professional responsibility which institutes an adherence to professional development (Educator Effectiveness Rating Tool, 2021). Once again, this is an area that relates to the requirement that educators maintain their Pennsylvania certification through the fulfillment of Act 48 continuing education hours as required for those holding the certification in either teaching or administration capacities (Pennsylvania Department of Education, 2021).

While the educator effectiveness model used in Pennsylvania outlines teacher evaluations with an underlying premise to enhance the training needed to provide quality services, some standards support these processes. According to the work from the Division for Early Childhood (DEC), a division of the Council for Exceptional Children (CEC), it is critical to have a set of consistent standards that frame the expectations, guide professional development to ensure that EI staff have a level of understanding, and possess the ability to develop and refine their technical skills to support all eligible young children (Cochran et al., 2012). As a result, the DEC has developed professional standards focused on EI for infant/toddler and ECSE staff. These standards are differentiated to include those at the onset of their career and those who are advanced. As defined by the DEC, they contain the “knowledge, skills, and dispositions professionals need to practice competently” (Division for Early Childhood [DEC], 2020). This is a complement to the work of the CEC in relation to providing standards for special educators as well as paraprofessionals. It is a resource to support evaluating individual

strengths within an area as well as determining what skills are needed to continue the path of knowledge and growth (Council for Exceptional Children [CEC], 2015).

Despite the fact this information pertains to those working with young children with disabilities, it is not considered a separate initiative. In 2009, the DEC, along with the National Association for the Education of Young Children (NAEYC), developed a joint position statement surrounding EC inclusion. The three components critical to inclusion, “access, participation, and supports,” must be built upon a framework of professional development opportunities afforded to a variety of stakeholders including “...family members, practitioners, specialists, and administrators,” that encompasses an “integrated system of high-quality” (Division for Early Childhood & National Association for the Education of Young Children, 2009, pp. 2-4). In addition to the DEC standards and the joint position statement, NAEYC has set forth practices that are considered developmentally appropriate for the age range that includes eligible young children supported by preschool EI programming. The emphasis throughout the document is the need to provide professional development that prepares educators to implement practices that support children in multiple ways that are meaningful and coincide with their developmental level (National Association for the Education of Young Children, 2020).

Implementation of Professional Development

The implementation of professional development can take on many formats that range from formal to informal. Regardless of the option, it is critical to consider what is perceived to be the main aspects. The work of Desimone (2011) suggests that five areas comprise professional development that is considered of value. These include ensuring a

“focus on subject matter content and how students learn that content,” as well as consistency with local and state initiatives, affording staff the chance to directly participate, providing opportunity for engaging in the topic for longer timeframes, going beyond the average workday to include upwards of 20 hours, and providing an opportunity for collaboration between and among those with similar roles (p. 69).

Format

From the state-level perspective, professional development in Pennsylvania is delivered through various formats as contained within the SPP. These include “statewide and local workshops; online learning modules and webinars; and materials development and dissemination. Family members are welcomed participants and trainers in professional development activities” (United States Department of Education, 2019b, p. 6).

At the local level, educational programs make similar decisions and may utilize both online and face-to-face formats that are conducted both synchronously and asynchronously. The depth of literature that exists regarding professional development for EC programs supports leaders in considering the reason to select one format over another. The options can include training delivered on one occasion, credit-bearing courses, coaching, and online training. Within each of these, there are positive and negative consequences associated with their use, including the cost of training, the depth of rigor and intensity as it impacts the time commitment an educator can give, particularly dependent upon the location, the level of proficiency with the format, as well as the lack of individualization (Schachter et al., 2019).

While a great deal of research has centered on in-person professional development, the utilization of training online is showing to be favorable as with research conducted for Part C EI programming. Staff that participated in the study found that the use of a 6-week long course in which technical assistance was incorporated and allowed for the synthesis of the information and feedback in a supportive manner led to positive ratings and the overall sense that having opportunities that extend over time are of superior value and benefit (Childress et al., 2021). The utilization of technology is a viable option; conversely, it is not without drawbacks. In a study involving preschool teachers, participants were provided with a level of professional development to facilitate their understanding and utilization of embedded instruction. The study results indicate that those who had the on-site coaching were able to gain access to consistent coaching and advice to enhance their use of the practice. Alternatively, those in the web-based group did not have the same experience, and within the data, things such as accountability and collaboration were not prominent. In addition, other aspects such as proficiency with technology and access to technical support to assist when there were connectivity or other issues must be taken into consideration. This further reiterates the need to analyze the best modality for professional development according to the needs and outcomes desired (Shannon et al., 2015).

Impact on Staff Behaviors

The impact professional development has on staff behaviors is one that has been analyzed from multiple perspectives. In looking at retention concerns, it has been found that in a study with school-age special education staff, that there may be a reduction in the likelihood that they would leave their position by adequately preparing them (Berry et

al., 2011). This means affording them training on topics that relate to the difficulties they frequently experience such as student behaviors and disability categories that are not commonly encountered and diving deeper into the expectations of their role. Moreover, educators desire to have topics that are of interest to them and enhance the depth of their understanding beyond what they have been trained in based on their certification (Berry et al., 2011). At a theoretical level, when looking at research that analyzes attrition, the environmental factors positively associated with the desire for special educators to remain in their position include ongoing access to professional development. It is important to afford teachers with experiences that increase their knowledge of their role such as is found with professional development (Billingsley, 2004). In a study conducted by Furness (2020), in addition to factors such as workload, the morale of ECSE staff was impacted by access to professional development. Given the direct association with morale, it is recommended to offer professional development that is of value and provides the job-related skills necessary to increase satisfaction within the field of ECSE (Furness, 2020). In addition to teachers, ECSE leaders also need to have the training to affect their behavior and skill so that they are adequately prepared to provide the guidance and facilitate the development of a high-quality program, as found through a study in Colorado (Movahedazarhouligh, 2020).

Effective Professional Development Characteristics

Knowledge of effective professional development characteristics provides the structure needed to make effective planning and implementation decisions. One way to act proactively on behalf of staff is to use a differentiated professional development model. This relates to the variety of EI professionals who provide both direct and indirect

services, dependent upon their role within the organization. Barton and Smith (2015) noted variability that exists by those that provide services. Considerations must be given to the "...backgrounds, education levels, and experiences" (p. 42). Subsequently, it is incumbent upon the administration to facilitate diversity despite the barriers.

Considering the specialized roles that each team member can play, OSEP provided funding for the creation of the Early Childhood Personnel Center (ECPC) that was able to bring together seven national organizations, including the DEC, American Speech-Language-Hearing Association (ASHA), and NAEYC, all of whom directly influence the work done in EI. They identified four competencies that could be found between and among the professionals delivering supports and services through their collective efforts. These include "collaboration and coordination, family-centered practice, evidence-based practice, and professionalism" (Bruder et al., 2019, p. 291). It is without question that these are topics that need to be considered and incorporated within a comprehensive model of professional development.

The application of professional development as a follow-through activity has been extensively studied. As it pertains to Preschool EI, Dunst reviewed research models that provide a structure for replication. In describing the model, Dunst (2015) noted that the expectation should be that it is an ongoing cycle that moves fluidly, "...from in-service training to practitioner knowledge and skill acquisition to practitioner adoption and use of the practice(s) constituting the focus of in-service training and the effects on child and family outcomes" (p. 216). This model incorporates multiple elements that must be considered in planning professional development which includes the need to give time for staff to reflect on the information shared at the training within the context of their job.

Additionally, they must be afforded the chance to receive other forms of follow-up, including repetitive trials in which they practice what they have learned and garner insight from observations made through aspects of coaching or a similar structure. While the amount of time allocated for the training and the depth and extent to which the training is continued will vary according to the needs, this necessitates examining the level of follow-up required (Dunst, 2015).

These findings are additionally reinforced within a meta-synthesis in which it was expressed that from the onset of professional development creation and reiterated throughout the process, consideration must be given to the intensity and duration of the training coupled with the appropriate allotment of time to afford teachers to conduct activities that allow them to process the information and synthesize it in a way that facilitates their ability to utilize the new information or skill (Dunst et al., 2015).

Ultimately, as it is a process, many factors contribute to the decisions surrounding what the professional development will look like in action. For example, elements such as the feasibility and reasonableness of the topic selected, the format used for delivery, the fiscal implications, supports needed for execution of the activity, and several additional items are impactful. This is extended further to include the experience and level of desire that the educator has in learning the content. Thus, the interconnected nature of these variables requires engaging staff in decisions related to the selection of the format and the necessary assessment of the effectiveness to coincide with follow-up activities (Sancar et al., 2021).

It is essential to ensure that the incorporation of specific professional development techniques successfully meets the desired outcome. These decisions should reflect the

need to assess and consider whether elements are being reliably implemented. This information contributes to making determinations for the next steps and the ways other variables such as the entry-level for the teacher, the experiences that were gleaned as part of participation in the professional development, and underlying attitudes and beliefs influence the process (Downer et al., 2009).

Preschool Early Intervention Professional Development Topics

Preschool EI professional development topics have many driving factors. As part of the oversight conducted by OCDEL, EI programs receive an annual review that focuses on the Pennsylvania State Performance Indicators (United States Department of Education, 2019b). As such, it is expected that staff has an inherent understanding of not only the elements required for compliance, but that training activities are conducted in such a way as to support the cohesive understanding of staff relative to the areas. These include Indicator 6 preschool LRE, Indicator 7 preschool outcomes, and Indicator 12 early childhood transition (United States Department of Education, 2019a).

National Organizations

Supporting staff relative to the research and information that comes from the work of national organizations that contributes to developing high-quality programming for children receiving special education services is also important to consider. The expectation is that those within the field of EI have the skills to comply with the laws and regulatory language set forth by IDEA and Chapter 14 and remain current within the use of research and evidence-based practices. To assist with this, OSEP created ECTA to facilitate the ability of states to put into practice these components (ECTA, 2015, p. 30).

ECTA has created a framework that assists states in assessing their work relative to the items deemed critical to the field and supporting their ability to capitalize on identified strengths while addressing areas of need. Subsequently, one factor is focused on personnel development as it relates to training and professional development. References are made to the importance of considering adult learning as well as incorporating a method that extends this learning of evidence-based practices beyond the training and is incorporated within the activities of the professionals as they provide services and supports to children and families (ECTA, 2015, p. 30). The evidence-based practices referenced by ECTA coincide with the recommended practices created by the DEC.

The DEC as an organization works collaboratively with ECTA (Division for Early Childhood, 2021). As referenced directly within the document, the intention behind the recommended practices “...is to help bridge the gap between research and practice by highlighting those practices that have been shown to result in better outcomes for young children with disabilities, their families, and the personnel who serve them” (Division for Early Childhood, 2014, p. 3). Research connected to the use of the DEC recommended practices by Preschool EI program staff found that the methodology used for delivering the professional development provided for EC special education teachers, therapists, and other professionals such as psychologists is equally or more critical than the number of times that it is offered. Moreover, the recommendation is to utilize practices such as those referenced to serve as a basis for the training opportunity (Dunst et al., 2020).

State Level Assistance

Acting on behalf of the Bureau of Early Intervention Services and Family Supports (BEISFS), Early Intervention Technical Assistance (EITA) serves as a conduit in providing training and supports to EI programs in order to facilitate their ability to provide high-quality services to families and children with developmental delays or disabilities that reside in the state of Pennsylvania. EITA is the birth-to-five component of the Pennsylvania Training and Technical Assistance Network (PaTTAN), which is the broader system (Early Intervention Technical Assistance, 2021).

As detailed within the SPP, PaTTAN covers the grade levels spanning school-age programming. Alternatively, the structure of training for Preschool EI programs at both the individual IU and school district level as well as across the state is built upon the premise that EITA utilizes information gathered from the “analysis of statewide data, including program verification visits and determination results, state and federal requirements, relevant research related to evidence-based early intervention practices, and planning with BEISFS staff” (United States Department of Education, 2019b, p. 5). The overarching intent is to ensure that Preschool EI staff demonstrate competency in providing services founded upon evidence-based practices (United States Department of Education, 2019b, p. 6). Additionally, recommendations generated from the work of the Pennsylvania Special Education Advisory Panel provide guidance to support school-age through the Bureau of Special Education and EI through the BEISFS in prioritizing topics for statewide activities or training, such as family engagement or inclusion (Special Education Advisory Panel, 2021). EITA facilitates opportunities based on the review of data and considering the Preschool EI program needs and relevancy to BEISFS program

verification, policy, research, and initiatives (United States Department of Education, 2019b, p. 6).

Discipline-Specific Topics

When taking into account the discipline-specific topics that are relevant and desired by staff, investigating the current work within the field can provide insight. A national organization, the Council of Great City Schools (2021), conducted a review of research and analyzed strong examples of school districts across the country that presents information on professional development for a variety of roles within the preschool through school-age programs (p. 6). Within their guide, they reference the need for professional development not only for teachers but also those that hold other positions such as leadership or office-based staff and, as such, are differentiated and focused on those skills required to be proficient at their job as well as those related to curriculum, attitudes, and the learning and social-emotional needs of students. As evidenced by the example of the Newark City Schools EC program, efforts surrounding professional development not only highlight the development of competency but also are intended to increase morale and enhance their ability to recruit new staff (Council of Great City Schools, 2021).

Although Preschool EI programs may operate with a variety of staff who are dependent upon their organizational structure respective of the IU or school district entity where they are employed, the PA school code defines EI itinerant teachers, classroom teachers, and speech therapists for the purposes of IEP caseloads and as such, serve as examples of team members (Range of Services, 2001). This is in addition to professionals needed for child find, screening, evaluation, and the provision of special education

services, including related services staff referenced in IDEA § 300.34, including but not limited to school psychologists, physical and occupational therapists, nursing, and social workers (Pennsylvania Department of Education, 2009). Other members who may contribute to the instruction and programming needs include instructional paraprofessionals and personal care assistants (Personnel, 2008).

In reviewing those team members that have specialized roles, EI Itinerant Special Educators are defined as those that hold special certification and are expected to travel to homes and community-based sites to act as "...consultants, coaches, mentors, and trainers" (Dinnebeil & McInerney, 2011, p. 2). The responsibility based on these expectations is to act collaboratively; however, given the diversity of their role and in considering the perspective of both special education and general education teachers in the EC field, it is not enough to expect that professionals must collaborate, but it is critical to provide the training that directly supports their ability to act in that capacity (Alghazo & Alkhazaleh, 2021). Moreover, the number of EI Itinerants is typically lower than those in traditional EC special education (ECSE) classroom roles, and there are elements to their job that are not precisely the same as those in ECSE classrooms. Accordingly, it is important to provide them with professional development that provides them with support beyond the classroom to include job-alike training relevant to their work (Dinnebeil & McInerney, 2011, p. 178). Dinnebeil et al. (2009) reviewed the empirical literature surrounding the aspect of this role that relates to consultation. Within that review, it was noted that personnel assigned to take on these responsibilities often do not have the foundational training required and, as such, do not demonstrate the characteristics exemplified by those who have an inherent understanding of the

expectations to act in the capacity as a consultant. Thus, it would be incumbent upon the administration to ensure that professional development is provided to support the EI itinerant (p. 442).

This coincides with the unique needs of other roles, including that of speech-language pathologists (SLP), occupational therapists (OT), and physical therapists (PT). Foundationally, various service options exist for young children with disabilities, dependent upon their needs. However, additional variables include the location where they receive services, whether occurring in the home, EC classroom, or other community setting, as well as the service delivery model used, either directly working with the child or in-direct services provided through the therapist acting as a consultant to the family or EC program.

While the selection of the model will be individualized for each child, multiple models can be incorporated to ensure that services are embedded and support the ability of the child to receive instruction that increases repetition and practice of the targeted skills outside the constraints of the allotted therapy time. In working through these factors, the training needs of SLPs, OTs, and PTs, related to things such as curriculum and goals for the classroom as articulated by the EC teacher, must be brought to the forefront, as it is core to the effective consultative services (Case-Smith & Holland, 2009). The expectations regarding the role of SLPs outlined in 2000 by the ASHA have grown over the years. The scope of practice and guidelines has been revised to encompass other areas such as evidenced-based practices and telepractices. As such, “new or expanded roles may require high-quality professional development for SLPs already in the schools” (American Speech-Language-Hearing Association, 2010).

When taking into account those ancillary supports needed to assist with educational programming for children, paraprofessionals are often assigned to aid teachers in supporting learning and in the implementation of activities, routines, and overall management. Nevertheless, a mixed-method study in elementary schools identified the specialized training needs for those working in this capacity. This area is often neglected, with a minimal amount of time devoted to supporting their growth, particularly as it pertains to children's behavioral concerns and those skills directly required of them in their role (Wiggs et al., 2021).

Another group of professionals impacted by the need to demonstrate continued advancement in their professional journey are those in a supervisory capacity. As contained within the DEC's Position Statement on Leadership in EI/ECSE, leadership is needed to support the growth of a program and facilitate the ability for it to meet the strategic mission and goals; therefore, the field should "purposefully build and sustain leadership capital across all domains of practice" (Division for Early Childhood, 2015, p. 1). The information on the ECSE leadership perspective is not as extensive as other fields; consequently, a group came together through the DEC to make recommendations based on these limitations and specifically referenced those that involve professional development for leaders (Bruns et al., 2017).

While this is an important facet of the organizational structure, it is recognized that there is not a widespread amount of literature that provides clear direction on leadership practices (Movahedazarhouligh, 2021). In cross-sectional research of Part C and Part B ECSE leaders, Bruns et al. (2017) recognized those aspects of leadership that are critical in assuming the responsibilities that naturally occur as a result of the position.

Professional learning, identified as one of the six competencies reviewed, was associated as essential as it incorporated the demonstration of both personal skill development as well as expanding the skills of others (Bruns et al., 2017).

Evidently, there is a need for more in-depth research surrounding supports considered necessary to develop leadership abilities. Moreover, the need exists to deliver extensive training that provides leaders with the competencies essential to take on their role that is overwhelmingly complex and multifaceted (Luckner & Movahedazarhouligh, 2019). This can be expanded to consider leaders' need to understand expectations of their diverse role and correspondingly, for a leader to put forth the effort to appreciate the skills and dynamics of the itinerant staff role; thereby affording leaders with the capacity to make decisions that impact the program and positively influence itinerant staff (Robertson, 2017).

Although it is incumbent upon those acting as a special education leader to support staff and provide oversight regarding the practical application of policies, for those administrators, based upon mixed methods research analysis, the overwhelming amount of stress they face requires professional development that supports them in understanding how to navigate the intricacies of their job and how to reduce the stress and handle the emotional components (Wheeler & LaRocco, 2009). Research that included a survey to assess burnout revealed that the stress felt by special education leaders is higher than that felt by teachers. It is necessary for administrators to receive the training required to handle the situations they face, including those that help them mitigate conflict and effectively manage their time and ability to deal with their responsibilities (Carter, 2011). In order to effectively provide the structure and support

the development of the skills of the professionals within EI, administrators must display a set of competencies as well. A meta-analysis partially funded by the Early Childhood Personnel Center of OSEP revealed 11 leadership practices that can be used as a tool to support leaders in understanding the actionable steps they can take to support staff and meet the desired outcome and goal of the program. While this included a variety of organizations, including education at a national level, it assists with framing the conversation around professional development for leaders (Dunst et al., 2018).

Another variable that continues to be of concern is the stress that educators are faced with in navigating the challenges related to student behaviors and their ability to create a classroom where they can showcase their management skills and provide the structure to support the needs of students. As such, providing training for staff on these topics is critical to ensure they feel competent and motivated (Collie et al., 2012). In a study of preschool teachers, outcomes were assessed based on implementing an evidence-based classroom-wide behavior support system that included a comprehensive and systematic method of professional development. Findings suggest that when incorporating a model associated with high efficacy and developmentally appropriate practices and supports that is coupled with a rigorous, systematic training series that transpires throughout the year and incorporates coaching, the results yield an extensive amount of positive benefits (Hemmeter et al., 2021).

Finally, as previously mentioned, whereas there are discipline-specific topics, recommendations from the field based on the overarching goal of inclusion include enhancing awareness and understanding of the "...history, laws, beliefs, attitudes, and research about inclusion" as well as "targeted skills for teachers and related services

staff’ (Barton & Smith, 2015, p. 100). This can be used as a foundation to build when considering it from a lens of inclusion and the additional skills required to ensure high-quality programming for preschoolers with disabilities.

Summary

Conceptually, professional development serves as a catalyst to support all facets of educational programs in developing the competencies and skills needed by those working to support children and families. Inherently, the intention is to achieve organizational goals by assuring staff has the capability to put them into action. Allocation of resources to ensure this happens moves beyond the fiscal component and includes tangible and intangible efforts that include time, human capital, and a myriad of other necessities. In assuring that eligible young children and families are making meaningful gains and reaching outcomes, Preschool EI professional development continues to be an avenue worth exploring to develop comprehensive implementation plans and dedicate the necessary resources to maximizing efforts.

The depth of professional development research from which to draw conclusions and take actionable steps is much more prevalent in fields adjacent to Preschool EI as identified by the literature. This imparts an opportunity to proactively conduct research to augment this area of study through this mixed methods study investigating the perceptions of EI Preschool IU staff on professional development.

CHAPTER III

Methodology

The extent of research pertaining solely to EI professional development is not as robust as in other educational fields (Dunst, 2015). Despite gaps identified through a literature review, connections can be made between EI, school-age, special education, and early childhood programming in that the underlying premise of professional development serves as one of the catalysts to facilitate growth in a variety of areas. These areas include local, state, and federal guidelines as well as the direct application of high-quality instructional practices. It is noteworthy to acknowledge the research contributions to the field on the topic of professional development, yet "...it is far from definitive when it comes to identifying any one program or approach that is guaranteed to work in all districts or contexts (Council of Great City Schools, 2021, p. 7). Professional development can empower employees and enhance their use of research-based methods to assist children and families through their educational journey (Diamond et al., 2013).

The WIU expects that all staff facilitating any portion of the educational process, whether from the referral procedures, to evaluation, IEP implementation, or transition, are equipped to navigate each element. This includes a broad subset of employees such as in-direct and direct special education service providers, secretaries, and administration. The effective monitoring of this requires the WIU to gather information relevant to their organization and use feedback on professional development to evaluate and use the evidence to influence the opportunities offered to all staff. As chapter II connected previous research to EI professional development, chapter III will explain the purpose of the study and research methods. This will also align this mixed methods action research

design with data collection procedures and tools. Finally, this chapter will highlight the three research questions and the interconnection to the quantitative and qualitative data collection, the validity measures, and the data triangulation approach.

Purpose

This study aims to investigate the effects of professional development on the perceptions of Westmoreland Intermediate Unit (WIU) Early Intervention (EI) staff as it relates to their job skills. Despite research that emphasizes recommended characteristics that are important, the consistent implementation and relative disparities in the literature lend to the purpose of the current investigation (NPDCEI, 2009). Whereas in the past, in-service professional development days were held primarily in a face-to-face format, during the 2020-2021 school year, all in-services were held online and included a mix of synchronous and asynchronous options as a direct result of the COVID-19 pandemic. Traditionally, following professional development, the trainer would provide staff with a post-workshop training survey that uses a 5-point Likert scale to rate the overall program, organization and flow, quality of materials, and the degree to which the stated objectives were met. Additional open-ended questions included inquiries about what was most valued from the training, additional questions that attendees may have, and suggestions for improvement. While this information has been meaningful, the feedback is more focused on one specific training and is of more value to the trainer as it assists them in developing an understanding of the areas that may be improved or strengthened when facilitating the same training in the future. It also did not reflect how the training may impact the job skills of the staff.

Considering these elements and the increase in asynchronous professional development due to the pandemic, the WIU is challenged to determine the best course of action for both the staff and the organization. This is in conjunction with the overarching themes embedded within the WIU comprehensive planning document, as one of the goals is to promote employee engagement and talent development. The final consideration is the intersection of these elements coupled with the need to maintain program integrity and fiscal responsibility. Ultimately, this leaves the administration with a desire to evaluate the influence of these changes on the effectiveness of the professional development offerings and identify key characteristics of high-quality professional development based on the experiences of those directly impacted. This established the framework for developing this participatory action research project as “...action research is a process by which current educational practice can be changed for the better” (Mertler, 2019, p. 147).

The selection of training topics is not only a local decision involving strategic planning between both the Director of Student Services and the EI program administrative team (M. Thomas, personal communication, April 23, 2021). It is also determined by considering the need to fulfill the expectations associated with state-level mandates that come in the form of announcements to the field, initiatives, such as inclusion, the reduction of suspension and expulsion, and other IDEA compliance-related topics. These decisions are in conjunction with providing staff with skills required for performance respective to their role and responsibility in EI, which is critical to enhancing the skill set of professionals. Themes may include things that pertain to a

speech-language pathologist (SLP) relative to apraxia or early childhood special education (ECSE) teachers relative to early literacy development.

As topics for professional development can be broad in depth and scope, there are some parameters that the EI program works within based on direction from the Bureau of Early Intervention Services and Family Supports (BEISFS). To comply with the U.S. Department of Education OSEP regulations 34 CFR § 300.602 (Part B), BEISFS evaluates local programs on an annual basis and reports their findings in a determination notification letter that identifies the threshold required to meet OSEP outcome area expectations and the compliance level relative to the EI program performance standards.

Determination levels are calculated by the Office of Child Development and Early Learning (OCDEL) using data collected from several sources, including data from annual family surveys, reports from the state management information system, and Pennsylvania early learning dashboards. Upon receiving this notification, EI programs must take action if they are below expectations and respond by identifying activities to correct these areas. These are included in a Quality Enhancement Plan (QEP) that is individualized for their respective program. OCDEL (2018) put forth Announcement EI-18 #2, Local Determination Process that identifies the outcome areas that include:

- Strengthening Partnerships: Family Engagement
- Strengthening Partnerships: Community Partnerships
- Shared Leadership: Compliance
- Shared Leadership: Data Quality
- Shared Leadership: Program Leadership
- Systemic Implementation of Evidence Based Practices: Child Progress

- Systemic Implementation of Evidence Based Practices: Support in
- Early Childhood Programs/Natural Environment (Discussion section, para. 4)

The response by programs is to create the structure that assists staff in meeting the expectation in the subsequent annual notice and utilize state and local data, orientation activities for leadership, and technical assistance or professional development surrounding data quality, compliance issues, policies, and procedures, as well as other applicable topics as avenues for positive change efforts (Office of Child Development and Early Learning, 2018). While the first portion of the QEP provides the program with an opportunity to respond to determination findings and take corrective action in noncompliance areas, the program also is to address any other statewide and local priorities and submit this final document for BEISFS approval.

The research study was designed using a mixed methods approach to explore the relationship between these areas and support the administration in determining how to utilize the data to develop a plan of action to provide professional development that satisfies all areas effectively. Of interest is the question, are staff more apt to learn as they can accrue hours of professional development asynchronously without the need to take an entire day from their job responsibilities? Nonetheless, this necessitates additional data collection to determine the impact level or if an alternative course of action is required (Parsons et al., 2019). The following research questions were developed to dive deeper into this topic:

1. What are the current perceptions of EI staff relative to the Professional Development (PD) opportunities available to them?

2. What changes do the EI staff recommend to enhance the PD that is currently offered to them?
3. How do the PD experiences that are provided to the EI staff impact their perception of their job skill level?

These questions align with the purpose of the study to facilitate a more comprehensive understanding of the professional development needs of employees, especially as it relates to WIU priorities such as staff retention, supporting employees to be highly engaged, committed to their work, and enabling them to reach their full potential. This study considers these variables because previous research positively correlates teacher retention to administrative support, school climate, and professional development (Billingsley, 2004).

Setting

The research setting for this study, the Westmoreland Intermediate Unit (WIU), is located in Westmoreland County, 35 miles east of Pittsburgh, Pennsylvania, and has an overall population of 354,663, which is 10,500 fewer people than in 2010, whose residents have a median household income of \$61,398 (United States Census Bureau, 2021). The WIU is part of the statewide system of twenty-nine regional educational service agencies designed to support the member school districts within the catchment area (Pennsylvania Association of Intermediate Units, 2022). The WIU supports all seventeen school districts that make up the county, with the largest, Hempfield Area School District, serving 5,333 students to the smallest, Monessen City School District, serving 751 (National Center for Educational Statistics, 2021). While the poverty level varies according to the school district of residence, the county average is 9.3% (United

States Census Bureau, 2021). This low need level is considered in the bottom 25% of the state, framed around socioeconomic status and access to community resources. This designation means there are opportunities for residents to participate in childcare, healthcare and that they have lower poverty rates when assessed in comparison to other counties in Pennsylvania (Pennsylvania Department of Human Services & Children's Hospital of Philadelphia, 2020).

The EI program provides services on behalf of the member school districts and offers a continuum of special education services for eligible young children. The eligibility process includes a comprehensive evaluation conducted by the EI program to determine the appropriate disability category. During the 2019-2020 school year, the EI program provided services for 1,449 children in a variety of settings, including regular early childhood environments such as Head Start, Pre-K Counts, and community-based preschools, as well as early childhood special education classrooms, approved private schools, and home-based services (Penn State Data Center, 2021). The percent of children listed by disability category includes:

- 56.2% speech and language impairment
- 33.1% developmental delay
- 7% autism
- 1.1% hearing impairment
- 1.2% multiple disabilities
- less than 1% visual impairment
- less than 1% other health impairment (Penn State Data Center, 2021).

The type of service, frequency of delivery, and duration of the service are dependent upon the Individual Education Plan (IEP) that is developed for each child and includes a wide range of service providers, including those that provide direct IEP services and indirect supports to facilitate the referral, evaluation, IEP development, and transition process. The WIU EI Preschool Program staff consists of 10 Early Childhood Special Education (ECSE) classroom teachers, 10 classroom assistants, six itinerant community/home-based special education teachers, 23 speech therapists, three occupational therapists, four certified occupational therapy assistants, three physical therapists, two Early Intervention Evaluation and Service Specialists, two Supervisors of Special Education, one Early Intervention Administrator, one school psychologist, and two administrative secretaries. Although unavailable for participation during the timeline for survey data collection, the EI program recently hired a licensed social worker.

The WIU EI program, operating on behalf of the member school districts, is fully responsible for all facets of programming beginning with referral and continuing until the child transitions to kindergarten, at which point service provision becomes the school district's responsibility. Indirect service providers such as EI administrative secretaries collect referral and demographic information to facilitate scheduling for screenings and evaluations to support eligibility determination by the multidisciplinary team. If the child demonstrates a delay or disability and is in need of specially designed instruction, the IEP team, including the family, proceed with the development of an IEP that outlines the specific services, modifications, and adaptations needed to support the child in their least restrictive environment (LRE) and to be implemented by the direct service providers such

as special education teachers, therapists, and other related services accordingly (Pennsylvania Department of Education, 2009).

Based on the IEP team's recommended placement, children with a need for an intense level of support may receive special education and related services in one of the eight ECSE classrooms taught by a special education teacher and classroom assistant or one of the two autistic support ECSE classrooms, with locations dependent according to the area where the child resides. While this accounts for approximately 17% of the children served by the WIU, 11% of children receive educational services and supports within their home, and 61% in an EC classroom or community-based location by itinerant special education teachers and related service providers based on the 2020-2021 annual fiscal year-end educational environments reports provided by OCDEL to the local program (Pennsylvania Department of Human Services, 2021a).

Participants

A total of seventy WIU EI staff were invited to participate in the study, including staff members employed by the WIU whose responsibilities are defined contractually through the collective bargaining agreement (CBA) or the Act 93 administrative agreement. Also included within the makeup are also the contracted occupational therapists, certified occupational therapy assistants, and physical therapists from Mission One Educational Staffing Services, LLC, assigned to the EI program.

All EI staff identified by the WIU Director of Student Services were voluntarily afforded the opportunity to participate in the research study. As a former special education supervisor and administrator for the WIU EI program from 2007 to 2019, the researcher had access to the current EI program through the previous relationship. Prior

to participation, an introductory email was sent to staff on behalf of the researcher by the WIU Director of Student Services to provide information on the upcoming research volunteer request and acknowledgement of his support to use time within their workday to allow them to partake in the research if they were interested. In turn, the researcher sent an invitational email on December 13, 2021, with a second request on January 10, 2022, and a final request on January 21, 2022. The final email reflected that the survey window would close on January 28, 2022.

Contained within the recruitment emails were details about the study. It explained that the intention was to investigate the EI staff's perception of professional development offered to them by the WIU and how it influences their job skills. It informed them that if they elected to participate, they were free to discontinue participation at any time and provided specifics regarding their contribution to the study. Details of importance included associated risks, the confidentiality of the information they would submit, and the contacts if they had additional questions about the study. It also contained the questionnaire disclosure informed consent form and a link to the Early Intervention Professional Development Survey (EIPDS) Google Form. The contents specified that by clicking on the survey link and completing the online questions, they agreed to participate in the study voluntarily and consented to the use of their data in research. The Institutional Review Board (IRB) approved the informed consent on August 25, 2021 (Appendix A and D).

The EIPDS was designed to be anonymous for the quantitative data collection; however, the final question of the EIPDS provided participants the opportunity to submit their contact information via a hyperlink to demonstrate their willingness to participate in

a semi-structured virtual interview with the researcher that contributed to the qualitative data collection portion of the study. A follow-up email was sent that included an additional semi-structured interview consent form for those participants who elected to provide confidential contact information. The participant signed the consent form which was obtained by the researcher prior to completing the semi-structured interviews. These began on January 20, 2022 and concluded on February 1, 2022. The consent explained that participation in this portion was voluntary. Participants would engage in a zoom meeting where they would be electronically recorded for transcription and analysis purposes and the storage of the transcriptions would be secured on a password-protected computer for privacy purposes. They were afforded an opportunity to request a copy of the transcription for their review. They were also informed of the procedures to maintain confidentiality, including removing personally identifying information and assigning a personal identification number (PIN). The letter reiterated the value of their contribution and the minimal level of risk associated with participation.

A total of 35 WIU EI staff completed the EIPDS using the online Google Form, which contributed to the quantitative portion of the data collection and represented a response rate of 50%. The varied roles and years of experience of the participating staff members contributed to diversifying perspectives throughout this portion of the data collection process. For demographic data, refer to Table 1, and for experience data, refer to Table 2. Of the 35 participants, 10 provided their contact information; however, only nine submitted the semi-structured consent form (Appendix E), representing a 26% response rate. Although not all possible roles were characterized by those who volunteered for this portion of the study, respondents included those representing EI

classroom teachers, itinerant teachers, evaluation team members, speech-language pathologists, certified occupational therapy assistants, and administrator or supervisor roles.

Table 1

Demographic Characteristics of EIPDS Survey Participants

Job Title	<i>n</i>	%
EI Classroom Teacher (more than half of caseload in ECSE classroom) ^a	8	23
EI Itinerant Teacher (more than half of caseload in home or community location) ^b	2	6
Speech Language Pathologist	11	31
Occupational Therapist	1	3
Certified Occupational Therapy Assistant	4	11
Physical Therapist	2	6
Early Intervention Administrator/Supervisor	1	3
Evaluation Team	3	9
Paraeducator	2	6
Secretary	1	3

Note. Total participants $n = 35$. ^aTeacher role reflective of staff holding special education teaching certificate. ^bEvaluation team may include school psychologist and EI Evaluation and Service Specialist roles.

Table 2*Experience Level of EIPDS Survey Participants*

	Years of Experience Working in EI		Years Employed by WIU EI Program	
	n	%	n	%
5 or below	7	20	11	31
6-15	14	40	13	37
16-29	13	37	11	31
30 or above	1	3	0	0

Note. Staff reporting years of experience working in EI may include those whose experience includes working with children in Part C and Part B Programming. Staff reporting employment by WIU denotes only years working with children in Part B EI.

Research Plan

The research plan was developed in response to the evidence that many studies incorporate the professional development needs and characteristics of both early childhood and school-age professionals. The current study sought to fill the gap in the area specific to Preschool EI staff through data and descriptive analysis. Pre-service professionals are provided with a dynamic curriculum and field experiences that support the acquisition of an educational certificate; however, these experiences should not cease once they graduate but must be ongoing throughout each phase of their career. As demonstrated through the work of national organizations such as the Council for Exceptional Children Division for Early Childhood, each service provider has a unique skill set necessary to support EI's work. It is incumbent upon professionals to engage in reflective practices and seek opportunities to remain relevant and refine their skills

(Council for Exceptional Children, 2015). Assistance with this endeavor requires professional development opportunities geared to their needs to ensure that all children receive meaningful educational benefits as is naturally derived from high-quality services.

The challenges and new situations encountered due to the COVID-19 pandemic have considerable relevance to the research conducted in this study. In March 2019, OCDEL responded to guidance put forth by the Center for Disease Control (CDC) and the Pennsylvania Department of Health to engage in remote delivery of services for all facets of Preschool EI programming. This required Preschool EI programs to provide virtual evaluations and tele-intervention for instruction and therapy in place of the traditional face-to-face services delivered within the context of the child's everyday activities in their home or early childhood setting. The guidance set forth by the Pennsylvania Department of Education that implemented a reopening plan based on different phases according to county-level transmission data continued to be a driving factor in determining the best format and safest way to deliver EI services through the remaining portion of the 2019-2020 (PDE, 2020). In the time following receipt of this information, EI programs remain diligent in using the guidance to support decisions and continue to monitor the situation moving from face-to-face to virtual as necessary.

Based on the information put forth by the CDC and guidance from OCDEL, Early Intervention Technical Assistance (EITA), Pennsylvania's statewide training and technical assistance network, devoted a section of their online materials and training portal to support EI staff in pivoting to teleintervention (Early Intervention Technical Assistance, 2020a). The relevancy of these capacity-building resources demonstrates the

prioritization placed on this initiative and allocation of state resources to ensure professionals have both access to the knowledge and training to develop skills required to navigate these novel situations. Knowing this critical information must be disseminated, local leaders are then faced with deciding how to move staff forward using these tools and coupling it with professional development that considers the shifting demands, accountability, and perspectives. The expectations of the EI professional's altered role must be aligned with the training and use a delivery method and materials that enable staff to employ it within the context of their daily work with fidelity.

Fiscal Impact

The WIU has committed fiscal and human resources to support professional development across the program. Financially, the WIU applies costs associated with professional development to the EI budget, particularly IDEA §611 Component 1 and IDEA §619, as well as to the WIU general operating budget. While the state budget guidelines allow for no less than 1% and no more than 2% of the budget to be allocated to training, the EI program uses other sources of revenue to compensate for this variance (Office of Child Development and Early Learning, 2021b, p. 7). For example, in the past, the WIU has sought grants that embed professional development within the agreements, thereby enabling the WIU to secure the services of independent contractors to provide staff development workshops and training along with the renting of space necessary to hold the appropriate number of staff. While there has been a transition to more frequent use of online professional development due to contact mitigation efforts as a result of COVID-19, there is the consideration of costs attributed to the technology needs when

shifting to this format, including computers, internet access, and the associated costs with the platform selected, such as Zoom or Microsoft teams.

Other budgeted items include purchasing a Frontline Education platform by the WIU as their method for managing all aspects of the professional development, including requests, approvals, and tracking of annual topics and hours. In addition, the EI program pays a subscription fee to speechpathology.com for the EI speech-language pathologists (SLP) and EI supervisors. This membership provides online continuing education options specifically for SLPs to be accessed throughout the year according to their needs and during structured in-service days where time is allotted for staff to select online options independently.

A financial impact is also associated with the time employees spend engaging in professional development in the form of their salary and benefits. The exact professional development hours a staff member must fulfill varies according to their professional contract. Specific details are outlined in the collective bargaining agreements for both the educational staff, the support personnel, as well as the Mission One Educational Staffing Services, LLC Agreement for contracted providers (Westmoreland Intermediate Unit Education Association, 2018; Westmoreland Intermediate Unit Education Support Personnel Association, 2018). The training expense is compounded when programs experience leaves of absence and retention difficulties resulting in staff turnover. These resignations and leaves have to be accounted for, and upon hiring new staff or securing long term substitutes to replace the vacancies, a series of training is necessary to establish a baseline level of knowledge pertaining to policies and procedures, in addition to filling

in any gaps that other staff had received from the time when the school year began and the time of the new assignment.

The fiscal implications based on the research plan correlate to those items identified as essential to conduct the study. As the study targeted quantitative and qualitative data collection through Google Forms and Zoom, no additional costs were required for the tools as they were already incorporated as part of the EI budget. Technology-related items were also excluded from the cost, such as computers and mobile hotspot MiFi devices for internet, as they are provided to staff members to complete their daily job responsibilities. This study did require the completion of consent forms by participants, and the subsequent printing and either mailing or scanning of the forms are of minimal cost as it is attributed to only the nine staff who participated in the semi-structured interview.

The future financial impact of the study includes analysis of all factors that contribute to associated training costs, both direct and indirect, to ensure the WIU is spending money on critically relevant and expected elements of professional development. The desired outcome will be to leverage and allocate resources driven by data and conversations based on research. This includes assessing the viability of continuing with the current professional development trajectory or modifying the plan to incorporate the characteristics of professional development as identified through the study and literature review such as increasing the length and duration of training intervals, mentorship, coaching, and post-training activities that correspond to content learned, ultimately resulting in improved outcomes for the eligible young children served through evidenced-based practices (Dunst, 2015; Desimone, 2011; National Professional

Development Center on Inclusion, 2008; Snyder et al., 2018). By effectively directing resources and responding to the identified needs of staff, the WIU can proactively address items from the comprehensive plan, for novice and veteran staff while addressing staff retention. Billingsley (2004) emphasizes the need for programs to take action:

administrators interested in reducing attrition must facilitate the development of better work environments for special educators. Issues such as overload and the need for critical supports (e.g., administrative support, professional development) must be addressed to ensure that teachers can be effective in their work. (pp. 53-54)

The WIU desires staff to feel confident and increase their skill competencies so that it translates to the work with their students. Gathering this information can assist the WIU in determining the extent to which information shared during training is being used in the classroom at the expected implementation level. This converts to a high rate of return for the fiscal and human resources allocated by the WIU.

Research Design, Method, and Data Collection

A non-experimental, convergent mixed methods research design was used to investigate the perceptions of WIU Preschool EI staff on professional development and the potential correlation to the staff's perception of their job skills (Mertler, 2019). This method was selected as it did not involve the manipulation of any variables and was intended to consider the experiences of the selected population of Preschool EI staff (Mertler, 2019). It involved using an electronic descriptive survey and an interview to answer the research questions. The surveys were selected as they offered multiple positive attributes including the ability to be downloaded into an excel spreadsheet file

for analysis (Hendricks, 2017; Mertler, 2019). Another advantage was the fact that both surveys were inexpensive to administer. Although they needed technology to complete them, the population selected had access to the internet as part of their daily job activities. Therefore, this portion of the study did not require additional money to be allocated. Also, the average time to participate in the web-based survey was 10 to 15 minutes, and the interview portion of the research was 17 minutes in duration. Given this transpired during the typical workday for the EI staff member, the cost associated is encompassed within their daily salary and did not incur additional supplementary pay.

The California University of Pennsylvania Institutional Review Board (IRB) provided approval on August 25, 2021. Upon receipt of the IRB approval, the study was conducted in multiple phases. This began after intentionally identifying the non-random sample of participants, securing the necessary permissions, and moving into the concurrent collection of qualitative and quantitative data. To the extent that purposeful sampling included all WIU EI staff, and the size was less than 100, the entire population was selected for the study (Mertler, 2019, p. 189).

Upon completion of the data collection portion of the study, the data were independently analyzed using several approaches, as reflected in Table 3. The analysis included statistical tests and transcription software to support coding and the development of themes. For triangulation, the data sets were merged to compare and contrast the results and enable interpretation to draw conclusions.

Table 3*Approaches Used to Analyze Data by Question*

Research Question	Approach
1. What are the current perceptions of EI staff relative to the Professional Development (PD) opportunities available to them?	Scores compared across disciplines. Descriptive statistics (measures of relationships to correlate data). Frequency analysis to determine patterns, thematic coding
2. What changes do the EI staff recommend to enhance the PD that is currently offered to them?	Descriptive measures to analyze frequency distributions and measures of dispersion. Comparison conducted across the median (most frequent of what each discipline wants more of), thematic coding.
3. How do the PD experiences that are provided to the EI staff impact their perception of their job skill level?	Evaluation of relationship to demographic survey items, thematic coding

An electronic survey, the EIPDS, was used to collect quantitative data and contained three demographic multiple-choice questions that gathered information on the participant's job title, years of experience working in EI, and the years employed by the WIU EI program. The remaining 24 questions combined a 7-point Likert scale (7 = strongly agree to 1 = strongly disagree) with additional multiple-choice and one open-ended question (Appendix B).

The survey instrument was developed by modifying three existing surveys. These surveys were strategically selected as they were previously used in peer-reviewed published research and were relevant to the current study (Mertler, 2019). The first survey, the Online PD Survey, was designed to investigate teachers' perceptions of their participation in online professional development, thereby making it an appropriate fit (Parsons et al., 2019). Permission to adapt the tool required to conduct the research was received on June 18, 2021 (S. Parsons, personal communication, June 18, 2021). The

second survey, the Special Educator Survey, was developed through an OSEP grant on special education teacher retention (Marshall et al., 2013). While it was not available in the original format, the corresponding authors, Yell and Karvonen, were able to assist in providing access to information that supported the development of revised questions that were more fully aligned with the research questions within this study. Permission to adapt the tools required to conduct the research was received on June 19, 2021 (M. Yell, personal communication, June 19, 2021) and June 27, 2021 (M. Karvonen, personal communication, June 27, 2021). The third survey, the Early Childhood Special Education Job Attitude Survey, was designed to analyze the morale of Preschool EI special education classroom teachers and Preschool EI administrators to investigate factors that impact morale (Furness, 2020). Permission to adapt the tools required to conduct the research was received on June 26, 2021 (Jennifer Furness, personal communication, June 26, 2021).

As part of the planning stage, the surveys for the current study were based on the work of the previous researchers in conducting pilot studies to confirm their tool was valid, measuring what it intended to measure. For example, the Early Childhood Special Education Job Attitude Survey conducted a pilot study that confirmed the survey's validity. Following the pilot study, the survey tool followed the guidance of Salkind, 2017, and used statistical procedures such as Cronbach's alpha research study, to develop internal consistency and reliability. Moreover, the use of the survey in the formal research served to confirm reliability (Furness, 2020).

The surveys were modified to include language more appropriate to the targeted population of Preschool EI staff and align with the research questions. Additionally, Dr.

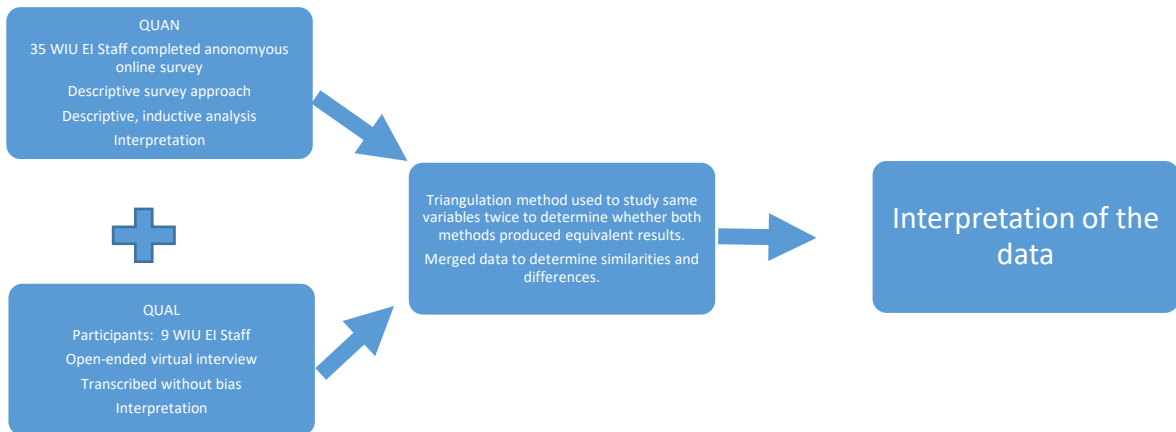
Jennifer Furness, the researcher associated with the development of the Early Childhood Special Education Job Attitude Survey, critically reviewed the modifications, and revised the scale to offer input that ultimately became the EIPDS. The EIPDS provided information on the perception of EI staff members (10 items), recommended professional development changes (9 items), and the correlation between professional development and job skill (5 items).

A semi-structured interview collected qualitative data and included four open-ended questions (Appendix C). These questions focused on the participant's preferred professional development format, characteristics to consider when designing professional development, professional development they have participated in, and those they desire that would impact their job skills. The quantitative and qualitative questions aligned with the research questions, as indicated in Table 4. The overall flow of the research design is identified in Figure 1.

Table 4

Research Questions Relative to EIPDS Items and Semi-Structured Interview

Research Question	EIPDS Item Numbers	Interview Questions
1 Perception of EI staff	1-8, 22, 24	1
2 Recommended changes	12-20	2
3 Impact of professional development on job skills	9-11, 21, 23	3-4

Figure 1*Flowchart of Convergent Mixed Methods Research Design*

Note: Phases of WIU EI research study. Adapted from *Introduction to Educational Research* (2nd ed., p. 126), by C. A. Mertler, 2019, SAGE Publications, Inc. Copyright 2019 by SAGE Publications, Inc.

Validity

Research systematically conducted with a prioritization on rigor is critical to establishing validity. This directly connects to the triangulation of data to establish the study as credible, transferable, dependable, and confirmable, all of which are necessary for being designated as having trustworthiness (Hendricks, 2017; Mertler, 2019).

In an attempt to increase the study's validity, there are conditions and criteria that researchers use to serve as evidence that the study has a solid research foundation. The current study used inquiry data using two different data collection techniques: a survey and an interview. The objective was to assist with triangulation and reduce the likelihood of bias by impartially collecting, analyzing, and interpreting the data throughout the process with the support of peer debriefing and an external audit to increase credibility, dependability, and conformability. These efforts coincided with a comprehensive

description of the setting for the purposes of transferability (Henricks, 2017; Mertler, 2019). To reduce other limitations that the researcher could influence, such as a low rate of responses, "direct administration" of the survey was conducted (Mertler, 2019, p. 96). Multiple requests were made for survey completion with follow-up emails from the Director of Student Services that resulted in a 50% return rate for the quantitative portion and a 25% return rate for the qualitative portion of the data collection. By anticipating potential risks to the data, including respondents' hesitancy to complete a survey distributed by a former administrator from the program, the researcher incorporated methods to enhance confidentiality and support anonymity. While threats to validity still exist, by reducing the likelihood of bias and errors made by the participants or researcher, the level of validity through the utilization of these methods increases validity and reliability.

Summary

Chapter III established the purpose of this mixed methods action research: to provide the methodology design used in the investigation of Preschool EI professional development. It directly correlated to the current Preschool EI professional development research reviewed in Chapter II. Information such as this is intended to empower the WIU by providing data relevant to the current professional development they offer to staff that satisfies the requirements set forth through state-level initiatives while meeting the needs of the EI staff in a fiscally responsible manner. A description of the participants and research design, methods, and data collection provide an understanding of the complexity and steps taken to increase the validity of the data. Chapter IV serves to provide the process involved in data analysis and the correlation to the three research

questions posed. The overarching intent is to equip the WIU with the information necessary to develop an action plan supportive of the needs of the program and employees, thereby positively impacting those who receive Preschool EI special education services.

CHAPTER IV

Data Analysis and Results

Professional development success is not related solely to an isolated training event. Instead, it involves the administration's ongoing and comprehensive analysis of data in a formalized manner that incorporates multiple factors associated with effectiveness (Barton & Smith, 2015). Leaders who engage in reflective activities can uncover meaningful and relevant answers to questions about their local level programs that align with organizational goals and values (Hendricks, 2017). This study aimed to examine the perceptions of Westmoreland Intermediate Unit (WIU) Preschool Early Intervention (EI) staff on professional development using a non-experimental mixed methods research approach. The information resulting from the study will be used to assist the WIU in developing actionable steps to implement professional development that improves the job skills of staff to improve special education services. The intent is to ensure professional development opportunities are in easily accessible formats, are fiscally responsible, offer the desired variety in combining the visual, auditory, and kinesthetic modalities, and are effective for staff according to their specific job responsibilities. This chapter will serve to present the results of the quantitative and qualitative data collection to answer three research questions:

1. What are the current perceptions of EI staff relative to the Professional Development (PD) opportunities available to them?
2. What changes do the EI staff recommend to enhance the PD that is currently offered to them?

3. How do the PD experiences that are provided to the EI staff impact their perception of their job skill level?

Finally, chapter IV will discuss the systematic processes used to collect the data, the procedures used to analyze and interpret the data, and the results from the findings.

The data collection methods were completed using a descriptive survey, the Early Intervention Professional Development Survey (EIPDS), electronically disseminated and collected between December 2021 and January 2022. Corresponding semi-structured interviews were completed between mid-January 2022 and early February 2022. The EIPDS collected demographic information and survey items that included one open-ended question, multiple-choice attitudinal and behavioral questions, and Likert scale questions. The survey instrument was developed using three surveys that had been used in peer-reviewed published research and had undergone analysis through piloting, reviews, or cognitive inquiry prior to their use to ensure that the survey items were measuring what they were intended to assess (Furness, 2020; Marshall et al., 2013; Parsons et al., 2019). Prior to administering the EIPDS to participants, it was reviewed by Dr. Jennifer Furness. The intent was to seek assistance in identifying "...reading level problems, ambiguous questions, redundancies, instructions that are unclear, and unnecessary questions" (Hendricks, 2017, p. 98). Based on the information gathered through this process and additional input by Dr. Matthew Thomas, WIU Director of Student Services, the questions were found to be in alignment with the research question, the instrument was understandable, in a format appropriate to the targeted population, required minimal effort to complete, and found to be a valid tool for the study.

The EIPDS was distributed via email to 70 WIU Preschool EI staff with a response rate of 50% with 35 voluntary respondents. Information to recruit participants was sent on the evening of Monday, December 13, 2021, so that staff would receive it early during the following workday upon checking their email. The information provided them with a description of the study, contact information, and a direct link to the Google Form containing the survey instrument, allowing them to consent by intentionally clicking on the link. The survey was anonymous, and while clicking on the link implied their agreement, they could discontinue at any point if desired. After receiving 12 responses, the researcher sent the same recruitment information two additional times, the first sent 28 days after the initial request on January 10, 2022, securing 15 additional responses, and the final sent January 21, 2022, 39 days after the initial request securing eight additional responses. The result was a cumulative total of 35 responses, with 10 participants volunteering to proceed to the semi-structured interview. The researcher exported the raw data from the EIPDS Google Form to an excel spreadsheet for analysis.

The WIU Preschool EI staff who volunteered to participate in the semi-structured interview received a follow-up email that provided them with relevant information about the next portion of the data collection, which included a description of the study, contact information, along with a consent form that required their signature before proceeding. While 10 Preschool EI staff members volunteered, only nine formal interviews were able to be formally scheduled and conducted. Out of the nine EI staff, four had been employed by the WIU for 16-29 years, four had been employed by the WIU for 6-15 years, and one had been employed by the WIU for five years or less. The interviews were arranged according to a time convenient to the participant and conducted via Zoom. It was

digitally recorded on a secure platform that allowed for transcription. Although all interview participants were provided an opportunity to receive a copy of the transcription, there were not any participants that placed a request to review.

Triangulation

Triangulation is defined as “a method in which multiple forms of data are collected and compared to enhance the validity and credibility of a research study” (Hendricks, 2017, p. 71). Statistical analysis was conducted using the quantitative survey data and qualitative interview data and included both descriptive and inferential statistical analyses as part of the triangulation process (Mertler, 2019). Several data measures were collected using the EIPDS that contained an open-ended question, multiple-choice attitudinal and behavioral questions, Likert scale questions, and semi-structured interviews. Integration of these components facilitated a deeper understanding and interpretation of the data. Following each research question, aspects of triangulation will be discussed.

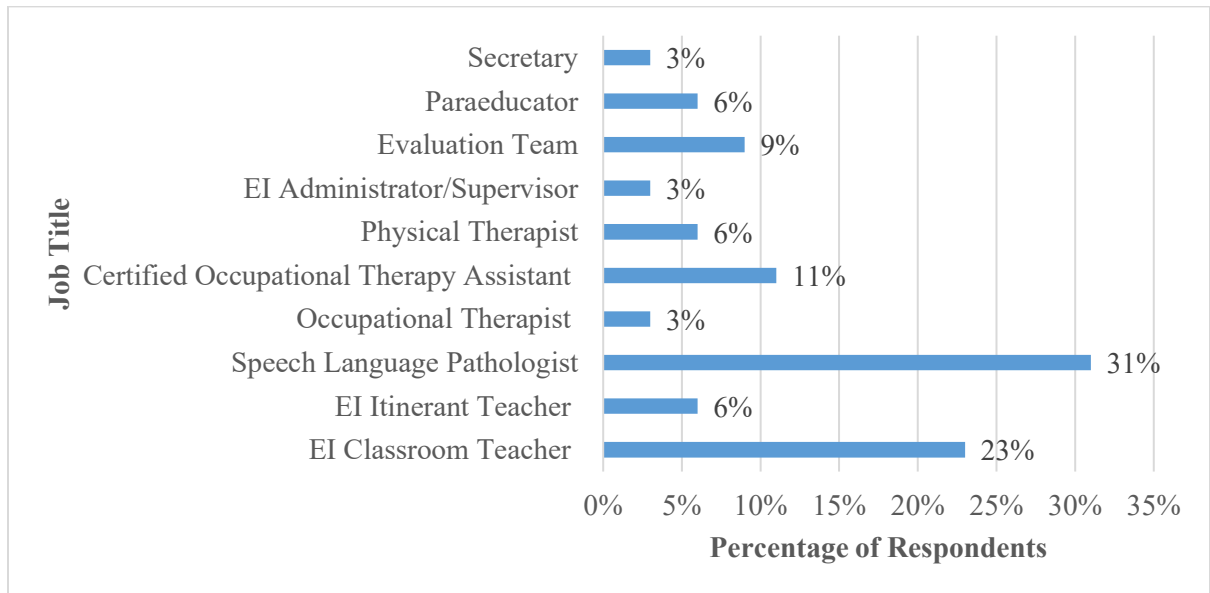
Data Analysis

In addition to frequency counts for the demographic questions, the data was entered into the Tableau software platform, where it was analyzed to identify the mean, median, and mode, and included using the Mann-Whitney U Test and one-way ANOVAs according to the research questions. The demographic information was examined based on the number of respondents and a calculation of the percentage represented by the questions identifying participants by job title, years of experience working in early intervention, and the number of years employed by the WIU EI program using a nominal scale of measurement (Mertler, 2019). Findings related to job title demonstrated that the

majority of the 35 respondents identified as a speech-language pathologist (31%), followed by EI classroom teacher (23%) as shown in Figure 2.

Figure 2

Percentage of Respondents by Job Title

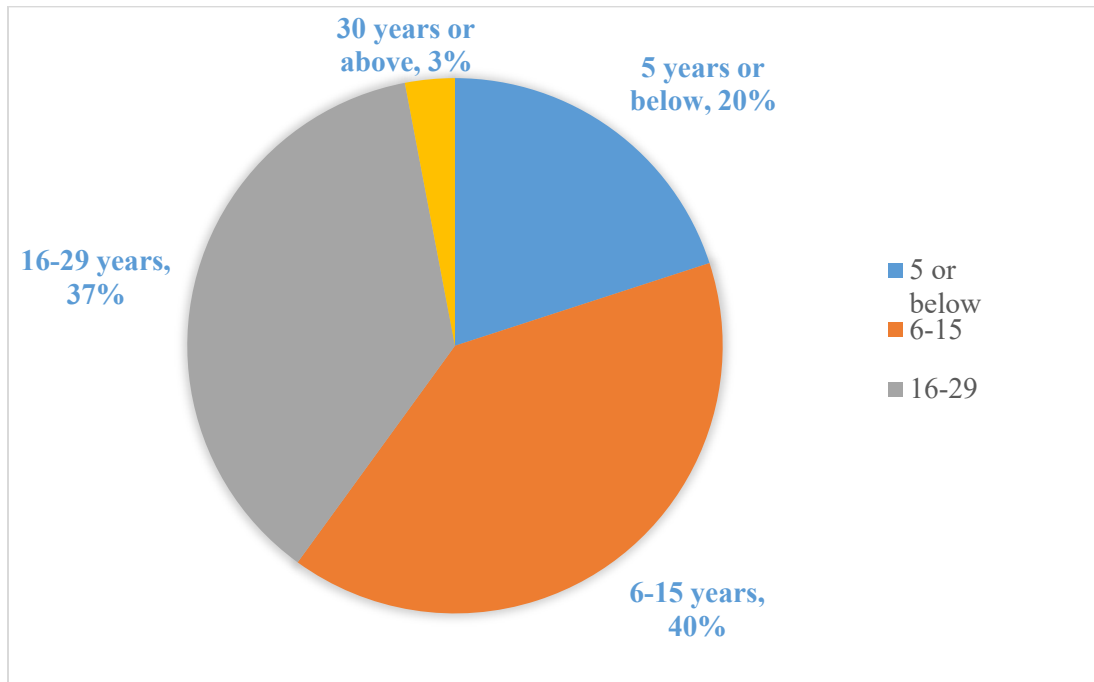


The percentage of respondents to the EIPDS survey aligns very closely with the overall percentages that comprise the 70 direct and in-direct WIU EI preschool program staff based on role. While this applies to speech-language pathologists, administration, secretaries, occupational therapists, and physical therapists, the percentage of respondents for other roles was slightly higher. For example, those who identified as speech-language pathologists represented 31% of the population out of 35 respondents. In comparison, the percentage of speech-language pathologists working in the WIU Preschool EI program is 33%. Alternatively, the percentage of respondents who identified as either an itinerant or classroom special education teacher totaled 29% out of 35 respondents. In comparison, the percentage of teachers working in the WIU Preschool EI program is 22%. These statistics are relevant in applying the final survey results to the various populations

represented. In the second question, most respondents reported working in EI for 6-15 years (40%), followed closely by those representing 16-29 years (37%) (Figure 3).

Figure 3

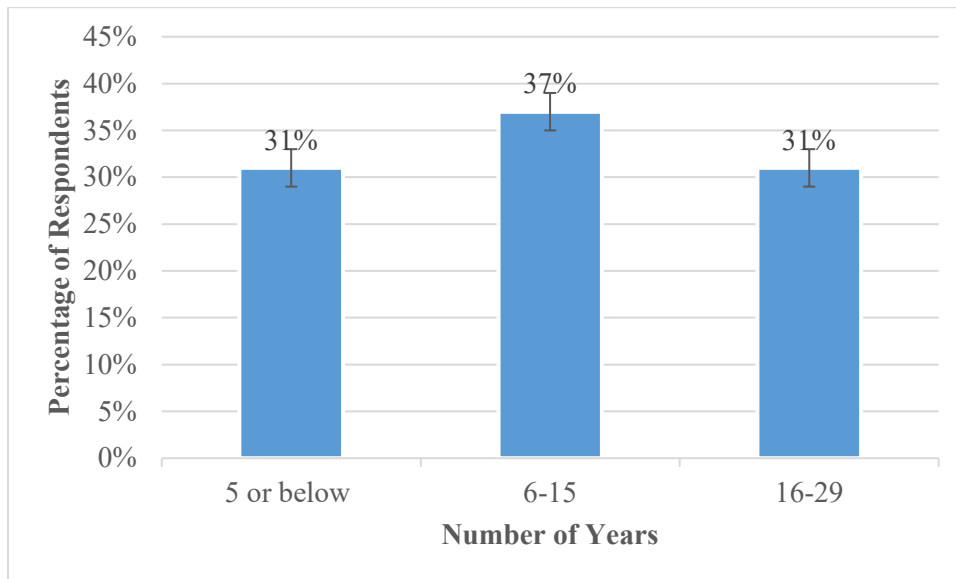
Percentage of Respondents by Years of Experience in Early Intervention



The final question sought to differentiate the number of years of experience in EI versus the time that the WIU had employed the respondent. When looking at the number of years the respondent was employed by the WIU's Preschool EI program, the distribution was relatively even, with 31% employed for five years or less, 37% employed for 6-15 years, and 31% employed for 16-29 years (Figure 4).

Figure 4

Percentage of Respondents by Years Employed by WIU Early Intervention Program



Research Question One Results

The first research question, “what are the current perceptions of EI staff relative to the professional development opportunities available to them,” included quantitative data from the EIPDS survey numbers 1-8, 22, and 24, and qualitative data from question one of the semi-structured interviews. Data analysis included using descriptive statistics of mean, median, and mode, frequency analysis to determine patterns, inferential statistics using the Mann-Whitney U Test, single-factor ANOVA to compare scores across categories, and thematic coding.

EIPDS Survey Data

When the EI staff were asked if they had participated in any formal professional development that was at least partially online, 33 of the 35 respondents (94%) selected yes, they had participated. Within that subset of respondents, using measures of central tendency revealed that the most frequently occurring response, or mode, to survey

question 3 (SQ3), the extent to which the online professional development in which they participated provided them with benefits, was that 14 of the 33 respondents felt it was very important. The responses ranged from somewhat important, moderately important, very important, to extremely important, with the average response indicating that the professional development was moderately important. None of the respondents selected the response that stated it was not at all important.

Questions 4-8 (SQ4, SQ5, SQ6, SQ7, SQ8) required respondents to select one of three answers (yes, no, I don't know). When looking at the survey responses relative to different benefits the respondents felt they received from the online professional development in which they participated, the most significant responses included the fact they felt it provided real-time solutions to problems (77%), it provided ongoing support for needs in their classroom/role (73%), and they could access the materials/resources at any time (70%). When looking at the ability to go at their own pace, most respondents answered that they could not (82%). Table 5 provides a listing of the perceived benefits of online professional development.

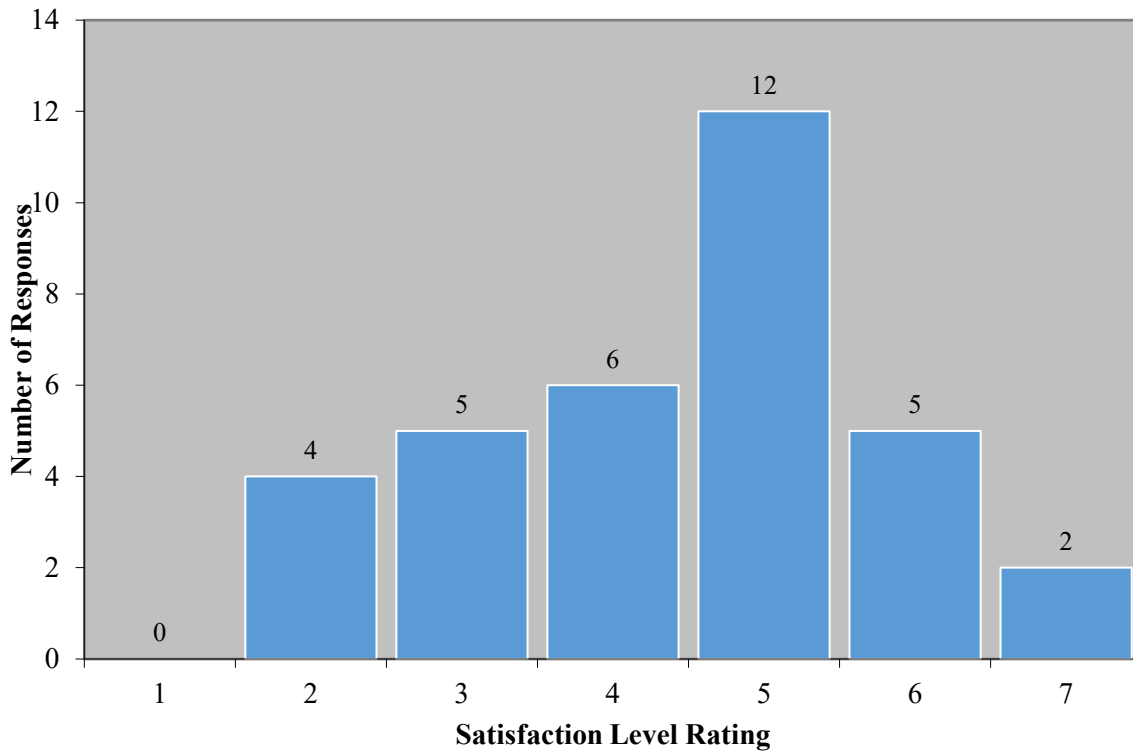
Table 5*Perceived Benefit of Online Professional Development*

	Yes		No	
	n	%	n	%
I could go at my own pace	6	18	27	82
I could access the materials/resources at any time	21	70	9	30
It provided real-time solutions to problems	23	77	7	23
It gave me access to resources not available in my area	16	52	15	48
It provided ongoing support for needs in my classroom/role	22	73	8	27

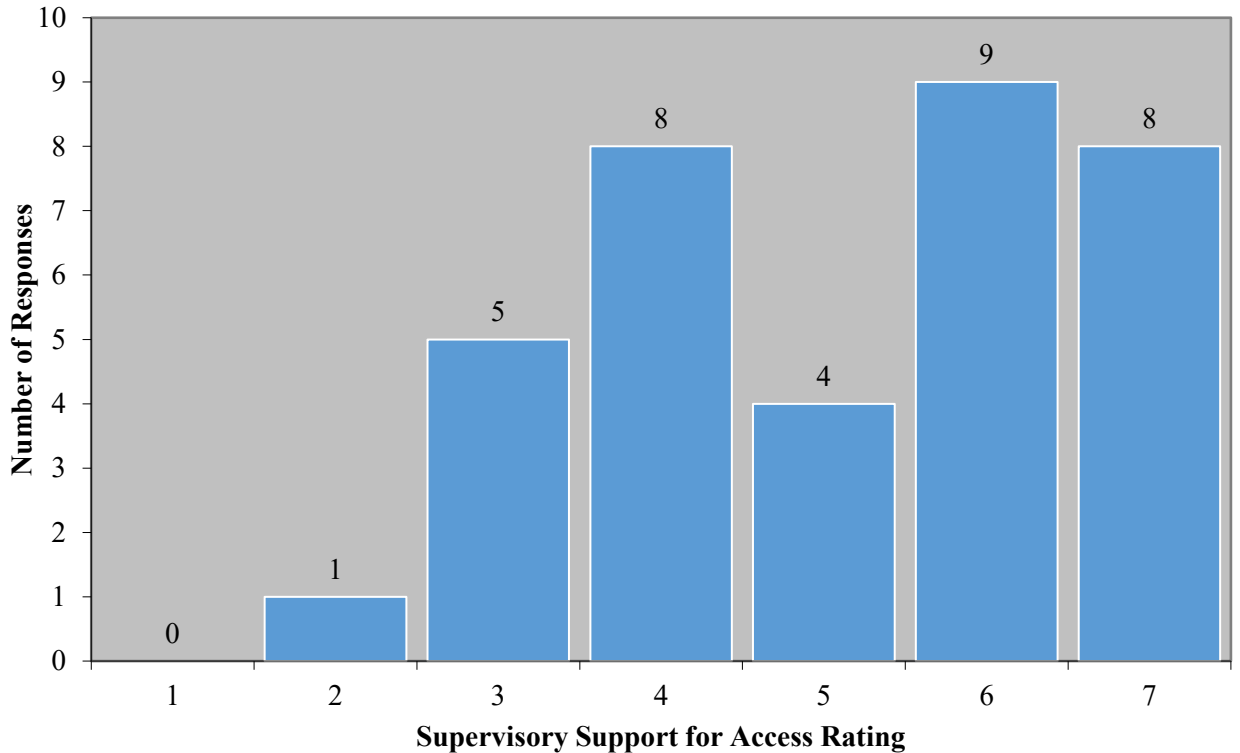
When presented with survey question 22 (SQ22), which required respondents to rate their agreement with the statement “Overall, I am very satisfied with my current professional development at my intermediate unit,” on a scale where 1 = strongly disagree to 7 = strongly agree, ($M = 4.4$, $SD = 1.4$), ratings showed that respondents were neutral to somewhat satisfied as presented in Figure 5. However, no significant difference was found between the means when looking at the respondents by comparing their job titles, years of experience, and years employed by the WIU as determined by using the ANOVA to analyze the responses.

Figure 5

Distribution of Responses to Survey Question 22



Alternatively, when asked to rate their agreement with the statement “My direct supervisor(s) supports me in accessing appropriate professional development for my role,” for survey question 24 (SQ24) using the same 7-point scale, ($M = 5.1$, $SD = 1.5$), ratings indicated that respondents were somewhat satisfied to satisfied as shown in Figure 6. Again, no significant difference was found between the means when looking at the respondents by comparing their job titles, years of experience, and years employed by the WIU as determined using the ANOVA to analyze the responses.

Figure 6*Distribution of Responses to Survey Question 24*

The Mann-Whitney U test was conducted to determine whether there was a difference in the satisfaction rates between jobs and explore the possibilities of outliers that would skew the data by only using the mean. The results indicate acceptance of the Null Hypothesis, H_0 , showing no statistical difference [$z = 1.96, \alpha = .05$]. Using the alpha (.05), which only has a 5% chance of error, indicative of a 95% accuracy rate, the results can be confidently reported. Therefore, in comparing the respondent's overall satisfaction with current professional development (SQ22) and the respondent's supervisor support (SQ24), there is no statistical difference between the ranks of satisfaction and supervisor satisfaction. Although the Mann-Whitney did not show statistical significance between the means of the two groups, it is essential to note that when rating professional

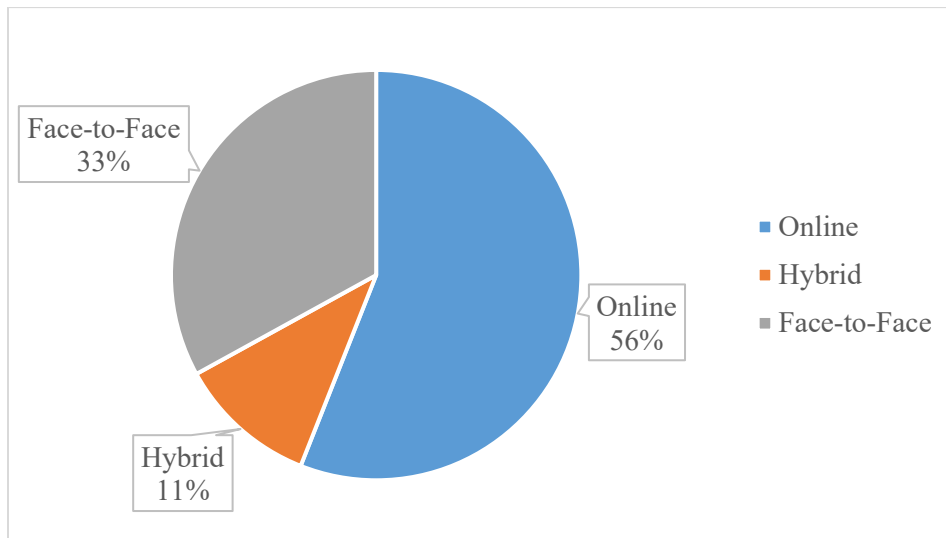
development, most respondents rated this item as five, as represented in Figure 5 and when rating their supervisors, the respondents appear to be split between ratings of four, six, and seven, as represented in Figure 6.

Semi-Structured Interview Data

During the semi-structured interview, the researcher asked the question, “When asked to participate in professional development, what is the primary reason you would select one format over another?” Of the nine Preschool EI staff that participated in this portion of the data collection, five respondents (56%) selected an online format, three respondents (33%) selected a face-to-face format, and one respondent (11%) selected a hybrid (Figure 7).

Figure 7

Percentage of Responses to Interview Question 1



Of the respondents that selected they would choose an online format, the reasons they provided for choosing this option included key phrases such as the “ease of accessibility,” “flexibility,” and the accessibility feature in doing it in a variety of locations, such as at home, and during different times of the day, such as in the evenings.

These rationales are in addition to having the chance to do things such as multitasking, affording the EI staff member to “get other work done” while also having the ability to review the content at a later time. Of the respondents that answered they would choose a face-to-face format, the key phrases were centered around the level of engagement it affords the audience, as it is “more personable,” and “interactive.” It was also noted that face-to-face professional development allows them to take in more information. One respondent referenced the difficulty they experienced in their attempts to keep up with the pacing of the information shared during online professional development, especially when they are expected to use tools such as the chat box feature found in Zoom. Face-to-face is also more appealing for those who are “hands-on” learners. It also provides the opportunity for questions to be answered more readily between the audience and presenter, as well as provides them with a chance to consult with other learners in the session. Finally, the respondent who answered hybrid or mixed option stated that their selection of this would depend on “their schedule and workload during the time it was offered.” While they also believe “in-person” training has a greater impact, they would make their selection based on other considerations. These factors include whether they had multiple activities occurring during that day, as this often results in a “hectic schedule” and a need to “be on a computer and decompress.” Table 6 aligns the response selected with themes that emerged and illustrative quotes.

Table 6*Key Themes and Illustrative Quotes in Response to Interview Question 1*

Themes	Quotes
<i>Online</i>	
Flexibility	“gives you more flexibility in your schedule,” “ease of accessibility”
Multitask	“can get other work done,” “can go back and relisten”
Self-directed	“can do it at my own pace and on my own time,” “access on a time not on work hours”
<i>Face-to-face</i>	
Engagement	“hard to keep up with all of the information in the [zoom] chat box”
Interactive	“more personable,” “have peers to consult,” “more hands-on”
Responsive	“respond [to the staff] more appropriately to real life”
<i>Hybrid</i>	
Options	“[choice] depends on my workload and schedule during that period of time”

Triangulation of the data for this research question from the EIPDS questions and interview data did not indicate contradictions in considering the perceptions of EI staff relative to the current professional development opportunities available to them. As the majority of interviewees chose online as their preferred format option, their comments related to flexibility and accessibility correlated with the EIPDS respondents that noted a benefit as the ability to access the materials or resources at any time and ongoing support for their needs.

Research Question Two Results

The second research question, “what changes do the EI staff recommend to enhance the PD that is currently offered to them,” included quantitative data from the EIPDS survey numbers 12-20 and qualitative data from question two of the semi-structured interview. Data analysis included using descriptive statistics to analyze

frequency distributions and measures of dispersion as well as comparisons conducted across the median, inferential statistics using single-factor ANOVA, and thematic coding.

EIPDS Survey Data

When the EI staff were asked to select one of the prepopulated reasons for not participating in professional development in an online format, the largest group of respondents, 34%, preferred to participate in face-to-face professional development, as shown in Table 7. No Preschool EI staff responded that they did not have the technical skills needed to participate in online professional development or did not have the required equipment to participate online. Although there were 35 respondents, only 21 selected one of the reasons listed within this section, and the remaining 14 did not respond.

Table 7

Reasons for Not Participating in Online Professional Development

	n	%
I am not aware of any online professional development offerings	2	6
I prefer to participate in face-to-face professional development	12	34
It is too expensive	2	6
I do not receive credit from my school or district for online professional development	3	9
I do not feel it would be useful	2	6

Note. N = 35; n = number of responses.

In survey questions 13-20 (SQ13-SQ20), respondents were asked to rate the level of importance they placed on specific characteristics for future professional development

opportunities by selecting one of the following answers: not at all important, somewhat important, moderately important, very important, and extremely important. To analyze these responses using measures of central tendency, they were converted to a scale where 1 = not at all important, 2 = somewhat important, 3 = moderately important, 4 = very important, and 5 = extremely important.

The data indicated that respondents placed a higher level of importance on aspects such as training specific to special education, self-selected topics, ongoing support for needs in their current role, access to resources, and the ability to access materials at any time. These characteristics had at least two measures of central tendency, mode and median, at a 4.0 indicating they were of greater importance. Alternatively, characteristics that were found to be the less important to the respondents included their desire to engage in informal ongoing professional development and their desire to have an opportunity to reflect on their job skills and discuss them with other professionals. This was determined by including those characteristics with two central tendency measures, mode and median, at a 3.0. In looking at this data, the mean was noted to have extreme outliers that led to skewed data. Alternatively, the use of mode and the median provided the best representation (Mertler, 2019). The characteristics and corresponding descriptive statistics are shown in Table 8.

Table 8*Characteristics Important in Future Professional Development*

Characteristic	Mean	Median	Mode
Ability to get real-time solutions to problems in my role	3.9	4.0	3.0
Ongoing support for needs in my current role ^a	3.9	4.0	4.0
Ability to access the materials anytime ^a	3.9	4.0	4.0
Training specific to special education ^a	3.8	4.0	4.0
Access to resources ^a	3.8	4.0	4.0
Self-selected topics ^a	3.5	4.0	4.0
Opportunity to reflect on my job skills and discuss them with other professionals	3.5	3.0	3.0
More informal ongoing professional development	3.3	3.0	3.0

^a Characteristics with at least two measures of central tendency at 4.0 indicating a higher level of importance.

Again, there was no significant difference found between the means when looking at the respondents by comparing their job titles, years of experience, and years employed by the WIU as determined using the ANOVA to analyze the responses.

Semi-Structured Interview Data

The second semi-structured interview question posed by the researcher was, “What characteristics are most important to consider when planning future professional development opportunities?” In analyzing the transcript, four themes emerged, including: (a) presentation format, (b) speaker attributes, (c) staff preferences, and (d) topic relevance. The themes, the corresponding number of times the theme was referenced across the interviews, and key phrases provided by the nine Preschool EI staff are represented in Table 9. The most common responses provided by the interviewees

contained across all themes related to factors that promoted engagement, differentiation according to their level of expertise, relevancy to their role, and consideration to their individual needs.

Table 9

Themes and Key Phrases in Response to Interview Question 2

Theme	n	Phrases
Presentation Format	7	Hands-on, actively engaged, use videos, short articles, provide time, find ways to present it different
Speaker Attributes	7	Dynamic speaker, engaging, has real-life experiences and knows where we are coming from as professionals, personality, makes you pay attention, fresh ideas
Staff Preference	3	Staff members can choose, what staff feel is important to their professional growth
Topic Relevance	7	Relevant topic for whole staff, tell me something new, topic choice, mandatory topics, staff weaknesses

Note. n = number of times theme was referenced across all interviews

Triangulation of the data confirmed the results gathered relative to EI staff recommendations necessary to enhance current professional development offerings. The EIPDS respondents and interviewees focused on similar items. For example, ongoing support for needs in their role, training specific to special education, self-selection of topics, and access to resources were important characteristics found to have two measures of central tendency in the EIPDS data results. Similarly, within the interview themes of topic relevancy and staff preference, these items were referenced with key phrases such as topics related to staff weaknesses, staff choice, and need for professional growth.

Research Question Three Results

The third research question, “how do the PD experiences that are provided to the EI staff impact their perception of their job skill level,” included quantitative data from the EIPDS survey numbers 9-11, 21, and 23, as well as questions three and four from the semi-structured interview. Data analysis included an evaluation of the relationship to demographic survey items and analysis of the transcript through thematic coding.

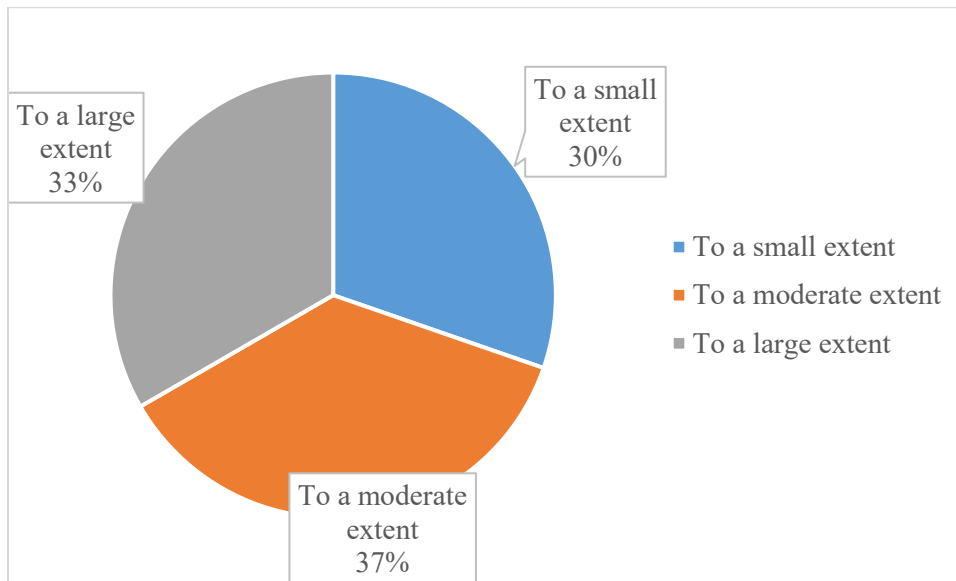
EIPDS Survey Data

When the Preschool EI staff were asked in survey question 9 (SQ9) to indicate if the online professional development in which they participated provided specific benefits, in responding to the prompt, “it gave me the opportunity to reflect on my teaching/job skills and discuss it with other professionals,” 26 respondents (79%) selected yes indicating they were afforded the opportunity as opposed to the seven respondents (21%) who selected no.

Survey question 10 (SQ10) required respondents to select the extent to which they were able to apply what they learned from the most recent online professional development to their job skills. While all participants reported that they were able to apply at least one of their recent professional developments to their job skills to some extent, the level to which they were able to apply their learning was relatively evenly distributed, ranging from 10 respondents (30%) reporting to a small extent, 12 respondents (36%) reporting to a moderate extent, and 11 respondents (33%) to a large extent (Figure 8). None of the respondents selected not at all, not sure, or not applicable.

Figure 8

Percentage of Respondents Able to Apply Online Professional Development to Job Skills



Alternatively, survey question 11 (SQ11) asked the Preschool EI staff to select a reason, if anything, that primarily prevented them from having the ability to apply what they had learned from the online professional development to their instructional or technical practices. Respondents were provided with the opportunity to select one of six prepopulated responses or to select “other” and explain the reason for their selection. While 20 of the respondents (61%) selected that they were able to apply what they learned, the 13 remaining respondents (39%) selected one of the prepopulated answers reflecting that they did not apply what they learned or opted to select “other” and provided an explanation. This resulted in the following:

- five respondents (15%) selected “It wasn’t relevant to my teaching.”
- three respondents (9%) selected “I didn’t have time to plan instruction based on what I learned.”

- two respondents (6 %) selected “I meant to implement what I learned, but never got around to it.”
- one respondent (3%) selected “I applied a minimal amount of what I learned.”
- one respondent (3%) selected “I didn’t have the tools/materials I needed.”
- one respondent (3%) selected “other” and reported that the training was only applicable in an “emergency situation.” However, they had internal discussions with their colleagues regarding how they could apply what they learned.

As a result of the analysis, it is determined that the main reason preventing staff was the relevancy to their job responsibilities (Table 10).

Table 10

Reasons Preventing Application of Content from Online Professional Development

	n	%
It wasn’t relevant to my teaching.	5	15
I didn’t have time to plan instruction based on what I learned.	3	9
I meant to implement what I learned, but never got around to it.	2	6
I applied a minimal amount of what I learned.	1	3
I didn’t have the tools/materials I needed.	1	3
Other	1	3

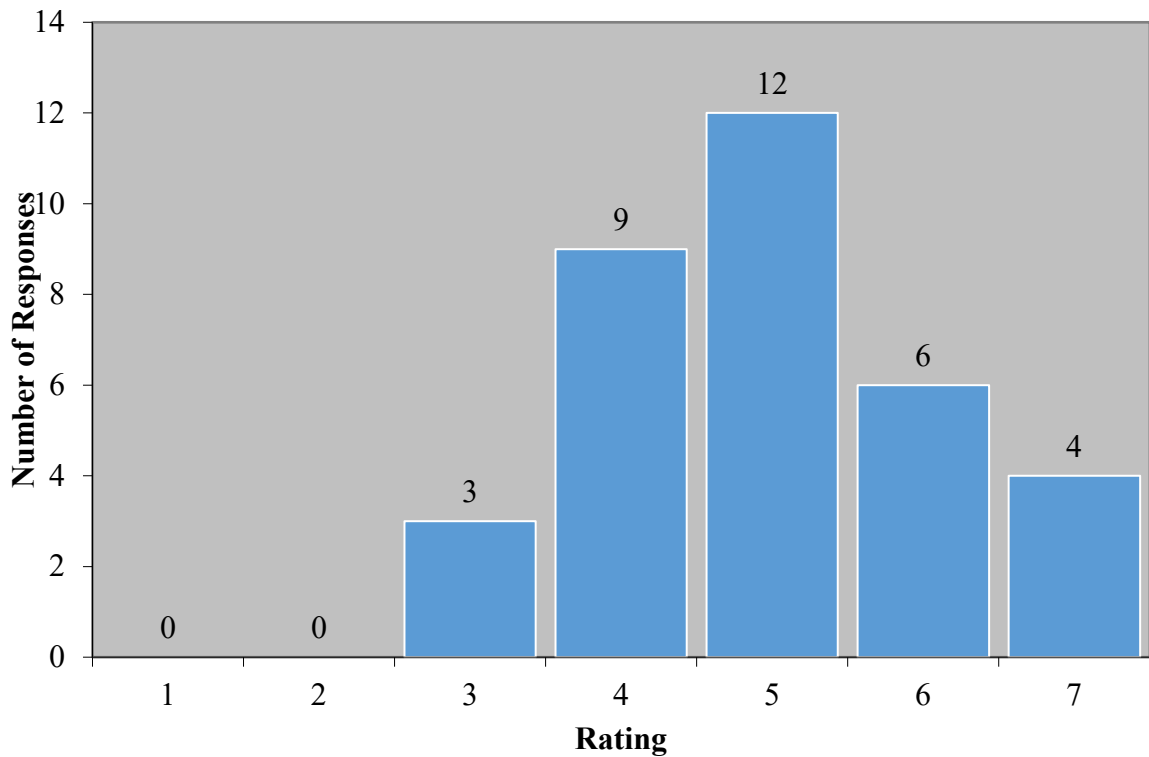
Note. N = 33; n = number of responses.

When presented with survey question 21 (SQ21), which required respondents to rate their agreement with the statement “I receive the right amount of guidance and

professional development in order to feel competent and confident in my position,” on a scale where 1 = strongly disagree to 7 = strongly agree, ($M = 5$, $SD = 1.14$), the average rating was 5.0, thereby showing some agreement; however, it was not found to have a strong level of agreement. Figure 9 represents the most frequently occurring response which is five.

Figure 9

Distribution of Responses to Survey Question 21

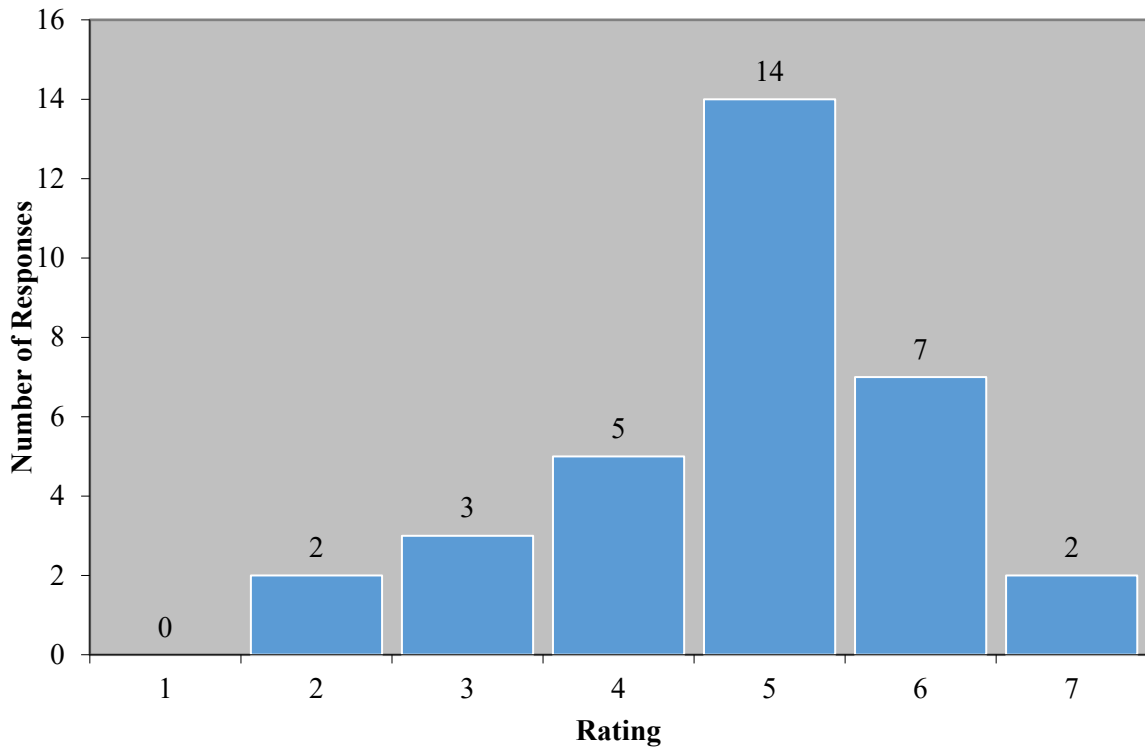


When presented with survey question 23 (SQ23), which required respondents to rate their agreement with the statement “The training I received prepared me for my job responsibilities,” on a scale where 1 = strongly disagree to 7 = strongly agree, ($M = 4.8$, $SD = 1.24$), the average rating was 4.8, indicating that respondent’s level of agreement

was neutral to some. The most frequently selected number was also five, as shown in Figure 10.

Figure 10

Distribution of Responses to Survey Question 23



Semi-Structured Interview Data

During the semi-structured interview, the researcher posed the third question, “What professional development opportunities do you feel would help you to be more effective in your role that you have not had access to in the past?” While there were many different topical suggestions for professional development provided by the nine Preschool EI staff interviewed, including needs related to "adult learning" and "creating and sustaining long-lasting change," four interviewees referenced that they desired job-specific training. These topics varied according to the job title of those interviewed but

were related to assessment tools for the evaluation team, apraxia, or language training for speech-language pathologists, as well as occupational therapy development skills. Two topics, time management and behavioral management strategies for children with different disabilities or a diagnosis other than autism, were referenced by two interviewees. The rationale provided for time management professional development opportunities included the ability to learn how to be more efficient and “streamline [the] process of teaching and paperwork.” The rationale for behavior management included the desire to become more informed on trauma and mental health to “be confident in the recommendations” that the EI staff provide to families and the early childhood teachers with whom they work. One of the interviewees noted that “the hardest thing too is just the carrying over of the skill you’re learning,” in making “the transition from I have this information, now how do I make it work in real life?” They desire “clear cut ideas or ways to incorporate those things that might make it more useful, more friendly.”

The final semi-structured interview question required the EI staff to answer, “What past professional development activities (coaching, mentoring, support, or other methods of accountability/skill transfer) were provided that impacted your job skills?” While there were several options offered as professional development activities, only two of the nine mentioned practices such as “personal independent, reflective exercises” and “support [or] mentoring from other staff.” Instead, the majority of respondents referenced a specific training that impacted their job skills. These included trainings:

- Offered by a presenter not affiliated with the WIU, such as seminar by Cari Ebert.

- That were on a specific topic such as incorporating sensory training, autism training, coaching strategies, augmentative and alternative communication (AAC), training on speech sounds and their visual representations, data collection, and methods for reporting data.
- That provided hands-on opportunities or included presenters that demonstrated it in front of the audience.
- That directly applies to the treatment they provide children in their daily work.

Within the responses, there was a direct reference to the importance that leadership plays in being “responsive,” “open-minded,” and providing a “safe space to work,” as well as the support needed by staff. It was once again reiterated by several Preschool EI staff that they believed it was important to have an “engaging presenter with good ideas,” who is “funny” and “easy to listen to,” all of which had been mentioned in some format across the previous interview questions.

During triangulation for research question 3, contradictions were more evident when looking at professional development experiences and the impact on job skills. In looking at EIPDS SQ10, all respondents reported the ability to apply the learning from their most recent online professional development to their job skills. In SQ11, however, when asked if anything prevented them from applying what they learned, 39% of respondents selected a reason indicating that they were not able to apply what they learned. Follow-up clarification would be of value to determine the reason for this variance.

Data analysis supported findings from the EIPDS SQ9, which revealed that most respondents believed that the online professional development training provided them with an opportunity for reflection and the ability to engage in discussion with other

professionals. Subsequently, the semi-structured interview generated comments related to practices that impacted the job skills of Preschool EI staff, which included time to reflect and receive support from colleagues. Although only two interviewees explicitly mentioned this, it corroborates the responses.

Discussion

Overall, the responses of the Preschool EI staff from the EIPDS indicated that previous online professional development was moderate or in the middle range in terms of their perception of the benefits received. This data coincides with questions that rated their level of satisfaction with the current professional development provided by the WIU. In addition, across the EIPDS, when conducting a one-way ANOVA, results revealed no statistically significant difference between the groups by job title, years of experience in EI, and years employed by the WIU Preschool EI program. Therefore, these factors did not influence the responses provided by the Preschool EI staff in the EIPDS.

The data from the semi-structured interview provided important information about what the staff desired from professional development, including relevant topics that address their unique job responsibilities within the organization using dynamic speakers with engaging training formats. The value of this information cannot be understated. It provides specific information that the WIU can use when developing an action plan for future professional development initiatives and literature gaps on Preschool EI and professional development.

There were several factors worth considering during the data collection and data analysis. During the initial request for the EIPDS, which occurred in mid-December,

prior to the scheduled winter break, only 12 Preschool EI staff members responded. Based on the low response rate of 7%, a second request was made; however, this was approximately one month after the first request due to the timing of the break and return of staff. The second request generated an additional 15 responses, and the third request, 11 days later, generated eight more responses. If this study were replicated, the timeframe for distribution of the EIPDS request would be modified to consider the increased volume of work-related activities in preparation for the school closure for winter break. At that time, staff was engaged in various activities such as completing paperwork and modifying their service delivery schedules due to student absences and preschool holiday parties and events. These factors may be contributors to the variances in the responses. They may also have influenced the number of staff who volunteered to participate in the semi-structured interview.

Another issue that developed during the semi-structured interviews was the confusion with interpreting the term “coaching”. The variance was most significantly noted during the conversations related to the fourth interview question. Within the majority of interviewees’ responses, it was clear they perceived it to be related to coaching as a topic from a previous training designed to assist EI staff in supporting the early childhood teachers or in their work with families, as opposed to considering themselves as recipients of coaching. Developing a way to differentiate the concept would be necessary for future investigation, although the information provided insight into topics they perceived as beneficial.

Summary

As previously established, the desired outcome of the research was to gather data that would provide the WIU with a greater understanding of the program-wide preschool EI professional development needs. The research provided a structure that enabled the WIU to "...investigate problems in a systematic and scientific manner," based on the analysis of Preschool EI staff perceptions of the current model used by the WIU and the level of impact on job skills (Mertler, 2019, p. 148). This information is intended to focus efforts on refining and enhancing professional development practices.

Chapter IV described the collection of quantitative data via an anonymous online survey and qualitative data by conducting semi-structured interviews, thereby enabling the researcher to engage in triangulation through integrating qualitative and quantitative data during the data analysis. As the hypothesis was that staff are more likely to accumulate professional development hours through online methods without detracting from their daily job responsibilities, the data served to assess their perceived effectiveness and determine if there were differences between and among staff based on job title and years in the EI program.

Chapter V serves to report these findings and discuss the relationships between and among the data. Additional information related to the interpretation of the data as well as limitations will be reviewed along with future research recommendations related to the study.

CHAPTER V

Conclusions and Recommendations

"To develop a team or organization that can grow and improve, to build anything for the future, a leader's main responsibility is to develop people..." (Maxwell, 2018, p. 15). Investing in opportunities for staff to learn and enhance their skills is one way this can be accomplished. This study addressed the problem the Westmoreland Intermediate Unit (WIU) identified in delivering professional development that effectively addresses the needs of the Preschool EI staff, coupled with efforts to comply with state and federal expectations and local accountability. This focus is also in response to the WIU's need to properly manage fiscal allocations and resources to meet the organizational goals and align with the strategic plan for operating special education services (Pennsylvania Department of Education, 2022).

The WIU has committed time, personnel, materials, and funds as an investment in staff, despite the limited research specifically addressing the most effective methods appropriate for this diverse group of individuals working in early childhood special education. This non-experimental mixed methods action research study sought to investigate the perceptions of the WIU Preschool Early Intervention (EI) staff in relation to the core professional development structures established by the WIU, especially in response to the increased use of online training methods, explore the level to which the current approach aligns with the information contained within the literature, and develop future recommendations to fulfill the goals contained in the WIU's comprehensive plan relative to employee engagement, retention, and talent development.

A review of relevant research unveiled evidence suggesting that while there are prominent features of professional development applicable to the field of education, the depth of content pertinent to Preschool EI and educating young learners who receive special education services are not as abundant. As stated by Dunst (2015), there "...is clearly a need for more systematic reviews and meta-analyses of in-service studies, with a focus on identifying which features of professional development are associated with observed changes and improvements in study outcomes" (p. 216). This chapter discusses the conclusions and provides recommendations based on the information gathered from the study conducted through the WIU Preschool EI program. Capitalizing on the data collection and analyzing Chapter IV results, the researcher was able to draw conclusions about the effects of professional development on the perceptions of Preschool EI staff regarding their job skills that align with the research questions.

Using the Early Intervention Professional Development Survey (EIPDS) as the quantitative component of the data collection, 35 Preschool EI staff out of 70 anonymously responded to various multiple-choice, Likert scale questions and one open-ended question. This data was coupled with a semi-structured interview that served as the qualitative portion of the data collection, for which nine Preschool EI staff voluntarily participated.

Overall, the findings from the triangulation of the data sets and analysis of the results indicate a mostly positive response to online professional development opportunities facilitated directly by the WIU and outside entities through which the WIU contracts. Essential elements that impact the perception of Preschool EI staff include the level of relevancy to the topic, how the professional development is delivered, including

a presenter that is engaging and actively involves the audience, and the ability of the staff to have a choice. While most respondents indicated a tendency to select online professional development when afforded an option, some employees referenced a desire for face-to-face training. Also, as there was some agreement, although not strong, with the Preschool EI staff's perception that they receive the right guidance and professional development to feel competent and confident, this information may be valuable to consider and support further investigation.

After examining each research question, Chapter V will provide recommendations specific to the WIU and review the fiscal implications. Notable limitations will be discussed in addition to future recommendations for research. This research may include the potential replication within additional departments of the WIU and other action steps that can be pursued to support the organization and ultimately benefit the eligible young children who receive WIU Preschool EI services. These include the best way to accommodate the desires of staff and incorporate those highly favored features of online training such as flexibility, accessibility, opportunities for reflection, and ability to receive support.

Conclusions

Within this chapter, each research question will be individually examined to provide relevant findings and by what means the data can guide the WIU in future professional development decisions and practical applications. The need to correlate this information to current practices is essential to empower staff's professional growth and ensure that funds are maximized and the Preschool EI program derives the highest benefits.

Research Question One

"What are the current perceptions of EI staff relative to the professional development opportunities available to them," was the first research question posed. The data collected through the EIPDS and semi-structured interview revealed that the majority of respondents, 27 out of 33, rate online professional development as either moderately or very important. This data coincides with the five of nine interviewees who stated that they would select online over face-to-face and hybrid when allowed to choose. The preference was due to its convenience as it offers flexibility and increased accessibility options, such as the variety it provides concerning the location where staff can view it and the opportunities to participate during different times of the day. This information aligns with the previous literature that revealed online professional development was favored by school-age teachers in national research as it provided alternatives in both the length of time they could take to complete it and the selection of a time of the day that they preferred (Parsons et al., 2019).

The perceived benefits of online professional development highlighted by the WIU Preschool EI staff mainly focused on their ability to access real-time solutions to problems, their receipt of ongoing support relevant to their classroom/role, and the ability to access the materials/resources at any time. This study further aligns with the work of Parsons et al. in revealing the importance of the online accessibility and support features desired by educators (2019). Related concepts from the literature correlated to the Preschool EI staff responses include ensuring that professional development is valuable and relevant to the educator's work (Powell & Bodur, 2019). While the results of this research study apply specifically to the WIU Preschool EI staff, there is value in

considering the use of this data to support the WIU in accommodating future offerings of online learning.

In analyzing the responses directly related to the professional development provided by the WIU, there were no statistically significant differences when comparing responses by job titles, years of experience, and years employed by the WIU. Overall, the respondents were neutral to somewhat satisfied with the WIU, with most of them rating their satisfaction at five out of seven points on the Likert scale. When considering the supervisory level of support in accessing professional development based on the EI staff member's role, respondents were more split between the ratings, with four, six, and seven as the most common responses. The findings suggest that the WIU can take steps to investigate further the depth to which they can impact the perceptions of staff by implementing more rigorous levels of online professional development to meet the needs specific to Preschool EI staff roles. Furthermore, this suggests the need to replicate similar studies with Preschool EI professionals across other Intermediate Units or School Districts as "...larger sample sizes improve the likelihood of detecting differences between groups" (Merler, 2019, p. 199).

Research Question Two

"What changes do the EI staff recommend to enhance the PD that is currently offered to them," was the second research question posed. Based on the study results, when the Preschool EI staff were asked to select why they would not participate in online professional development, 12 of the 35 respondents, or 34%, indicated that they preferred to participate in face-to-face professional development. While this serves as a majority, it is worth noting that 14 respondents did not select one of the prepopulated selections,

thereby limiting the interpretation of this response. This data is similar to the preferences noted in the current literature and the survey from which the EIPDS was adapted, in that 27% of respondents also preferred face-to-face (Parsons et al., 2019).

Professional Development Characteristics

Characteristics that respondents found to be important in future professional development focused centrally on the accessibility of the materials and resources, support relative to their role, training specific to special education, and topics that were of their selection. These responses parallel the information contained in the literature. As adult learners, Preschool EI staff need access to relevant, interesting topics that are meaningful to their work based on their role (Berry et al., 2011; Billingsley, 2004; Furness, 2020; New England Institute of Technology, 2021).

Themes Derived from Interviews

Four themes emerged within the responses to the semi-structured interview question about important characteristics for future consideration and included the presentation format, speaker attributes, topic relevance, and staff preference. Providing Preschool EI staff with professional development that keeps them connected through activities and presents information using a variety of modalities, including the opportunity to watch videos and read articles, is desired. Within the research, similar positive effects were found in studies incorporating videos for observation and reflection (Diamond et al., 2013; Pianta et al., 2008; Spence & Santos, 2019). Supporting areas that facilitate staff growth and needs are keys that the WIU needs to keep at the forefront when planning. Factors such as these have been found in the literature to contribute to high-quality professional development (Dunst et al., 2015, Council for Exceptional

Children, 2015). Coupling these practices with a speaker who has relevancy to the audience can keep them engaged in a meaningful topic that showcases new information. It is crucial as the WIU must be cognizant of the learners, the specific content needed, and the methods that best define how to deliver high-quality professional development (National Professional Development Center on Inclusion, 2009). The information from this study provides insight into these areas.

Research Question Three

"How do the PD experiences that are provided to the EI staff impact their perception of their job skill level," was the third research question posed. Contained within the EIPDS responses, it was discovered that 26 out of 33 respondents felt the online professional development they participated in allowed them to reflect on and discuss their job skills. Within the literature, the ability to participate in activities that allow for reflection, whether independently or amongst other professionals, is considered an essential element of professional development and is not regularly included as a feature (Dunst, 2015). Previous research, specific to Infant/Toddler EI staff, found that providing opportunities to collaborate and time to engage in self-reflection were areas desired by participants (Spence & Santos, 2019). This literature compares to the experiences reported by the Preschool EI staff and serves as a reminder to utilize this avenue in the future.

While respondents reported that they could apply information from their most recent professional development to their job skills, they were mixed in reporting the extent to which it was applicable. Data revealed that 10 respondents reported it was to a small extent, 12 respondents reported it was to a moderate extent, and 11 respondents

reported it was to a large extent. The follow-up question allowed the researcher to gain insight into what may have prevented the EI staff from applying what they learned. The reasons provided by five respondents indicated it lacked relevance to their teaching. An additional five respondents selected a response related to time limitations, in that they either did not have the time or while they had intentions to apply the information, they did not get around to implementing what they learned. One respondent noted they did not have the tools or materials to proceed. Finally, one Preschool EI staff member reported that the applicability of the training was only for emergency situations. Although these respondents do not represent the majority, the data once again reflects conceptually the need to provide professional development that is useful to the audience, has applicability to their work, and provides time for the staff to synthesize what they have learned (Desimone, 2011; Powell & Bodur, 2019).

The remaining questions of the EIPDS were intended to gather insight related to the professional development received by the Preschool EI staff and their perception of the impact on their job skills. In both questions, respondents selected a rating based on a seven-point scale ranging from strongly disagree to strongly agree. The most frequently selected response was five out of seven, indicating neutrality or some level of agreement. The selection pertained to the amount of guidance and professional development Preschool EI staff feel they receive to feel competent and confident in their role and the amount of training they feel they receive to feel prepared for their job responsibilities. The perspective of staff is critical as studies that have investigated attrition, job satisfaction, and increases in positive outcomes were associated with factors such as the perceived levels of support staff feel they receive along with the depth and type of

professional development provided (Billingsley, 2004; Harding et al., 2019). Knowing that the WIU desires to retain staff and ensure that eligible young children receive high-quality special education services that lead to successful results, this area requires regular attention.

Topics Revealed

Several topical suggestions were revealed when using the semi-structured interviews to gather additional insight regarding what Preschool EI staff believe are essential in assisting them to become more effective. The content was diverse according to the job title of those interviewed, with four respondents suggesting skills that would support their role. Their desired topics are related to the work of speech-language pathologists, evaluators, and occupational therapists. Others preferred topics related to adult learning, increasing efficiency, time management, behavior management, supporting children with genetic diagnoses or communication barriers, mental health, and trauma. References to topics by the interviewees are similar to those contained in the literature, especially in research that links a teacher's feelings of value and effectiveness to their job performance, including behavior and classroom management (Collie et al., 2012). One interviewee was quoted as stating that they are "...always open to continued behavior management because we're seeing a lot of different behaviors and also a lot of different and new diagnoses that we're seeing."

Further comments from interviewees on desired training were more general and referenced training on problem-solving techniques, especially given that the "...hardest thing...is just the carrying over of the skill you're learning or teaching." Additionally, there was the desire to have "... clear-cut ideas or ways to incorporate those things that

might make it [the skill] more useful, more friendly." Another interviewee stated that it is "...always helpful to just to hear what other people are struggling with and kind of brainstorm to get to the bottom of how we can help the child." These suggestions are similar to findings that reported teachers are interested in collaborative opportunities that allow them to extend the learning of skills that have meaning to their work through practice within the context of their job (Powell & Bodur, 2019).

The final semi-structured interview question served as a catalyst to discover those previously provided professional development areas that Preschool EI staff felt were impactful. Interviewees were more inclined to list trainings they had participated in instead of mentioning other support methods. No direct correlation was found between the training referenced and the job description of the interviewee. For example, three interviewees identified with a role other than speech-language pathologist; however, they mentioned a specific training on communication that they believe had a positive impact on them. Similar themes to those found in the previous research questions surfaced within the statements. These include presenters who are "...actively performing it [the skill] in front of me. So, in other words, she didn't just use words; she would physically show you." Other interviewees prefer "...ones [presenters] that are upbeat and engaging, and you know, get into the stuff that make you pay attention versus the ones that are just sort of reading from slides and you're kind of trying to read with them." Finally, it was reinforced by several interviewees that a highly desirable feature of professional development is when the skill taught is functional and able to be replicated within the daily job responsibilities. Similar suggestions can be derived from the limited Preschool

EI teacher research that focused on strategically selected educational practices that engaged the educators in an ongoing systematic format (Snyder et al., 2018).

Limitations

There are strengths in mixed methods research, including the ability to capitalize on the advantages of using both qualitative and quantitative data. However, limitations and delimitations exist within this research. They are essential to note as they potentially impact the findings (Mertler, 2019). Studies with the early childhood literature review reveal a large amount of information that pertains to teachers as opposed to other direct service providers. Within this research study, most respondents, 31%, identified as speech-language pathologists, as opposed to 28% of the respondents who identified as early childhood special education teachers. The remaining respondents included other related service providers, evaluation team members, and those providing indirect services. The variances in these EI roles limit the ability to interpret the results and generalize their perceptions to professionals outside their scope of practice, and the population served.

This research study effectively gathered in-depth knowledge and facilitated a more comprehensive understanding of the defined setting; subsequently, the findings of this study pertain to WIU Preschool EI program staff, and the ability to generalize the results is limited. The staff that responded represents a unique group of professionals responsible for facilitating and delivering special education services to eligible young children ages 3 to 5 residing in one of the 17 Westmoreland County school districts in southwestern Pennsylvania. The study sought to contribute to the research for this population of preschool special education professionals as defined within the current

study, as there are gaps in the literature. Information pertaining to professional development frequently references school-age programming or early childhood.

An additional consideration that potentially impacted the study was the COVID-19 pandemic. Although the WIU had utilized online methods in the past, these were considered supplementary to the primary use of face-to-face and hybrid models. During the 2020-2021 school year and the time following the implementation of COVID-19 mitigation strategies, online training has increased as a viable option to fulfill the contractual obligations of the WIU to provide in-service training using both synchronous and asynchronous formats. The participants' experiences may have been influenced by the rapid onset of moving to this professional development model and should be noted when interpreting the responses.

The topic selection of professional development continues to be driven by the needs identified by Pennsylvania's state performance plan indicators, the Office of Child Development and Early Learning (OCDEL) initiatives, and guidance from the EI administration. Due to COVID-19, the experiences of EI staff were complex, resulting in novel situations and varied training needs. The pandemic impacted the continuity of learning, tele-intervention, the type of support Preschool EI staff provided to the children on their caseload, and the ways of engaging with families and collaborating with early childhood education providers (Early Intervention Technical Assistance, 2022; United States Department of Education, 2019a). These factors must be considered as staff perception may be influenced by the unexpected changes following the coronavirus pandemic.

Several variables may impact the fidelity of the research. Although the survey data was submitted anonymously, given that the researcher previously served as a consultant, supervisor of special education, and administrator for the WIU Preschool EI program for approximately twelve years, some respondents may have been either more or less inclined to participate due to the prior relationship. Also, of the nine participants who agreed to the interview portion of the study, it is notable that they were Preschool EI staff members during the time when the researcher was in a leadership role at the WIU. While specific protocols and measures were implemented to minimize any bias, it is necessary to consider that factor as participants may have responded in a way that they felt was the desired response (Mertler, 2019). In addition to these considerations, when relying on data based on perceptions, "...even though people believe they are being accurate, they may in fact not be" (Mertler, 2019, p. 101).

In looking at the statistical significance of the findings, it is notable that the number of respondents was relatively small. While it constituted a 50% return rate, not all subsets of the respondents were well represented. For example, paraeducators represent approximately 20% of the total WIU Preschool EI staff; however, only 6% of the respondents identified with this job title. Correspondingly, the impact on the survey demonstrated by the low numbers representing a specific job title can skew the interpretation of the results for a specific category. For example, when the WIU employs three EI staff within a specific job title, representing 3% of the total EI staff population, as long as there is one respondent, there is statistical information from which to draw. These results must be interpreted with caution as other factors may impact their

perception, including the number of years they have worked within the program and their prior experiences.

In consideration of the current study, the potential exists that there is a "practical significance" as opposed to "statistical significance," warranting the need to "...repeat the research using a larger sample" (Mertler, 2019, p. 255). For the purposes of this research, no significant differences were found within any of the statistical tests used to analyze the research questions by comparing job titles, years of experience, and years employed by the WIU.

Fiscal Implications

The WIU is committed to investing in the professional growth of EI staff as the WIU desires to engage its employees, contribute to the development of talent, and proactively focus on retainment, all of which have fiscal implications. The costs associated with this research were minimal as the technology used in all aspects of the study, such as the use of a computer to complete the survey through a Google Form and interviews through Zoom, were already incorporated into the regular job responsibilities of the Preschool EI staff and did not require additional costs to the budget. Most consent forms were completed electronically or scanned, further minimizing costs.

While there is money designated as part of their state Preschool EI allocation to be applied to training and technical assistance, the depth of the costs exceeds that which is appropriated by the state funds (Office of Child Development and Early Learning, 2021b). Therefore, the WIU's financial accountability expands beyond that which is dedicated within the budget to professional development and involves the interrelated resources such as the time, effort, and skills that come from human capital investments.

The research data from this study supports the continuation of aspects of the current professional development plan and modifying elements to align more closely with the recommendations derived from the data collected that is specific to the WIU Preschool EI program. The effectiveness of this study was revealed in finding that the characteristics of professional development found to be important to the WIU EI staff coincided with several characteristics identified within the currently existing research. Although the literature is minimal specific to Preschool EI, this data derived from this research supports the WIU in using the information to proactively respond to the identified needs of the staff.

There is also evidence that the WIU should continue to incorporate subscription costs to online platforms such as Frontline Education and speechpathology.com, as 56% of the EI staff that participated in the semi-structured interview prefer to participate in online professional development. The subscription services referenced help to support management and access to on-demand continuing education. Investigation into other reputable sources is also warranted to encompass a wider variety of Preschool EI staff with varying job responsibilities.

A subset of the Preschool EI staff who participated in the semi-structured interview, 34%, prefer to participate in face-to-face professional development. Therefore, it is worthwhile to consider incorporating other opportunities that allow employees to receive the benefits of in-person training using alternative modalities. These methods may include coaching or mentoring and exploring ways that time can be provided that enable staff to incorporate the technical skills in their daily work, resulting in an expanded reach of training efforts beyond the initial presentation of information (Dunst et

al., 2015). As two of the nine interviewees mentioned the importance of reflection or support from other staff as impactful to their job, further inquiry is necessary. The WIU could consider ways to provide this as another avenue of professional development, potentially developing a pool of candidates willing to receive training and employ the identified methods to facilitate the growth of their colleagues if this is found to be a reasonable endeavor.

Another fiscal implication would be to continue to contract with presenters that offer specific topics that are relevant to the needs identified by staff and leverage high-quality, evidence-based practices as revealed through the literature to impact educational outcomes for preschoolers receiving special education services (Dunst, 2015; Snyder et al., 2018). Multiple references were made to previously contracted presenters as they engaged the audience and had attributes desired by the interviewees. Although this may be associated with the payment for a presenter not affiliated with the WIU, investigating grants and partnerships with other departments or outside agencies to share the cost may prove valuable. Additionally, the WIU should continue capitalizing on support provided by Early Intervention Technical Assistance (EITA), a division of the Pennsylvania Training and Technical Assistance Network. The service comes at no cost to the program, as EITA facilitates training according to the identified needs and associated statewide initiatives.

Further action to expand upon the current research questions is warranted. The investigation may include evaluating the typical duration of the training, length of follow-up activities, and the effectiveness of specific interventions on the job skills of staff. Assessments such as these can help to ensure that the costs attributed to professional

development, including the daily staff salary and time associated with engaging in the events, lead to the intended success for staff and ultimately the positive impact on the recipients of Preschool EI services.

Recommendations

The research results led to the development of actionable items for consideration by the WIU and future research directions. The study provided evidence that the Preschool EI staff are neutral to somewhat satisfied by the current professional development offered by the WIU, thereby indicating the opportunity for growth within this area. The Preschool EI staff desire professional development that supports their job responsibilities in providing real-time solutions to problems they encounter, ongoing support, and offerings in various formats according to the frequently fluctuating educational landscape and their changing needs.

Recommendation 1

The WIU administration would benefit from evaluating the guidance identified in this study's literature review and incorporating data specific to the WIU Preschool EI staff within their action plan. These measures aim to increase the likelihood that future professional development activities align with the identified needs expressed by Preschool EI staff. Efforts to capitalize on this information coincide with the 94% of survey respondents who reported they had participated in formal professional development that was at least partially online. The benefits they conveyed from this opportunity included real-time solutions, ongoing support, and increased accessibility of resources the online training provides. Adjustments to future professional development would require examining the current collective bargaining agreement language or Act 93

administrative agreement to determine what could be adjusted to incorporate these ideas while maintaining the integrity and intention behind the current professional development plan. Additional considerations may include analyzing how frequently a topic is addressed throughout the year and the duration of time for which staff has an opportunity to examine the content further. The ability to analyze information, make connections, and receive support related to training over an extended period can be a valuable contribution to the work (Childress et al., 2021; Harding et al., 2019; Wei et al., 2009).

Recommendation 2

Next, it is proposed that the WIU create a professional development committee to replicate the findings across the WIU Preschool EI program and investigate similar questions across the organization. Capitalizing on the insight of Preschool EI staff also demonstrates responsiveness by the WIU to the survey results. Statements made during the semi-structured interview that investigated characteristics important to future planning included a desire for staff to have autonomy and relevant topics. The committee, comprised of employees that represent diverse job responsibilities as identified within the study, would be able to assist with making recommendations to integrate the desire to engage in professional development with flexibility. Also, some respondents noted the appealing nature that comes from the ability to engage in online professional development at times other than when they were to be delivering special education services. Exploration by the committee regarding alternative timeframes may result in cost-saving measures as there may be a reduced need for staff coverage to attend training.

Recommendation 3

Finally, the WIU may want to consider incorporating survey items within the context of the current method of evaluating professional development. A survey that assesses a singular training event provides information to the trainer and, at some level, to the administration. Although, by extending the review of the data to include current information relative to what staff is reporting across training events and over time, the WIU can continue to be responsive to their needs and further evaluate how training is impacting job skills. Modifying WIU post-training survey questionnaires can be done by extrapolating questions from the EIPDS and interview questions the WIU finds to be the most significant and adjusting them to incorporate these types of assessments into their work more regularly. Moreover, as the desired outcome is to impact the engagement and retention of staff, methods such as these can assist them in achieving this objective.

Future research

There are various opportunities to expand upon the data gathered through this mixed methods research study to account for the limited research on Preschool EI and the professionals responsible for impacting programming and change efforts. First, expanding the study to incorporate a larger sample size is recommended. This expansion may yield information showing a greater statistical significance for some of the questions. As the results of this study relate to the WIU Preschool EI staff, reproducing similar studies with Preschool EI programs at a statewide level can provide a more comprehensive set of data that includes different geographic areas and staff composition.

Next, additional measures can be implemented to more fully define specific terms contained in the questions. Elaborating on terms may reduce any unintended

interpretation of terminology by staff. For example, many staff had participated in training on providing coaching to families. Subsequently, any use of the term within the semi-structured interview was discussed as the training they had received instead of the Preschool EI staff identifying themselves as recipients of coaching as a form of professional development provided on their behalf. While the survey items were created by incorporating questions from pre-existing surveys and measures were taken to increase validity, adjustments may reduce any difficulties in this area. Replacement of several questions to allow the WIU to gather specific information about the impact on job skills may be necessary. Therefore, if the WIU elects to implement any of the recommendations discussed, administering an additional survey on an annual basis can support analyzing potential patterns in responses and trends over time.

Finally, consideration should be given to the timing of the survey to determine if, during future implementation, there is an impact on the results. While the response rate was favorable, this required multiple attempts to secure participants and assistance from the administration to solicit responses. The need to incorporate several prompts to complete the survey may have been due to the number of activities and paperwork the staff was responsible for finishing in preparation for the impending break. The utilization of incentives for completion may also contribute to increases in response rates and may be implemented in the future.

Summary

Implementing effective professional development can lead to considerable benefits for students, staff, and organizations by allocating appropriate resources. Procedures were employed to increase the validity or trustworthiness of this mixed

methods research, as described in chapter III, to support the WIU leadership in using this information to lean into the areas that are working cohesively and revising those that need refinement (Hendricks, 2017). The effectiveness of the study is demonstrated by the ability of this information to serve as a mechanism by which the WIU can act and generalize the information within the work of the Preschool EI program.

Overall, the Preschool EI staff noted a satisfactory level related to the efforts of the current WIU professional development offerings. The research yielded several limitations accounted for within the study and discussed in this chapter. Investigation of the data led to developing recommendations to support the WIU in creating a plan of action that may be used to incorporate the suggestions. The recommendations are intertwined with the overarching intent to support educational outcomes for children who receive their special education services and the school district communities the WIU serves. Conceptually, professional development has layers of complexity; however, when breaking it down and specifically targeting each element from the planning to implementation, organizations and school districts can effectively ensure that it is accomplishing the goal of positively impacting the quality of instruction without leaving it to chance (National Professional Development Center on Inclusion, 2008).

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APPENDICES

Appendix A

IRB Approval Letter

Institutional Review Board
California University of Pennsylvania
Morgan Hall, 310
250 University Avenue
California, PA 15419
instreviewboard@calu.edu
Melissa Sovak, Ph.D.

Dear Brandi,

Please consider this email as official notification that your proposal titled “A Mixed Methods Study: Investigating the Perceptions of Early Intervention Preschool Intermediate Unit Staff on Professional Development” (Proposal #20-044) has been approved by the California University of Pennsylvania Institutional Review Board as submitted.

The effective date of approval is 8/25/21 and the expiration date is 8/24/22. These dates must appear on the consent form.

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following:

- (1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)
- (2) Any events that affect the safety or well-being of subjects
- (3) Any modifications of your study or other responses that are necessitated by any events reported in (2).
- (4) To continue your research beyond the approval expiration date of 8/12/22 you must file additional information to be considered for continuing review. Please contact instreviewboard@calu.edu

Please notify the Board when data collection is complete.

Regards,

Melissa Sovak, PhD.
Chair, Institutional Review Board

Appendix B

Survey Instrument

As an employee of the Westmoreland Intermediate Unit (WIU) working within the Early Intervention program, you are invited to take part in a research study conducted by Brandi Binakonsky, a doctoral student at California University of Pennsylvania.

The purpose of this research is to investigate your perception of professional development offered by the WIU and how it influences your job skills. The process will potentially assist the administration in developing a more comprehensive understanding of how EI staff perceive current professional development as well as provide insight into what changes could enhance future offerings and how they may develop a plan of action to improve the effectiveness of professional development.

Remember, consent to participate is voluntary. If at any time you no longer wish to continue, you are not obligated to complete the survey and can stop participating by exiting out of the Google form without explanation or penalty. By continuing, you are indicating your agreement to the use of data collected.

The Early Intervention Professional Development Survey (EIPDS) is a brief survey that consists of 25-items. The survey is expected to take approximately 15 minutes. All information in this survey is confidential. Please complete the following descriptive information before continuing to the next page to complete the survey.

Demographic Information

1. Which title matches your job description most?
 - Early Intervention Classroom Teacher (more than half of caseload in ECSE classroom)
 - Early Intervention Itinerant Teacher (more than half of caseload in home or community location)
 - Speech Language Pathologist
 - Occupational Therapist
 - Certified Occupational Therapy Assistant
 - Physical Therapist
 - Early Intervention Administrator/Supervisor
 - Evaluation Team
 - Paraeducator
 - Secretary

2. Which category matches your years of experience working in early intervention?
 - 5 or below
 - 6-15

- 16-29
 - 30 or above
3. Which category matches the number of years that you have been employed by your current intermediate unit's early intervention program?
- 5 or below
 - 6-15
 - 16-29
 - 30 or above

Survey Items

INSTRUCTIONS: The EIPDS uses both a multiple choice and a 7-point Likert Scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) for several items in the survey. Answer the questions based on the past 6 months. Please indicate your response by choosing the number corresponding to your desired choice.

1. During the last 6 months, have you participated in any formal professional development opportunities that were at least partially online (completely online, hybrid format, etc.)? (RQ1)
- Yes
 - No
2. What was the topic (ex. Inclusion, Behavior Management, Apraxia, Early Childhood Outcomes, etc.) and delivery method of the professional development? (ex. Course management system such as blackboard, video conferencing, self-paced course, EITA portal, speechtherapy.com, etc.) (RQ1)
- Topic 1: _____ Delivery method 1: _____
- Topic 2: _____ Delivery method 2: _____
- Topic 3: _____ Delivery method 3: _____
- Topic 4: _____ Delivery method 4: _____
- Topic 5: _____ Delivery method 5: _____
3. To what extent was the online professional development beneficial to you? (RQ1)
- Not at all important
 - Somewhat important
 - Moderately important
 - Very important
 - Extremely important

Please indicate if the online professional development in which you participated provided the following benefits:

4. I could go at my own pace (RQ1)
 - Yes
 - No
 - I don't know

5. I could access the materials/resources anytime (RQ1)
 - Yes
 - No
 - I don't know

6. It provided real-time solutions to problems (RQ1)
 - Yes
 - No
 - I don't know

7. It gave me access to resources not available in my local area (RQ1)
 - Yes
 - No
 - I don't know

8. It provided ongoing support for needs in my classroom/role (RQ1)
 - Yes
 - No
 - I don't know

9. It gave me the opportunity to reflect on my teaching/job skills and discuss it with other professionals (RQ3)
 - Yes
 - No
 - I don't know

10. To what extent were you able to apply what you learned from your most recent online PD to your job skills (RQ3)
 - Not at all
 - Small extent
 - Moderate extent
 - Large extent
 - Not sure/not applicable

11. What, if anything, primarily prevented you from applying what you learned from the online PD to your instructional or technical practices? (RQ3)
 - Nothing. I was able to apply what I learned
 - It wasn't relevant to my teaching

- I didn't have the tools/materials I needed
- It was not allowed by my school's policies/curriculum
- I didn't have time to plan instruction based on what I learned
- I meant to implement what I learned, but never got around to it
- Other: Please explain _____

12. Which response best describes your reason for not participating in professional development in an online setting? (RQ2)

- I am not aware of any online professional development offerings
- I prefer to participate in face-to-face professional development
- I don't think I have the technical skills needed to participate in online professional development
- It is too expensive
- I do not have the equipment I need to participate online
- I do not receive credit from my school or district for online professional development
- I do not feel it would be useful

How important are the following characteristics to you in future professional development opportunities?

13. Ability to access the materials anytime (RQ2)

- Not at all important
- Somewhat important
- Moderately important
- Very important
- Extremely important

14. Ability to get real-time solutions to problems in my role (RQ2)

- Not at all important
- Somewhat important
- Moderately important
- Very important
- Extremely important

15. Access to resources (RQ2)

- Not at all important
- Somewhat important
- Moderately important
- Very important
- Extremely important

22. Overall, I am very satisfied with my current professional development at my intermediate unit. (RQ1)

1 2 3 4 5 6 7
(strongly disagree) (strongly agree)

23. The training I received prepared me for my job responsibilities. (RQ3)

1 2 3 4 5 6 7
(strongly disagree) (strongly agree)

24. My direct supervisor(s) supports me in accessing appropriate professional development for my role. (RQ1)

1 2 3 4 5 6 7
(strongly disagree) (strongly agree)

25. I am appreciative of your participation in the survey but also recognize the value in personal communication to enhance the collection of data. Please indicate yes or no if you are willing to participate in a virtual interview following your submission of this survey. I sincerely appreciate your consideration.

- Yes (please click on hyperlink to submit contact information)
- No

Appendix C

Semi-Structured Interview Questions

Researcher Note

While the questions listed below as stated, dependent upon the answer of the participant, the researcher may need to couple these with the request to ask clarifying questions to support the researcher in gathering more information pertaining to the answer a participant provided. All clarifying questions will remain within the scope of this research study.

Researcher opening statement

As we begin, I would like to thank you for your willingness to more fully discuss your perception of professional development that is offered to you by the WIU and how it influences your job skills. As a staff member working for the WIU EI program, your honesty and openness to discuss this topic will be valuable. The process will potentially assist the administration in developing a more comprehensive understanding of how EI staff perceive current professional development as well as provide insight into what changes could enhance future offerings and how they may develop a plan of action to improve the effectiveness of professional development. Information gathered through this study will remain confidential, as it is important that your privacy be protected. To maintain confidentiality and remove personally identifying information, you will be assigned a personal identification number (PIN). Your privacy is important and I will handle all information in a confidential manner.

Remember, consent to participate is voluntary. If at any time you no longer wish to participate, you are not obligated to complete the interview. You can opt out of any

question(s) you choose and are able to stop participating at any time without explanation or penalty. This interview will be electronically recorded for my records and transcribed for analysis. This will take no more than 20-30 minutes of your time. The transcriptions will be stored on a password protected computer. You will have the option to review the transcription upon request. At this point, if you are in agreement, I will proceed with the interview (researcher will confirm the participant has verbally agreed to continue).

1. When asked to participate in professional development what is the primary reason you would select one format over another (online vs face-to-face vs hybrid)? (RQ1)
2. What characteristics are most important to consider when planning future professional development opportunities? (RQ2)
3. What professional development opportunities do you feel would help you to be more effective in your role that you have not had access to in the past? (RQ3)
4. What past professional development activities (coaching, mentoring, support or other methods of accountability/skill transfer) were provided that impacted your job skills? (RQ3)

Appendix D

Invitation Email

Hello! My name is Brandi Binakonsky and I am currently a doctoral student at California University of Pennsylvania. I am working with the Westmoreland Intermediate Unit (WIU) to conduct a research study titled “**A Mixed Methods Study: Investigating the Perceptions of Early Intervention Preschool Intermediate Unit Staff on Professional Development.**” I am interested in investigating your perception of professional development that is offered to you by the WIU and how it influences your job skills. The process will potentially assist the administration in developing a more comprehensive understanding of how EI staff perceive current professional development as well as provide insight into what changes could enhance future offerings and how they may develop a plan of action to improve the effectiveness of professional development. As a staff member working for the WIU within the Early Intervention (EI) program, you are invited to participate in the study.

Within this study, you will be asked to participate in a survey that is collected via Google Forms and will take approximately 10 to 15 minutes to complete. You will be asked basic demographic questions about your position and experience along with several multiple choice and Likert Scale questions in which you will rate answers along a scale of 1 to 7 related to your perception of professional development.

If you are willing to share your perspective and insight, please follow the link below to answer the 25 survey questions. Your contribution is a critical part of the data collection. While you will not benefit directly from participating in the study, information that is gathered may be of value to the WIU. The risks associated with participating are minimal. There are no physical or mental risks from participating in this study and every attempt will be made to protect your privacy. While I may present the results of the research as a published study and potentially in journals or periodicals, your name and other identifying information will remain confidential. The study will not cost you anything to participate and there will not be direct compensation for participating. You should feel empowered to make an informed decision and are able to discuss and ask the researcher any questions you may have.

Remember, consent to participate is voluntary. If you do not wish to participate, you are not obligated to complete the survey and you are able to stop participating at any time without explanation or penalty.

If you have any questions about this research study, please contact Brandi Binakonsky at bin0621@calu.edu or 724-493-8073 or California University of PA Assistant Professor, Dr. Lordon at lordon@calu.edu.

This research has been approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 08/25/21 and expires 08/24/22.

By clicking on this link, you are indicating your agreement to participate and permit the use of data collected through the survey.

Appendix E

Semi-Structured Interview Consent Form

Thank you for your interest in participating in the interview portion of the research survey titled “**A Mixed Methods Study: Investigating the Perceptions of Early Intervention Preschool Intermediate Unit Staff on Professional Development.**” I am interested in investigating your perception of professional development that is offered to you by the WIU and how it influences your job skills. The process will potentially assist the administration in developing a more comprehensive understanding of how EI staff perceive current professional development as well as provide insight into what changes could enhance future offerings and how they may develop a plan of action to improve the effectiveness of professional development. As a staff member working for the WIU within the EI program, you are invited to participate in the study.

During this portion, you will be asked a series of questions related to the research topic. If you agree to participate, I will arrange a zoom meeting at your convenience. This interview will be electronically recorded for my records and transcribed for analysis. This will take no more than 20-30 minutes of your time. The only participants during the interview will be you and the researcher. The transcriptions will be stored on a password protected computer. If you take part in this portion of the research, it is very important for you to answer in an honest manner. You will have the option to review the transcription upon request. Your privacy is important and to maintain confidentiality and remove personally identifying information, you will be assigned a personal identification number (PIN).

While you will not benefit directly from participating in the study, information that is gathered may be of value to the WIU. The risks associated with participating are minimal. There are no physical or mental risks from participating in this study and every attempt will be made to protect your privacy. While I may present the results of the research as a published study and potentially in journals or periodicals, your name and other identifying information will remain confidential. The study will not cost you anything to participate and there will not be direct compensation for participating. You should feel empowered to make an informed decision and are able to discuss and ask the researcher any questions you may have.

Remember, consent to participate is voluntary. If you do not wish to participate, you are not obligated to complete the interview and you are able to stop participating at any time without explanation or penalty. If you have any questions about this research study, please contact Brandi Binakonsky at bin0621@calu.edu or 724-493-8073 or California University of PA Assistant Professor, Dr. Lordon at lordon@calu.edu.

This research has been approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 08/25/21 and expires 08/24/22.

By signing below, you agree to participate in this interview for the purpose of this research study.

Signature

Printed Name

Date