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A Qualitative Investigation of Preservice Special Education Teacher Programs' Preparation of Preservice Special Education Teachers to Work with Paraprofessionals

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ABSTRACT

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Research shows the number of paraprofessionals who provide support to students with exceptionalities is increasing (Data Accountability Center [DAC], 2010) and that special educators are becoming increasingly responsible for managing, training, and supervising paraprofessionals who support students with exceptionalities (Carlson, Brauen, Klein, Schroll, & Willing, 2002; Douglas, Chapin, & Nolan, 2016; Drecktrah, 2000). The purpose of this qualitative interview study was to investigate how preservice programs were preparing teachers to manage, train, and supervise paraprofessionals who provide support to students with significant needs. Ten leading experts in the field of paraprofessional research who work at universities with special education teacher preparation programs were interviewed with the intent to identify current practices in preparing preservice special education teachers to manage, train, and supervise paraprofessionals. In addition to investigating how leading experts in the field prepare preservice special education teachers to work with paraprofessionals, participants' experiences and beliefs were also analyzed. The results of this study revealed five themes: (a) obstacles to preparing preservice teachers to work with paraprofessionals, (b) we do not do a good job preparing them to manage adults, (c) preservice teachers don't know what they don't know, (d) why paraprofessionals should be a part of preservice

training, and (e) knowledge, skills, and approaches needed to prepare preservice teachers This study added to the current literature by highlighting issues that impact preservice special education teacher preparation programs' ability to effectively prepare special education teachers to work with paraprofessionals including how this topic is addressed in special education preservice preparation programs. This study also added to the growing literature on best practices for preparing preservice special education teachers to work with adult learners as well as how to effectively train paraprofessionals to support students with exceptionalities including students with severe needs. Implications for special education preservice preparation programs, policy for special education preservice preparation programs, and future research were addressed.

Keywords: paraprofessionals, special education preservice preparation programs

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TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

Over the last three decades, policies and practices were aimed at increasing the achievement of students in general education classes and those receiving special education services including the identification and use of evidence-based practices (EBPs) to provide instruction (Individuals with Disabilities Education Act [IDEA, P. L. 108-446], 2004; No Child Left Behind Act [NCLB, P. L. 107-110], 2002; Wong et al., 2015). Due to the increased standards of accountability for the progress of students, improving the outcomes for students with exceptionalities became a significant need and research focus within the field of special education. Although EBPs were the most effective interventions used to improve outcomes for students with exceptionalities, research showed educators, particularly those who worked with students with significant support needs, required more intensive interventions (e.g., students with autism spectrum disorder [ASD]) and were implementing unproven practices over EBPs at alarming rates (Hess, Morrier, Heflin, & Ivey, 2008). Despite research and progress made during the last three decades including the development of guidelines for the identification of EBPs and their impact on students with exceptionalities, the literature on improving the outcomes of students with exceptionalities, especially students with significant support needs, remained relevant (see Dingfelder & Mandell, 2011; Hendricks, 2011; Odom, Boyd, Hall, & Hume, 2010; Reichow, Volkmar, & Cicchetti, 2008; Ryan, Hughes,

Katsiyannis, McDaniel, & Sprinkle, 2011; Simpson, 2004, 2005, 2008; Simpson, Mundschenk, & Heflin, 2011; Yell, Drasgow, & Lowery, 2005). Another concern that compounded the issue of implementation of EBPs for students with exceptionalities was the increasing number of paraprofessionals providing support to students with exceptionalities (Data Accountability Center [DAC], 2010) in various school settings (e.g., general education and special education classrooms) to students with varying levels of need. Because paraprofessionals tended to be the least knowledgeable and trained to work with and implement EBPs for students with exceptionalities (Breton, 2010), it was important research efforts focused on training paraprofessionals to implement EBPs for students with exceptionalities. Research conducted in this area indicated paraprofessionals could be trained to implement EBPs with fidelity (Bessette & Willis, 2007; Brock & Carter, 2015; Hall, Grundon, Pope, & Romero, 2010; Quilty, 2007; Walker & Snell, 2017). Additionally, research demonstrated special education teachers could successfully train paraprofessionals to implement EBPs with fidelity to improve the outcomes of students with exceptionalities (Brock & Carter, 2016).

Due to the increasing number of paraprofessionals providing interventions and support in the school setting, including general education classrooms, special educators have been given the responsibility of training and supervising paraprofessionals (Carlson et al., 2002; Douglas et al., 2016; Drecktrah, 2000). Although research on this topic was sparse, the limited research available indicated special educators reported their preservice teacher programs did not prepare them for this role (Biggs, Gilson, & Carter, 2018; Brock & Carter, 2015; Carlson et al., 2002; Drecktrah, 2000; Hall et al., 2010; Quilty, 2007; Walker & Snell, 2017; Wallace, Shin, Bartholomay, & Stahl, 2001) and special educators

were capable of training them to use EBPs to support students with severe needs (Brock & Carter, 2016). Given the dearth of research available on this topic, it was important to investigate related literature and to consequently identify needed areas of research.

A Significant Population Impacted by Paraprofessionals: Students with Significant Support Needs

In addition to focusing on EBPs for students with disabilities, IDEA (2004) added language that included serving students with disabilities in the least restrictive environment. As a result, there has been an increase in students with severe needs being placed in general education settings (Carroll, 2008). It is important to note that *significant support needs* is a term used by the state of Colorado that identifies intensive supports required to serve students with severe needs. The Colorado Department of Education (CDE; 2017) indicates, "Students with significant support needs often require more physical, medical, communication, behavioral, and therapeutic supports" (para. 2). It is also well known that this population of learners often experiences challenges with learning and requires intensive support with academic skills (Westling, Fox, & Carter, 2014).

For the purposes of this study, students with severe needs included students with autism spectrum disorder (ASD), an intellectual disability (ID), and students with multiple disabilities. The IDEA (2004) listed 14 disability categories with definitions and eligibility criteria for qualifying students with exceptionalities for special education services. The categories of autism, intellectual disability, and multiple disabilities share many characteristics that indicate significant support needs require intensive interventions. According to the definitions of the eligibility categories provided by IDEA, students with severe needs require intensive interventions and support to meet

their individual needs. Students with severe needs are typically impacted in more than one of the following areas: social interactions, communication, behavioral deficits, adaptive behavior, independent living, sensory and motor, academic skills development, and vocational and transitional planning for adulthood. Definitions and eligibility criteria for these disability categories provided by IDEA (2004) are listed at the end of this chapter under Definitions of Terms. Further, Westling (2010) indicated students with severe needs (e.g., students with mild, moderate, or profound ID, students with multiple disabilities, and students with ASD) often experience challenging behaviors due to deficits in the areas of functional communication, personal abilities, and social skills. Often, students with severe needs require interventions and supports based on one or more EBPs in the areas of academics, communication, emotional-behavioral support, social interactions, and adaptive behaviors. Throughout the rest of this paper, students with severe needs included students with ASD, ID, and multiple disabilities.

Quality Indicators for Programs that Support Students with Severe Needs

In addition to identifying the typical needs of students with severe needs, CDE (2015) identified quality indicators to develop, implement, and evaluate services for students with severe needs. These quality indicators included areas of inclusive culture, collaboration, communication, instruction, paraprofessionals, progress monitoring, and positive behavior support. This study focused on the areas of collaboration, instruction, paraprofessionals, and positive behavior support.

Cook and Friend (2010) defined collaboration as a process that required “mutual goals; parity; shared responsibility for key decisions; shared accountability for outcomes; shared resources; and the development of trust, respect, and a sense of community” (p. 3).

In the quality indicators for collaboration, CDE (2015) addressed the importance of multi-disciplinary teams that included special educators, general educators, paraprofessionals, and parents working together collaboratively. Additionally, CDE promoted systematic instruction for students with severe needs, which identified interventions based on EBPs and emphasized monitoring data through frequent data collection (Browder & Spooner, 2011). It was important to note one of the indicators for instruction specifically stated that staff be trained and able to implement EBPs and another indicator supported the use of evidence-based interventions identified to meet the individual needs of the students. The CDE used literature to define a paraprofessional in these quality indicators as a school employee who worked under the supervision of a licensed professional (CDE, 2015). Expected roles of a paraprofessional providing services to students with severe needs were also identified as instructional support in the general education classroom, supporting academic instruction, teaching functional life skills and vocational skills, providing support for students with challenging behaviors, and facilitating interactions with peers (CDE, 2015). The indicators for positive behavior support for students with severe needs requiring significant support needs relied on concepts from positive behavior intervention and support (CDE, 2015), which was based on theories and basic research from the field of applied behavior analysis (ABA). Essentially, schools that use a positive behavior intervention and support system have identified behavior expectations woven throughout student activities, including academic activities, that students are reinforced when they meet expectations. Additionally, students who struggle with behavior are given more individualized support and intensive interventions based on EBPs (e.g., functional behavior assessment and behavior

intervention plan when needed to help students be successful). These four indicators provided an outline for competencies special educators in the state of Colorado need to have to manage, train, and supervise paraprofessionals who provide support to students with severe needs.

Who is Working with Students with Severe Needs?

Teachers and paraprofessionals work with a variety of students with varying needs and special education identifiers (e.g., ASD, intellectual disability, and multiple disabilities; Carlson et al., 2002; Fisher & Pleasants, 2012). The *Study of Personnel Needs in Special Education* (SPeNSE; Carlson et al., 2002) was a national study conducted with 358 administrators and 8,061 service providers including general educators, special educators, speech-language pathologists, and special education paraprofessionals. The authors reported 47% of special education teachers surveyed worked with students with two to three different exceptionalities, 24% of the participants worked with students with four to five different exceptionalities, and 8% of special education teachers surveyed work with students with six or more different exceptionalities (Carlson et al., 2002). Fisher and Pleasants (2012) conducted a survey with 1,867 paraprofessionals in a Midwestern town and found that of the paraprofessionals surveyed, most reported working with students with a variety of needs requiring varying levels of support. The authors found 54% percent of the respondents reported working with students with EBD, 50% of the respondents worked with students with autism, 53% of the respondents worked with students with mild mental disabilities, 36% of the respondents worked with students with moderate mental disabilities, 19% of the respondents worked with students with severe mental disabilities, and 31% of the

respondents worked with students with multiple disabilities. These data clearly indicated special educators and paraprofessionals were working with students with various exceptionalities including students with severe needs who required intensive interventions and supports.

It was important to note that 50% of the paraprofessionals surveyed by Fisher and Pleasants (2012) indicated their primary or secondary responsibility was to provide behavioral and social support to students with exceptionalities. This was particularly interesting given the concerns special educators themselves reported feeling unprepared to address the challenging behaviors of student with severe needs (Westling, 2010) and often lacked the knowledge and skills necessary to meet the individual needs of students with challenging behaviors (Billingsley, Fall, & Williams, 2006). Interestingly, the SPeNSE report noted 40% of special education teachers surveyed indicated they did not read any professional journals and 31% indicated they did not belong to any professional associations (Carlson et al., 2002). This highlighted the concern special educators working with a variety of students with severe needs who required intensive interventions and supports were not accessing research literature available to identify and implement EBPs for students with exceptionalities. The concern that special educators were not accessing research to identify and implement EBPs as well as the aforementioned concern that special educators were still implementing unproven practices for students with severe needs were particularly concerning due to the fact that most paraprofessionals received on-the job training from special educators (Bradley, Doolittle, & Bartolotta, 2008).

Teacher Preparation for Managing, Training, and Supervising Paraprofessionals

The SPeNSE report indicated 77% of teachers surveyed reported their preservice programs did not provide adequate knowledge and skills required to train and supervise paraprofessionals (Carlson et al., 2002). Limited research conducted in this area supported findings that special educators felt their preservice teacher programs did not prepare them to manage, train, and supervise paraprofessionals (Biggs et al., 2018; Carlson et al., 2002; Drecktrah, 2000; Wallace et al., 2001) despite reporting that this was part of their responsibility as a special educator (Carlson et al., 2002; Douglas et al., 2016; Drecktrah, 2000). Given the facts that (a) a research to practice gap still exists with the implementation of EBPs for students with severe needs requiring intensive supports and interventions; (b) paraprofessionals are increasingly supporting students with severe needs but are often the least knowledgeable and trained to provide support to students with exceptionalities (Breton, 2010), (c) paraprofessionals can be trained to implement EBPs (Bessette & Willis, 2007; Brock & Carter, 2015; Hall et al., 2010; Quilty, 2007; Walker & Snell, 2017) despite being the least knowledgeable and trained to work with students with exceptionalities (Breton, 2010); and (d) teachers can train paraprofessionals to implement EBPs (Brock & Carter, 2016), it is essential special educators are prepared to manage, train, and supervise paraprofessionals (Wallace et al., 2001).

Statement of the Problem

The field of special education has experienced many changes over the last 30 years. One major accomplishment was the increase in the number of students with exceptionalities being included in the general education setting, particularly students with significant support needs who required intensive evidence-based interventions and

supports (e.g., ASD, ID, and multiple disabilities). However, due to the increase of students with severe needs being educated in the general education setting throughout their day, the roles and responsibilities of paraprofessionals have also changed. Paraprofessionals are provided more instructional responsibilities and are consequently working directly with students with severe needs more (DAC, 2010). Therefore, the concern being addressed was threefold. First, special educators were not implementing EBPs that addressed the unique characteristics of students with significant needs (e.g., ASD, ID, and multiple disabilities) to a sufficient degree. Although special educators reported regularly implementing EBPs (e.g., direct instruction) that often addressed academic deficits, they were less likely to implement EBPs (e.g., applied behavior analysis [ABA] that addressed concerns with communication, behavior, and social interactions (Burns & Ysseldyke, 2009). Second, special educators did not feel adequately prepared (preservice or in-service training) to manage, train, and supervise paraprofessionals (Biggs et al., 2018; Carlson et al., 2002; Drecktrah, 2000; Wallace et al., 2001). Third, as previously indicated, paraprofessionals were the least knowledgeable and trained individuals who were providing academic and behavioral support to students with exceptionalities (Breton, 2010). This was a concern given the number of paraprofessionals who provided support to students with exceptionalities. It was a concern, particularly for students with severe needs receiving supports from paraprofessionals, as it was still evident special education teachers were less likely to use EBPs that addressed the unique needs of these populations of learners and, in turn, less likely to train paraprofessionals to use EBPs.

Significance of the Study

Limited information was available about how preservice teacher programs were preparing special educators to manage, train, and supervise paraprofessionals supporting students with severe needs using EBPs. Although the literature in this area was sparse, it did not mean preservice special education teacher preparation programs were not addressing these skills. To address the concern special education teachers had voiced regarding their lack of preparation to train and supervise paraprofessionals (Biggs et al., 2018; Carlson et al., 2002; Drecktrah, 2000; Wallace et al., 2001), there was a need to investigate how programs were preparing preservice teachers to be competent in this skill as a special educator. If themes could be identified in the preparation of preservice special education teachers to manage, train, and supervise paraprofessionals, particularly those supporting students with severe needs, then we could begin to identify the disconnect between how preservice teacher programs were preparing special educators to manage, train, and supervise paraprofessionals and special educator reports of feeling underprepared in this skill area, which could be tied to competencies, even for individuals working with students with severe needs (e.g., CDE's [2015] quality indicators for developing, implementing, and evaluating services for students with severe needs).

Purpose of the Study

The purpose of this study was to investigate how preservice programs were preparing special education teachers to manage, train, and supervise paraprofessionals who supported students with exceptionalities, particularly students with severe needs, using EBPs. University faculty were interviewed to examine how their preservice teacher preparation program prepared special educators to manage, train, and supervise

paraprofessionals, particularly those working with students with severe needs. They were asked questions pertaining to their knowledge of federal law, state standards, and program curriculum, the practices and strategies they used, and their personal experiences and beliefs with regard to preparing preservice special educators to manage, train, and supervise paraprofessionals. Again, how preservice teacher programs were preparing special educators to manage, train, and supervise paraprofessionals supporting students with severe needs to use EBPs were specifically addressed. The goal of this study was to identify how preservice special education teacher preparation programs prepared special educators to manage, train, and supervise paraprofessionals working with students with exceptionalities. This study also sought to identify approaches to how programs were preparing preservice special education teachers to manage, train, and supervise paraprofessionals supporting students with severe needs to use EBPs.

Research Questions

Research questions developed for this qualitative study were semi-structured and open-ended. This provided a guide for questioning during participant interviews while allowing the researcher to explore the topic in-depth by asking additional questions that pertained to individual participant responses regarding the preparation of preservice special education teachers to work with paraprofessionals. As a result, the following research questions guided this study:

Q1 How have preservice special education teacher preparation programs prepared preservice special education teachers to work with paraprofessionals who provided support to students with exceptionalities including students with severe needs requiring intensive interventions and support?

Q2 What did the leading experts in the field of paraprofessional research experience and believe regarding preparing preservice special education

teachers to work with paraprofessionals who provided support to students with exceptionalities?

Definition of Terms

Evidence-based practices. Interventions, instructional strategies, or teaching programs that have been systematically researched and shown to make a positive difference in students when experimentally assessed (Perry & Weiss, 2007).

Unproven practices. Interventions with little empirical support that often involved "controversial" or "invalidated methods and strategies for which there is little in the way of scientific support and efficacy" (Simpson, 2005, p. 141).

Significant support needs. A term used in the state of Colorado that identifies the intensive interventions required to support students with severe needs including but not limited to "more physical, medical, communication, behavioral, and therapeutic supports" (CDE, 2017, para. 2) and support with academic skills (Westling et al., 2014).

Autism spectrum disorders. Developmental delays impacting social communication and social interaction, evident before the age of three, and impacts educational performance. Also includes repetitive behaviors, resistance to environmental changes, and unusual responses to sensory stimuli (IDEA, 2004). The criteria included (a) impairments in social communication, (b) difficulties in forming appropriate relationships, (c) unusual response to sensory stimulation, (d) cognitive impairments, (e) abnormal range of activities, (f) current diagnosis from a qualified professional, and (g) disability adversely affects educational performance.

Coaching. One-on-one training by an expert after the initial training has occurred (Walker & Snell, 2017). There are two types of coaching: side-by-side coaching occurs when the observer provides in-vivo feedback during skill implementation and supervisory coaching occurs when the feedback occurs after the observation is complete (Kretlow & Bartholomew, 2010).

Evaluation. Ongoing performance assessments developed from the competencies related to the roles and responsibilities of paraprofessionals and used to rate their performance on the identified skill areas (Carnahan, Williamson, Clarke, & Sorensen, 2009).

Intellectual disabilities. A student with an intellectual disability has a significantly sub-average general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period (IDEA, 2004). The criteria include (a) significantly impaired intellectual functioning--an IQ score of less than 70; (b) significantly impaired adaptive behavior in the home or community--a composite individual standardized instrument or a composite age equivalent score representing a 50% delay based on chronological age could be used if the instrument failed to provide a composite standard score; (c) significantly impaired adaptive behavior in the school, daycare center, residence, or program--normally determined by systematic document observation by an appropriate specialist; (d) the student is compared with other children of his/her chronological age group; (e) developmental history indicated delays in cognitive/intellectual abilities and a current demonstration of the delays present in the student's natural environment; and (f) the characteristics as defined above

were present and caused an adverse effect on educational performance in the general education classroom or learning environment.

Multiple disabilities. A child with multiple disabilities has two or more areas of significant impairment, one of which is an intellectual disability. Other areas of impairment could include orthopedic impairment, visual impairment including blindness, hearing impairment including deafness, speech or language impairment, serious emotional disability, autism spectrum disorder, traumatic brain injury, or other health impaired. The combination of such impairments creates a unique condition evidenced through a multiplicity of severe educational needs that prevent the child from receiving reasonable benefit from general education (IDEA, 2004). The criteria included evidence that satisfied all eligibility criteria for intellectual disability and another identified area of impairment.

Paraprofessionals. Individuals who provide support and supplement instruction for students, including students with exceptionalities, in various school settings (e.g., general education and special education). Paraprofessionals do not provide primary instruction to students and are required to work under the supervision of a licensed educator (Doyle, 2002; IDEA, 2004; NCLB, 2002).

Performance feedback. Providing constructive verbal, visual, or video feedback after observing a paraprofessional engage in a targeted skill (Brock & Carter, 2015; Hall et al., 2010).

Professional development. A training package designed to address learning a targeted skill, which includes specific instruction on a targeted skill, modeling of the

targeted skill, regular practice of the targeted skill, and performance feedback given observations of the paraprofessional performing the targeted skill (Brock & Carter, 2015).

Supervision. The components of systematic supervision for paraprofessionals include regularly scheduled meetings, assessment of performance, ongoing learning opportunities, and providing opportunities for problem-solving (Carnahan et al., 2009).

Conclusion

The number of paraprofessionals working with students with exceptionalities continues to increase (DAC, 2010). Additionally, paraprofessionals are becoming increasingly responsible for providing interventions based on EBPs to students with severe needs. This is a concern because paraprofessionals are often the least knowledgeable and prepared to work with student with exceptionalities (Breton, 2010). To adequately prepare paraprofessionals to implement interventions for students with exceptionalities based on EBPs, we need to understand how preservice special education programs are preparing teachers to manage, train, and supervise paraprofessionals. Despite the persistent research-to-practice gap that exists with the implementation of EBPs, research has shown paraprofessionals could be trained to implement EBPs with fidelity when working with students with exceptionalities (Bessette & Willis, 2007; Brock & Carter, 2015; Hall et al., 2010; Quilty, 2007; Walker & Snell, 2017). However, special educators reported feeling underprepared for this responsibility (Biggs et al., 2018; Carlson et al., 2002; Drecktrah, 2000; Wallace et al., 2001). Some research also demonstrated special education teachers could train paraprofessionals to implement EBPs

with fidelity (Brock & Carter, 2016). However, limited research was available on how to adequately prepare preservice teachers for this role. The purpose of this study was to examine how preservice special education programs are preparing teachers to work with paraprofessionals that support students with exceptionalities.

The next chapter focuses on (a) the identification and implementation of EBPs to improve the outcomes of students with exceptionalities, particularly students with significant needs requiring more intensive interventions; (b) concerns regarding the lack of paraprofessional training and preparation; and (c) a review of the limited literature regarding training paraprofessionals to implement EBPs including research supporting the use of special education teachers to train paraprofessionals to implement EBPs. Thus, the chapter begins with a review of educational law and recommended practices for identifying and using EBPs to improve outcomes for students with exceptionalities; a particular focus is on students with significant needs that require more intensive interventions and supports to be successful.

CHAPTER II

REVIEW OF LITERATURE

Since the implementation of NCLB (2002) and the reauthorization of IDEA (2004), educational research has focused on identifying EBPs for students with exceptionalities and improving the achievement of all students including students with exceptionalities receiving special education services. According to Marder and deBettencourt (2015), the rising political and educational focus on the identification and implementation of EBPs resulted from a clear need to improve student outcomes. In addition, such student outcome data were identified as a way to determine teacher effectiveness. Consequently, the use of EBPs determined to improve student outcomes became important not only to student success but to the success of special education teachers as well.

In their exploration of EBPs, Cook and Cook (2011) differentiated between the terms research-based practices and EBPs. According to the authors, research-based practices have less rigorous standards of empirical support; whereas EBPs contain operationally defined instructional procedures, determine what research studies to include from evidence-based reviews, and examine fidelity of implementation. The authors also identified four critical components to be analyzed when reviewing research studies for the identification of EBPs: (a) research design, (b) quality of research, (c) quantity of research, and (d) magnitude of effect of supporting studies. Further, EBPs in education

were defined as interventions, instructional strategies, or teaching programs that have been systematically researched and shown to make a positive difference in students when experimentally assessed (Perry & Weiss, 2007). Cook, Cook, Landrum, and Tankersley (2008) also described EBPs as high-quality research including experimental, quasi-experimental, or single-subject research designs that had been replicated multiple times and were published in peer-reviewed professional journals. Despite these guidelines, major concerns continued to exist regarding the failure of educators to implement EBPs for students with exceptionalities (Hall, 2015; Hendricks, 2011; Hess et al., 2008) including a lack of clear procedural guidelines for the identification and implementation of EBPs in school settings.

To address concerns regarding the lack of identification and implementation of EBPs for students with exceptionalities, the Council for Exceptional Children (CEC; 2014) developed standards to identify EBPs that included quality indicators to ensure sound methodology and socially valid outcomes when identifying EBPs as well as research classifications (e.g., evidence-based practices, potentially evidence-based practices, mixed effects, negative effects, and insufficient evidence) for group comparison and single-subject research designs. According to the CEC, interventions reviewed as evidence-based should focus on "examining the effect of an operationally defined practice or program on student outcomes" (p. 504). Thus, to be considered an EBP, the intervention should improve outcomes for the population being studied.

Despite the focus on EBPs for students with exceptionalities designed to improve student outcomes, one major concern was student achievement continued to remain fairly "stagnant" compared to the last 40 years (Yell et al., 2005, p. 131). Notably,

exceptionalities in the area of ASD saw the most inconsistencies when reviewing recommended practices with many interventions having little to no research support. In fact, some researchers argued that "no area of disability has experienced this problem to the same degree as those within the autism field" (Simpson, 2005, p. 141). Much of this problem could be attributed to many unfounded intervention claims aimed at improving outcomes for students with ASD. Consequently, leading researchers in the field have focused their work on identifying EBPs that would improve the outcomes of students diagnosed with ASD (e.g., Cook & Cook, 2011; Reichow et al., 2008; Simpson, 2005; Wong et al., 2015). The following section focuses on the process of identifying EBPs for students with exceptionalities and EBPs identified to improve outcomes for students with severe needs.

The Identification of Evidence-Based Practices for Students with Exceptionalities

Due to the increasing number of students with exceptionalities being educated in various school settings, researchers have focused their efforts on identifying EBPs found to be effective in addressing the unique needs of students with exceptionalities, particularly those with ASD. According to the Centers for Disease Control and Prevention (2014), the prevalence of ASD increased from 1 in 150 in 2002 to 1 in 68 in 2012 to 1 in 59 in 2014. It is important to note that ASD is the fastest growing disability category in special education (Rakap, Jones, & Emery, 2014) and the number of students with ASD enrolled in schools in the United States has steadily increased, highlighting the importance of ensuring that individuals providing intensive interventions and supports to students with ASD and students with similar significant support needs are properly trained to implement EBPs. Nevertheless, this population of learners has simultaneously

experienced an increase in the amount and use of unproven practices and interventions that posed promising results that were often unrealistic and unattainable. For example, although these practices were proven to be unsuccessful, some families opted for interventions such as a gluten-free, casein-free diet in attempt to decrease symptoms of ASD while other families opt out of vaccinations for their child in an attempt to decrease the chances of an ASD diagnosis in the future. Other non-evidence-based practices for students with ASD included but were not limited to the following controversial practices: chelation, sensory diets, and facilitated communication. Thus, as Simpson (2005) suggested, "Because it is considered to be a life-long, permanent disability, autism related disabilities have attracted a number of highly controversial treatments and interventions" (p. 141). He went even further to define "controversial" as "invalidated methods and strategies for which there is little in the way of scientific support and efficacy, especially when extraordinary and incomparable results are measured" (p. 141). These statements not only reinforced the importance of identifying EBPs to improve outcomes for students with exceptionalities but also the need to constantly analyze new research regarding EBPs for students with exceptionalities, particularly students with severe needs.

Researchers indicated a lack of universally determined methods for improving the outcomes of students with ASD (Reichow et al., 2008; Simpson et al., 2011). In their evaluation, Simpson et al. (2011) suggested, "There is a notable disagreement over what instructional methods and supports are most effective in teaching and supporting learners with ASD" (p. 10). As a result, they indicated it was important to focus on the core elements of ASD including social interaction, communication, behavioral deficits, adaptive behavior, independent living, sensory and motor, academic skills development,

and vocational and transitional support planning (Simpson et al., 2011, p. 10). Simpson et al. also reported that the "dearth of guidelines to follow [in the identification of EBPs] make consensus regarding the effectiveness of intervention difficult" (p. 11). The work of Reichow and colleagues (2008) and Simpson et al. highlighted a need to identify universal methods for identifying EBPs that addressed the core elements of ASD as well as made the findings available and presented them in a way educators could understand and utilize the findings to improve the outcomes for this population of learners. Although above mentioned researchers focused on the use of EBPs and the outcomes for students with ASD due to the increased prevalence of students diagnosed with ASD over the last 30 years and concerns regarding the use of unproven practices over EBPs, other students with severe needs benefited from intensive instruction and supports that addressed deficits in these core areas as well. For example, students with ID and multiple disabilities could benefit from EBPs that focused on outcomes in the areas of social interaction, communication, behavioral deficits, adaptive behavior, independent living, sensory and motor, academic skills development, and vocational and transitional support planning (IDEA, 2004).

Because previous methods of evaluation were proven to be insufficient, Reichow and colleagues (2008) completed an evaluation to investigate methods for determining EBPs for individuals with ASD. First, the researchers identified limitations of existing models for identifying evidence-based interventions for students with ASD including the lack of an operationalized method for evaluating evidence and determining if a treatment was evidence-based, the narrow interpretation of what was considered evidence, and the treatment or dismissal of single-subject research (Reichow et al., 2008). As a result,

Reichow and colleagues developed an evaluative method for determining EBPs in ASD that included rubrics for evaluation of research vigor, guidelines for evaluation of research report strength, and criteria for the determination of EBPs. The authors reported, "These instruments provide a standardized method for researchers, practitioners, and clinicians to evaluate the empirical evidence on autism interventions" (Reichow et al., 2008, p. 1312), which in turn allowed individuals who worked with students with ASD the ability to assess, identify, and implement effective interventions that had the potential to improve outcomes for this population of learner. It was important to note that the process for identifying EBPs developed by Reichow et al. is really best practice for identifying EBPs that could be used to address various needs (e.g., social interaction, communication, behavioral deficits, adaptive behavior, independent living, sensory and motor, academic skills development, and vocational and transitional support planning) and to improve the outcomes of all students with exceptionalities, particularly those with severe needs.

In 2009, both the National Autism Center (NAC) and the National Professional Development Center on Autism Spectrum Disorders (NPDC) published reports regarding their research identifying EBPs for students with ASD, which have since been updated to include new research studies and implement stricter guidelines for identifying EBPs. Overall, the EBPs identified by these two groups were used for improving the outcomes of students with ASD but could be used to meet the needs of students with various exceptionalities and level of need (e.g., significant support needs, social-emotional concerns, and behavior problems).

Phase 2 of the NAC's (2015) *National Standards Project* included research conducted with individuals between birth and 22 diagnosed with ASD, published in peer reviewed journals, and utilized group comparison or single-subject design. The NAC utilized the Scientific Merit Rating Scale (SMRS) to assess research design, measurement of the dependent variable, measurement of the independent variable or procedural fidelity, participation ascertainment, and generalization and maintenance of selected studies. The NAC also analyzed these studies using the Intervention Effects Rating Scale (e.g., beneficial, ineffective, and unknown) and the Strength of Evidence Classification System (established, emerging, and unestablished). Through their review, the NAC identified 14 established treatments, 18 emerging treatments, and 13 unestablished treatments for children, adolescents, and young adults with autism under 22 years of age. Examples of established treatments included behavioral interventions (e.g., antecedent package and behavioral package) and cognitive behavioral therapy. Examples of emerging treatments included augmentative alternative communication devices and structured teaching. Examples of unestablished treatments included DIR/Floortime and GFCF diet (NAC, 2015). Phase 2 of this project addressed research for adults 22 and over and found only one established, one emerging, and four unestablished. This was not surprising given the dearth of research conducted on individuals with ASD beyond adolescence and into adulthood.

Wong et al. (2015) conducted a review of the literature regarding EBPs for individuals with ASD. This review included participants between birth and 22 years who were diagnosed with ASD (including co-occurring conditions); interventions that were behavioral, developmental, and/or educational in nature; results that demonstrated

behavioral, developmental, and/or academic outcomes; and experimental group, quasiexperimental, or single-case research designs. Criteria for inclusion included at least two experimental or quasi-experimental group design studies carried out by at least two different researchers, at least five single case design studies from at least three independent investigators with a total of at least 20 participants across studies, a combination of at least one experimental and one quasi-experimental study and three single case design studies from at least two different research groups. Wong et al. identified 27 evidence-based practices for individuals with autism including antecedent-based interventions, behavioral interventions (e.g., prompting, reinforcement, task analysis, functional behavior assessment, and differential reinforcement), the Picture Exchange Communication System, and pivotal response training (PRT). Additionally, the NPDC (2009) offers a comparison between their report and the report conducted by the NAC (2009). One of the major differences was the NAC put all of the behavioral interventions into one "package" while the NPDC listed them individually. Additionally, some of the interventions (e.g., Picture Exchange Communication System) were listed as EBPs by the NDPC but were not listed as EBPs by the NAC due to small differences in their criteria for identifying EBPs.

It was also important to note that since the What Works Clearinghouse (n.d.) incorporated single-subject research designs into their evaluation of research, they identified 17 EBPs for children and youth with exceptionalities and 20 EBPs for students with behavior concerns. However, most of the EBPs identified by the What Works Clearinghouse included specific curriculums (e.g., Peer-Assisted Learning Strategies [PALS]) and did not address specific EBPs for students with exceptionalities. The

following section provides an overview of applied behavior analysis (ABA), which is comprised of several EBPs found to be effective in improving educational, behavioral, and social outcomes for individuals with exceptionalities, particularly students with severe needs.

Applied Behavior Analysis: An Evidence-Based Practice for Students with Exceptionalities

Applied behavior analysis is a scientific approach that uses the manipulation of environmental variables to influence and change socially significant behavior (Cooper, Heron, & Heward, 2007). Additionally, ABA uses EBPs to improve outcomes for individuals by improving socially significant behaviors. Socially significant behaviors are immediate, long-lasting, and impact individuals with disabilities as well as the individuals with whom they interact. They include many skills students with exceptionalities require to be successful including communication skills, adaptive learning skills, academic skills, and social skills. Applied behavior analysis includes several EBPs founded by both the NPDC (2009) and the NAC (2009) to be effective in improving outcomes for students with significant needs including but not limited to functional behavior assessment, differential reinforcement, extinction, prompting, reinforcement, task analysis, functional communication training, modeling, naturalistic teaching strategies, and visual supports. Most of the EBPs listed here could be used within the educational environment for students with exceptionalities from preschool through high school in various school settings. A comprehensive list of research that forms the evidence-base for these practices including participant demographics, settings, and results is provided in the full reports from the NPDC and the NAC, which are available to the public on their respective websites. This information could be used to

inform the practices of educators when working with students with severe needs requiring intensive interventions and significant support needs as most of these interventions could be implemented and monitored in the classroom with little or no impact on academic instruction. The next section of this chapter includes discussion about the research-to-practice gap identified regarding the provision of EBPs for students with exceptionalities with a focus on students with severe needs requiring intensive interventions and support.

Implementing Evidence-Based Practices for Students With Exceptionalities: The Research-to-Practice Gap

Although their primary focus was the identification of EBPs, it should be mentioned that Cook and Cook (2011) also reported, "One of the most critical issues in contemporary special education is the significant and persistent gap between research documenting the effectiveness of practices and the actual instruction that occurs in typical classrooms" (p. 71). Additionally, Cook and Odom (2013) stated, "The research-to-practice gap underlies what is probably the most vexing caveat related to evidence-based practices: the difficulty in translating research findings to the everyday practices of teachers in typical classrooms" (p. 138). As indicated earlier, interventions with little or no research (e.g., opting out of vaccinations, chelation, GFCF diet, DIR/Floortime, etc.) were being implemented in schools despite the increase and identification of EBPs using rigorous and clearly defined standards. Dingfelder and Mandell (2011) stated, "Decisions are [often] based on opinions, observations, and inferences among the community and that ambiguous evidence deters practitioners from empirical research" (p. 600). These statements emphasized the significance of increasing the implementation of

EBPs based on research by educators in order to increase positive outcomes for students with exceptionalities.

When considering the needs of individuals with ASD specifically, Reichow et al. (2008) indicated, “Although research in autism has grown more sophisticated, the gap between research knowledge and applicability of research in real world settings has grown” (p. 1311). Cook and Odom (2013) supported this statement by Reichow and colleagues by pointing out limited evidence that the gap between research and practice for individuals with exceptionalities had been meaningfully reduced. This research-to-practice gap has significant consequences that could affect the educational, social, and behavioral outcomes of learners with exceptionalities, including students with ASD, throughout their education and into adulthood (Carnine, 1997; Dingfelder & Mandell, 2011).

In an effort to improve outcomes for students with exceptionalities, EBPs must be identified and implemented in the school setting consistently and with fidelity. For this to occur, individuals working with students with exceptionalities must be able to experience the implications of using EBPs for the improvement of student outcomes (Dingfelder & Mandell, 2011) as well as accessing and understanding the research regarding EBPs for individuals with exceptionalities (Carnine, 1997; Cook & Odom, 2013; Reichow et al., 2008). Research suggested educators who worked with students with exceptionalities, including those who worked with students with ASD, did not implement EBPs due to a lack of knowledge regarding effective interventions (Hendricks, 2011). Additionally, researchers reported that individuals who worked with students with ASD used interventions based on perceptions instead of empirical research

(Dingfelder & Mandell, 2011). There were a few different theories as to why individuals who worked with students with exceptionalities, particularly individuals who worked with students with severe needs, did not implement EBPs and used unproven practices instead. First, Simpson et al. (2011) indicated the lack of practitioner friendly resources made it difficult for educators to access or understand the research for EBPs known to improve outcomes for individuals with ASD. Additionally, despite access to evidence-based indicators (e.g., CEC, NAC, NPDC, and What Works Clearinghouse), educators often lacked access to databases to search literature, knowledge of the databases' indexing systems, and time to do an extensive literature search and analyze outcomes (West, McCollow, Umbarger, Kidwell, & Cote, 2013) to identify appropriate EBPs for students with ASD. Although these researchers focused on reasons educators working with students with ASD often used unproven practices, it was reasonable to conclude that educators working with students with severe needs requiring intensive interventions experienced the same barriers to accessing EBPs that would meet the individual needs of their students. Nevertheless, research that highlighted a gap in providing EBPs versus unproven practices existed mostly within the area of ASD, which was not surprising given the increase in prevalence of students with ASD over the last 30 years. The following section identifies concerns regarding special education teacher preparation and the use (or lack thereof) of EBPs for students with exceptionalities.

Special Education Teacher Preparation and Evidence-Based Practices for Individuals with Exceptionalities

As indicated previously, little evidence suggests the research-to-practice gap for EBPs has been reduced (Cook & Odom, 2013). Unproven practices were being used to

improve student outcomes in special education more often compared to research-based interventions (Cook & Cook, 2011). Thus, "Teacher trainers must have an empirical basis and teach students to distinguish between proven and unproven methods and strategies" (Yell et al., 2005, p. 138). Although some practices and interventions needed to be modified to address individual learner needs, it was still imperative to utilize practices proven effective in improving student outcomes (R. Simpson, personal communication, November 11, 2013).

It is critical for teachers to have a comprehensive understanding of EBPs for individuals with exceptionalities and the ability to implement EBPs based on student needs and desired outcomes. Hendricks (2011) conducted a survey to assess the knowledge and practices of teachers working with students with ASD. In this study, the author sent the Needs Assessment of Special Educators Who Serve Students with Autism (a self-report survey) to special education teachers employed in a public school district in Virginia who had taught for at least five years prior to the study. Participants were employed by the Virginia Department of Education Region I, which was comprised of 15 geographically diverse regions near a metro area (Hendricks, 2011, p. 41). Four hundred and ninety-eight surveys were completed--a response rate of 21.3%. Findings indicated that despite regularly working with students with ASD in their classrooms, the respondents did not specialize in working with students with ASD and were not knowledgeable regarding specific, effective interventions for this population of learners. It was also worth noting that respondents indicated low implementation of EBPs. The study supported concerns that educators were often not well prepared to effectively

implement EBPs for students with exceptionalities, particularly students with ASD (Hall, 2015; Morrier, Hess, & Heflin, 2011).

Additionally, Burns and Ysseldyke (2009) conducted a survey with 174 special education teachers and 333 school psychologists regarding participants' use of EBPs for students with exceptionalities. Participants were randomly selected from the teacher membership of the Council for Exceptional Children and the school practitioner membership of the National Association of School Psychologists. The authors reported a response rate of 34.8% for special education teachers and 33.3% for school psychologists. Participants were reported to work in a variety of settings (e.g., resource rooms and self-contained classrooms) with the majority of participants (69.5%) reporting they worked with students with specific learning disabilities. However, Burns and Ysseldyke reported participants were allowed to select up to four categories; as a result, participants reported working with a variety of students with severe needs as well. For example, 47% of participants reported working with students with EBD, 47% of participants reported working with students with other health impairments, 37.9% of participants reported working with students with ASD, and 36.8% reported working with students with ID. They found that although participants reported frequently using EBPs (e.g., direct instruction), participants also reported frequently using less effective practices (e.g., modality instruction). Despite participants reporting they used EBPs, there was still an evident research-to-practice gap when it came to consistently implementing EBPs versus unproven practices for students with exceptionalities.

Overall, the increasing prevalence of students with severe needs being educated in various school settings, the persistent gap between research and practice for instructing

students with severe needs as well as the abundance of evidence indicating special education teachers were not adequately prepared to implement EBPs for students with severe needs was especially alarming given increasing number of paraprofessionals employed by school districts in the United States. The next section includes information regarding the changing role of paraprofessionals in providing EBPs to support students with exceptionalities including students with severe needs requiring intensive interventions and supports.

Paraprofessionals in Education: Definition, Roles, and Responsibilities

Current data suggested over 400,000 paraprofessionals throughout the United States work with and support students with exceptionalities within public school settings (DAC, 2010). Further, the number of paraprofessionals working with and supporting students in public school settings is expected to increase over the next several years. In fact, over the last 25 years, employment and use of paraprofessionals has grown by 131% (DAC, 2010). Additionally, the roles and responsibilities of paraprofessionals are changing as students with exceptionalities are being educated more from supporting the special education teacher to directly supporting students transitioning to the general education environment (Suter & Giangreco, 2009). As their roles continue to change from being more supportive to being more instructional, paraprofessionals are becoming increasingly responsible for implementing EBPs for students with exceptionalities.

Over the years, there have been various names for the paraprofessional role including para, paraeducator, teacher's aide, education assistant, instructional assistant, and classroom assistant. In fact, the Every Student Succeeds Act (ESSA; 2016) includes specific language for the terms that might be interchanged with paraprofessional

including paraeducators, education assistants, and instructional assistants. Meanwhile, both policy and research have provided definitions for paraprofessionals in educational settings. For example, NCLB (2002) defined a paraprofessional as "an individual who is employed in a preschool, elementary school, or a secondary school under the supervision of a certified licensed teacher, including individuals employed in language instruction education programs, special education, or migrant education" (Title I, §1119 [g] [2]). The IDEA (2004) described a paraprofessional as someone who "provides instructional support" under the supervision of a highly qualified teacher (20 U.S.C. 6319 [g] [3] [A]). Doyle (2002) defined paraprofessionals as individuals "who work under the supervision of a certified teacher or other professional staff member to complete a variety of instructional and non-instructional tasks" (p. 8). Although these definitions are not exactly the same, each one specified that paraprofessionals could provide support and supplement instruction for students, including students with exceptionalities, in various school settings (e.g., general education, special education, etc.). These definitions were also very clear in that paraprofessionals were not to provide primary instruction to any students, including students with exceptionalities, and were required to work under the supervision of a licensed educator.

As previously indicated, current literature indicated the roles and responsibilities of the paraprofessional have changed drastically over the last 20 years (Hughes & Valle-Riestra, 2008; Lews & Lupert, 2008; Quilty, 2007). Paraprofessionals are increasingly taking on more instructional tasks, behavior programs, social interventions, and data collection responsibilities when working with students with exceptionalities (Giangreco, 2010; Giangreco, Suter, & Doyle, 2010; Hughes & Valle-Riestra, 2008). In a follow-up

to a national survey study, Liston, Nevin, and Malian (2009) conducted a semi-structured open-ended interview with 27 paraprofessionals in California to corroborate themes identified regarding paraprofessional roles in general education classrooms. Paraprofessionals reported that in addition to working with a wide range of students with exceptionalities (e.g., physical disabilities, behavior disorders, ASD, traumatic brain injury, learning disabilities), their roles and responsibilities varied as well. Under the theme of paraprofessional responsibilities, the researchers found five sub-themes that included working with students one-on-one, providing instruction (e.g., small group, scaffolding, pre-teaching and re-teaching), behavior supports (e.g., teaching social skills), data collection, and preparation (e.g., preparing adapted materials; Liston et al., 2009). The research conducted by Liston and colleagues supported other related studies that reported paraprofessionals were increasingly becoming responsible for more instructional tasks including providing instruction, managing small groups, and modifying materials for students with disabilities in general education settings (e.g., Carroll, 2001; Carter, O'Rourke, Sisco, & Pelsue, 2009; Fisher & Pleasants, 2012; Ratcliff, Jones, Vaden, Sheen, & Hunt, 2011). The following section addresses the lack of required paraprofessional training and support.

Paraprofessional Training and Preparation (or Lack Thereof)

Students with exceptionalities often receive support from paraprofessionals in the school setting to assist with academic, behavioral, and social concerns (Broer, Doyle, & Giangreco, 2005). The IDEA (2004) regulations specified that all individuals who provided special education services, including paraprofessionals, needed to receive appropriate preparation, training, and supervision (20 U.S.C. 1412 [a] [14] [B] [iii]). Yet,

paraprofessionals tended to be the least knowledgeable regarding EBPs for students with exceptionalities (Breton, 2010). In addition to being the least knowledgeable, researchers also highlighted special education paraprofessionals were rarely properly trained to implement the activities they were being asked to perform (Brock & Carter, 2015; Brown, Gatmaitan, & Harjusola-Webb, 2014; Hughes & Valle-Riestra, 2008; Lews & Lupert, 2008). Hence, the changing roles and responsibilities of paraprofessionals who work with students with exceptionalities was concerning for several reasons. First, paraprofessionals were rarely trained to perform the duties they were assigned (Brown et al., 2014; Hughes & Valle-Riestra, 2008; Lews & Lupert, 2008). Second, paraprofessionals often lacked knowledge of students' individualized needs when providing various services to students with exceptionalities in the school setting (Brown et al., 2014; Hughes & Valle-Riestra, 2008). Third, the lack of teacher training to supervise and provide feedback to paraprofessionals was extremely problematic given the increasing roles and responsibilities paraprofessionals were assuming when supporting students with exceptionalities (Breton, 2010). Finally, and simply put, the paraprofessional role has grown tremendously over the years despite an overwhelming documentation of a lack of preparation and required training and/or knowledge. This issue was concerning given the increasing expectation when paraprofessionals implemented EBPs for students with exceptionalities in the school setting. It is important to note, however, "when appropriately trained and supervised [paraprofessionals] can assist with special education and related services" (Lane, Carter, & Sisco, 2012, p. 239) including the effective implementation of EBPs. As a result, it is imperative that efforts are focused on ensuring paraprofessionals received training and preparation that address

the changing role of paraprofessionals in implementing EBPs for students with exceptionalities including students with severe needs requiring intensive interventions and supports in various school settings. Although some states do offer training programs (e.g., the PAR^{2}A Center through the University of Colorado Denver and Northwestern Illinois Association Paraprofessional Training Program), participation in these programs is not required by states or districts. Additionally, special education paraprofessionals who have participated in a formal training program such as these reported feeling ill-prepared and indicated receiving inadequate supervision (Breton, 2010). In response to this challenge, Breton (2010) recommended (a) a formal system to assess special education paraprofessionals' competencies, (b) professional development opportunities, and (c) preparing special education teachers to supervise paraprofessionals. Consequently, implications for policy and practice regarding paraprofessional training is presented next.

Policy and Practice for Training Paraprofessionals

Despite federal laws, no policy is in place that ensures paraprofessionals are properly prepared and trained to take on these new roles and responsibilities including implementing EBPs found to improve outcomes for students with exceptionalities. For example, ESSA (2016) indicated that for schools receiving Title I funds, the state education agency (SEA) is responsible for identifying paraprofessional standards (§1111 [g] [2] [m]) and overseeing certification requirements (§1111 [g] [2] [j]). Additionally, NCLB (2002) indicated paraprofessionals were considered "highly qualified" by having either (a) two years of post-secondary education, (b) an associate's degree, or (c) completed a state or local academic assessment (§1119 [c] [d]). However, the term

highly qualified was subsequently eliminated from ESSA and it is now up to the SEA to determine the standards and requirements for paraprofessionals. Until ESSA, some SEAs across the United States had developed paraprofessional standards (e.g., Colorado and Utah) as well as certification guidelines (e.g., Colorado and Illinois); however, these guidelines were often vague and did not extend beyond guidelines provided in IDEA (2004). While some SEAs (e.g., Colorado and Pennsylvania) have decided to keep the criteria for highly qualified established under NCLB, it is no longer a requirement.

With respect to students with exceptionalities, IDEA (2004) indicated paraprofessionals must complete state-approved certification or licensing (20 U.S.C. 1412 [a] [14]). Again, it is up to each state how to comply with those guidelines. Meanwhile, IDEA also required that paraprofessionals were appropriately trained and supervised (20 U.S.C. 1412 [a] [14]). Nevertheless, there were no specific guidelines regarding what constituted the most appropriate training and supervision for paraprofessionals who worked with students with exceptionalities (e.g., coursework, induction, mentoring). Although the law stated that paraprofessionals should be prepared and trained, there was a dearth of evidence regarding how to train, prepare, and support paraprofessionals to implement EBPs for students with disabilities, particularly students with severe needs requiring intensive interventions and supports. In addition to this challenge, most preservice programs lacked instruction for preservice teachers to manage, train, and supervise paraprofessionals in implementing EBPs for students with exceptionalities in various school settings (Hall et al., 2010). As a result, vague legal guidelines combined with a lack of educator guidance to address this dilemma pointed to a critical need that included preparing preservice teachers to manage, train, and supervise

paraprofessionals in the implementation of EBPs for students with exceptionalities including students with severe needs.

Research regarding the perceptions of special education teachers and paraprofessionals expectations focused on the necessary responsibilities, education, training, collaboration, and supervision opportunities for the paraprofessional role in schools (Breton, 2010; Hughes & Valle-Riestra, 2008). In a survey study conducted by Breton (2010), 46.3% of the 258 paraprofessional respondents rated their preservice or in-service training and supervision as very poor to fair. Paraprofessional participants also stated they had limited direct contact with special education teachers and did not receive performance feedback or evaluations. Consequently, the paraprofessionals in the study indicated they wanted more training and supervision specific to implementing EBPs with students who had emotional, behavior, and social challenges. Hughes and Valle-Riestra (2008) also found paraprofessionals who felt prepared for the duties they were required to perform and had regular professional development reported higher job satisfaction and viewed themselves as a critical member of the students' educational teams. Simply put, the greater exposure to training and support, the more these paraprofessionals felt valued within the collaborative process and prepared to support with students with exceptionalities including students with severe needs requiring intensive interventions in various school settings. This finding has important implications for current practice with regard to training and professional development for paraprofessionals working with students with exceptionalities in school settings. As a result, the remainder of this chapter focuses on the presentation of strategies that could be used to increase the knowledge and skills of paraprofessionals providing support students with

exceptionalities, including students with severe needs requiring intensive interventions and supports, through professional development, coaching, feedback, and supervision provided by the special education teacher. These strategies were based on the literature available to date.

Evidence-Based Practices: Paraprofessional Knowledge and Implementation

Researchers suggested paraprofessionals could be trained to effectively implement EBPs when working with students with exceptionalities in various school settings (Bessette & Willis, 2007; Brock & Carter, 2015; Hall et al., 2010; Quilty, 2007). For example, Quilty (2007) conducted a multiple baseline design across subject study to assess the impact of training paraprofessionals to write and implement *Social Stories*™ for three students with ASD. In addition to showing that paraprofessionals were able to be taught how to develop and implement *Social Stories*, the author reported a positive impact on student behaviors in all school settings (e.g., general education classroom, autism resource room, lunch, recess, physical education, etc.). Additionally, Bessette and Willis (2007) delivered a training package that consisted of training paraprofessionals to conduct a functional analysis and implement effective function-based interventions with two elementary students with severe problem behaviors who had been removed from the general education classroom due to their behaviors. The authors used an alternating treatments design to assess paraprofessional implementation of a functional analysis and an antecedent-behavior-consequence design to collect data on student behaviors. Findings from this study demonstrated that paraprofessionals were taught how to effectively conduct a functional analysis and implement function-based interventions that decreased problem behavior for students with severe problem behaviors.

Nevertheless, training alone is not effective in increasing paraprofessional knowledge and skills when working with students with exceptionalities in the school setting (Brock & Carter, 2015). Research indicated implementation fidelity and generalization of EBPs increased when paraprofessionals were provided training that incorporated instruction, coaching or guided practice, opportunities for independent practice, performance feedback, and supervision (Bessette & Willis, 2007; Brock & Carter, 2015, 2016; Hall et al., 2010; Quilty, 2007; Walker & Snell, 2017). For example, Brock and Carter (2015) found paraprofessionals could be taught to implement constant time delay procedures to 25 paraprofessionals who provided services to students with differing exceptionalities in various settings with high fidelity when provided with instruction, coaching, feedback, and supervision. In addition, Hall et al. (2010) reported paraprofessionals could be taught to implement two EBPs (e.g., discrete trial training and PRT) effectively for students with ASD, or at risk of ASD, using training, modeling, role-play, and rehearsal. However, the authors indicated generalization of the skills being taught did not generalize until performance feedback was provided. This emphasized the need to go beyond the "train and hope" style of professional development to teach paraprofessionals working with students with exceptionalities to implement EBPs (Mizell, 2001). In the next five subsections, information is presented on best practices based on the limited research literature for teachers training paraprofessionals to implement EBPs: professional development, coaching, performance feedback, supervision, and evaluation.

Professional Development

McKenzie (2011) reported the ongoing professional development for special education paraprofessionals in an urban school district in Colorado led to increased collaboration between the special education teachers and the paraprofessionals, increased research to practice, and increased retention rates for paraprofessionals working with students with disabilities in the district. In addition to providing ongoing training, special education teachers and paraprofessionals met on a weekly basis to go over lesson plans, discuss progress monitoring data, and to collaborate on concerns regarding, parents, students, and teachers. The author also reported the paraprofessionals who participated in the ongoing training and collaboration exhibited increased professionalism and pride in their work. Interestingly, McKenzie indicated some of the paraprofessionals who participated in the training, decided to enroll in preservice teacher preparation programs to pursue a degree in special education.

Several studies also suggested paraprofessionals could be trained to effectively implement EBPs when working with students with disabilities in general education settings (Bessette & Willis, 2007; Brock & Carter, 2015; Hall et al., 2010; Quilty, 2007). However, evidence indicated training alone was not effective in increasing paraprofessional knowledge and skills when working with students with disabilities (Brock & Carter, 2015). It is important to take this into consideration when developing professional development for paraprofessionals working with students with disabilities in various school settings including general education.

Research indicated implementation fidelity and generalization of EBP increased when paraprofessionals were provided with training that incorporated instruction, coaching or guided practice, opportunities for independent practice, performance feedback, and supervision (Bessette & Willis, 2007; Brock & Carter, 2015, 2016; Hall et al., 2010; Quilty, 2007). For example, Brock and Carter (2015) found paraprofessionals could be taught to implement constant time delay procedures with high fidelity when provided with instruction, coaching, feedback, and supervision. In addition, Hall et al. (2010) reported paraprofessionals could be taught to implement evidence-based strategies (e.g., discrete trial training and PRT) effectively using training, modeling, role-play, and rehearsal. However, the authors indicated generalization of the skills being taught did not generalize until performance feedback was provided. Therefore, the approach to preparing preservice special educators to work with paraprofessionals focused on a comprehensive training method for paraprofessionals working with students with disabilities in general education settings.

Professional development for paraprofessionals tended to focus on learning district policies, reporting protocols, first aid, and crisis management techniques (Hughes & Valle-Riestra, 2008). As a result, the training paraprofessionals received from their district rarely prepared them to work with students with exceptionalities. Additionally, on the job training was often provided by the special education teacher (Bradley et al., 2008). As indicated previously, the concern was special education teachers reported they did not feel their preservice teacher program prepared them to train and supervise paraprofessionals (Biggs et al., 2018; Carlson et al., 2002; Drecktrah, 2000; Wallace et

al., 2001) despite it being a responsibility special educators were frequently responsible to complete (Carlson et al., 2002; Douglas et al., 2016; Drecktrah, 2000). Due to the changing roles and responsibilities of paraprofessionals, it was imperative professional development and training focus on improving the knowledge and skills necessary to work with students with disabilities, including students with severe needs, in the school setting. In addition to basic knowledge and skills, paraprofessionals need instruction on EBPs that would assist with effectively implementing interventions designed to improve the outcomes of students with exceptionalities, particularly students with severe needs requiring intensive interventions and supports.

Coaching

Training is more effective when coaching is provided (Bessette & Willis, 2007; Brock & Carter, 2015, 2016; Quilty, 2007; Stockall, 2014). In fact, Stockall (2014) proposed a direct instruction training model that promoted side-by-side coaching through (a) goal development, (b) instruction, (c) demonstration, (d) guided practice, (e) independent practice, and (f) performance feedback. During goal development, the teacher and the paraprofessional work together to identify specific goals regarding the paraprofessional's roles and responsibilities. Several authors suggested one of the key features of providing supervision was identifying paraprofessional roles and responsibilities (Capizzi & Da Fonte, 2012; Maggin, Wehby, Moore-Partin, Robertson, & Oliver, 2009). Paraprofessional goals might differ based on the paraprofessional's background knowledge, the students' individualized needs, and the paraprofessional's specific position within the school and/or classroom. Once the skills for paraprofessional to work on were identified and the corresponding goal to establish mastery of the skill

had been established, the teacher would provide the necessary instruction and demonstrate the skill for the paraprofessional. Some of the skills or EBPs taught through demonstration and practice might include but were not limited to reinforcement, extinction, function-based interventions, task analysis, and data collection procedures. During guided practice, the teacher and the paraprofessional would work together to demonstrate and practice the skill or EBP being taught. The teacher's role would be to provide guidance and the paraprofessional would have the opportunity to demonstrate the skill or EBP and ask any questions he or she might have. After the paraprofessional had the opportunity to perform the skill or EBP independently, the teacher would provide feedback to the paraprofessional. Since teachers might not have the time or ability to directly observe the paraprofessional demonstrate the skill or EBP, it was also suggested that the paraprofessional's performance be recorded on a video recorder or smartphone so the teacher could provide feedback to the paraprofessional while viewing the recording. Regardless of whether it was in the moment or done while watching a video, it was important to provide feedback and reinforcement immediately after the paraprofessional correctly implemented an EBP. In addition, it was important to provide feedback that focused on something the paraprofessional did well and identified skills that still needed to be addressed.

One of the key elements of this direct instruction training model was providing effective communication through collaboration between the special education teacher and the paraprofessional throughout the entire process (Stockall, 2014). According to Stockall (2014), effective communication included using strategies such as listening, open-ended questions, closed questions, clarifying, paraphrasing, acknowledging, and providing

reflective feedback. These techniques allow the teacher and the paraprofessional to build a rapport that focuses on "sharing a common understanding and commitment to working together" (Stockall, 2014, p. 198). Moreover, the teacher and the paraprofessional could work together to ensure the paraprofessional implemented interventions effectively while simultaneously receiving feedback aimed to improve the paraprofessional's implementation of EBPs.

Performance Feedback

Many researchers stressed the importance of providing performance feedback to paraprofessionals when learning and implementing new interventions (Brock & Carter, 2015, 2016; Hall et al., 2010; Quilty, 2007; Stockall, 2014). For example, Brock and Carter (2015) conducted a study using a randomized, controlled experimental design to access the effects of a training package designed to teach 25 special education paraprofessionals to implement a consistent time delay procedure. The training package included an initial training session, a video model, and coaching and feedback provided onsite. The authors reported that one-on-one coaching and performance feedback was the most effective component of the training package because it involved observing paraprofessional performance on a targeted skill and provided additional support in areas requiring improvement. Additionally, Hall et al. (2010) conducted a single-case study using a multiple baseline design across settings to assess the implementation of EBPs for students with ASD by five paraprofessionals who received a training package that consisted of a workshop and feedback. The authors found that although paraprofessionals' implementation of EBPs (e.g., incidental teaching, PRT, and prompting procedures) increased after the workshop, paraprofessionals did not generalize

the EBPs they were learning into a different setting until feedback was provided in the new setting. As stated previously, training alone was not proven to improve knowledge and skills. Brown et al. (2014) provided steps for providing performance feedback to paraprofessionals that included (a) focusing on the feedback; (b) setting priorities, identifying outcomes, and developing a schedule for feedback; (c) establishing data collection procedures; and (d) establishing a feedback protocol. These steps promoted effective communication and collaboration to ensure the teacher and the paraprofessional were working together to make feedback meaningful through developing a purpose for the feedback.

Supervision

It is critical for paraprofessionals who are working with students with exceptionalities that adequate supervision be provided "on an ongoing basis to ensure fidelity of instruction" (Giangreco, Doyle, & Suter, 2012, p. 370). Essentially, it is important to ensure paraprofessionals are armed with the training and supervision required to implement interventions consistent with guidelines created and intended to increase student outcomes. Supervision could and ought to be incorporated into professional development opportunities for paraprofessionals. Developing goals, providing instruction and practice, conducting observations, and incorporating constructive feedback and opportunities for professional improvement could accomplish this task. Nevertheless, one concern remains--the lack of professional development available to paraprofessionals regarding specific knowledge and skills paraprofessionals needed to meet identified goals. Thus, a potentially simple solution to this dilemma might include training and preparing teachers with the skills necessary to provide such

professional development in vivo (e.g., during class instruction; Brock & Carter, 2016; Hall et al., 2010). Such practice could aim at addressing specific teacher, paraprofessional, teacher, and student needs unique to the particular classroom situation and student needs. Notably, under this caveat, many teachers would need to first be provided with instruction on how to supervise paraprofessionals effectively as preservice special educators are not typically given direct instruction on how to manage, train and supervise paraprofessionals in their teacher education programs (Hall et al., 2010; Hughes & Valle-Riestra, 2008).

Evaluation

Paraprofessionals who provide services to students with disabilities should be evaluated on a regular basis. Paraprofessionals are often evaluated by school administrators who do not have the opportunity to consistently observe the daily performance of paraprofessionals instead of being evaluated by the special education teachers that work directly with them. When special education teachers support paraprofessionals working with students with exceptionalities through ongoing training, coaching, feedback, and supervision; it is also important that they have the opportunity to assist with evaluating paraprofessionals' performance on the skills they have been taught. Having the special education teacher assist with evaluating paraprofessional performance also increases opportunities for paraprofessionals to receive consistent coaching, feedback, and recommendations for improvement. In the previously mentioned study, Hall et al. (2010) reported paraprofessionals who worked with students with exceptionalities maintained the skills they had been taught when the special education teachers were able to evaluate the paraprofessionals' performance. Evaluation is the

culminating experience in the process of professional development. Throughout the process of identifying areas of need, setting goals to address those needs, providing performance feedback, and allowing opportunities for improvement through ongoing supervision, it is imperative that evaluation takes place to ensure the training, coaching, feedback, and supervision provided to paraprofessionals working with students with exceptionalities result in the desired outcome(s). The following section reviews recent research on teacher-delivered support for paraprofessionals working with students with disabilities.

Teacher-Delivered Support for Paraprofessionals

One concern is the lack of professional development regarding specific knowledge and skills paraprofessionals need to meet identified goals. A potential solution to this dilemma includes permitting supervising special education teachers to provide professional development or training to paraprofessionals working with students with exceptionalities (Brock & Carter, 2016; Hall et al., 2010). This approach might ensure the focus of the training addresses paraprofessional, teacher, and student needs. However, many teachers require specific instruction on how to effectively work with paraprofessionals (Hall et al., 2010; Hughes & Valle-Riestra, 2008). There is a current dearth of information regarding teacher-delivered support (e.g., training, coaching, feedback, supervision, and evaluation) for paraprofessionals implementing EBPs for students with exceptionalities including students with severe needs requiring intensive interventions and supports. Brock and Carter (2016) conducted a single-case study to investigate whether a training package that included direct instruction, video modeling, and coaching with feedback would improve paraprofessional implementation fidelity

when implementing peer support arrangements for four middle school students with severe needs--one student with ASD and three students with ID with co-occurring conditions (e.g., ADD, speech impairment and hearing impairment)--in a general education setting. Brock and Carter reported teacher-delivered professional development on peer support in general education plus coaching and feedback not only increased implementation fidelity but also improved outcomes for three of the four students in the study. Despite such promising outcomes when considering the aforementioned research studies, it was very clear that investigation about special education paraprofessionals and student outcomes was limited. Further, as the researchers pointed out, we do not know if paraprofessional support for students with disabilities in inclusive settings was having the desired effect on students' academic, behavioral, and/or social needs (Hughes & Valle-Riestra, 2008; Lews & Lupert, 2008; Quilty, 2007; Ratcliff et al., 2011). Consequently, future research should focus on teaching special education preservice teachers to train and support paraprofessionals to implement EBPs. In addition, it would be worth investigating the impact EBPs implemented by paraprofessionals had on the outcomes for students with exceptionalities.

Preparing Preservice Special Education Teachers to Work with Paraprofessionals

Research regarding teacher-delivered support (e.g., training, coaching, feedback, supervision, and evaluation) for paraprofessionals implementing EBPs for students with exceptionalities, including students with severe needs requiring intensive interventions and supports, was sparse. Although special educators consistently reported that management, training, and supervision of paraprofessionals was part of their job responsibility **(**Carlson et al., 2002; Douglas et al., 2016; Drecktrah, 2000**)**, many special

educators did not feel their preservice teacher programs prepared them to manage, train, and supervise paraprofessionals (Biggs et al., 2018; Carlson et al., 2002; Drecktrah, 2000; Wallace et al., 2001**)**. Despite being the least knowledgeable and trained to support students with exceptionalities (Breton, 2010), some evidence demonstrated paraprofessionals could be trained to implement EBPs (Bessette & Willis, 2007; Brock & Carter, 2015; Hall et al., 2010; Quilty, 2007; Walker & Snell, 2017) by teachers (Brock & Carter, 2016). Due to the increasing prevalence of paraprofessionals working with students with exceptionalities, particularly students with severe needs requiring intensive interventions and supports, it is essential that special educators are prepared to manage, train, and supervise paraprofessionals (Wallace et al., 2001). The following section reviews adult learning theory as a theoretical framework for preparing preservice special educators with the knowledge and skills to manage, train, and supervise paraprofessionals.

Theoretical Framework: Principles of Adult Learning Theory

Adult learning theory focuses on what special educators need to know when working with paraprofessionals in the educational setting. To investigate how preservice teacher programs prepare special educators to manage, train, and supervise paraprofessionals providing supports to students with exceptionalities, it is important to understand the unique characteristics of adult learners. The need for understanding the characteristics of adult learners existed on two levels pertinent to this study. First, it was important that special educators learn how to manage, train, and supervise paraprofessionals. Second, it was important that paraprofessionals learn how to

implement EBPs when working with students with exceptionalities. Such learning should be self-directed, transformative, and included critical reflection.

When preparing preservice special education teachers to work with paraprofessionals, it is important to help them understand the needs of nontraditional, or adult, learners. According to Chen (2014), nontraditional students include individuals 25 years or older who tend to think of themselves as employees first and students second. Learning for nontraditional students is self-directed and optimized when experience is recognized and utilized (Chen, 2014). Merriam (2001) stressed the importance of life experiences. According to Merriam, this impacts how content is learned and how goals are redefined. Knowles, Holton, and Swanson (2005) described the adult learner as an active agent who values learning that is relevant and addresses solving a problem. Transformative learning leads to personal development. Transformations occur when by default, long-standing beliefs are challenged (Chen, 2014). Old assumptions and beliefs are challenged and examined to evaluate accuracy, relevance, and fit (Chen, 2014). This is based on critical reflection because it focuses on understanding; it includes challenging assumptions, exploring alternatives, and developing reflective skepticism (Chen, 2014).

Zepeda, Parylo, and Bengston (2013) completed a review of several theories of adult learning (e.g., Knowles' theory of adult learning, Knupp's phases of adult learners, and Isenberg's assumptions of andragogy). According to Zepeda et al., andragogy, a theory of adult learning, asserts an adult learner is self-directed, has an independent self-concept, and can direct his or her own learning; is motivated by internal rather than external reinforcement; is problem-centered and interested in immediate application of knowledge; is relevancy oriented and focused on the accumulation of life experiences as

a resource for learning; and is goal oriented with learning needs closely related to changing roles.

According to Lawler (2003), several factors need to be taken into consideration when developing and implementing training for adult learners: “the characteristics of the learner, the context in which the adult learning is occurring, and the process through which we deliver education and training each time we approach professional development” (p. 17). The author also stated it was important to focus on the characteristics of the teachers of adult learners in relation to their roles and responsibilities within the learning environment. Lawler provided six principles for developing training for adult learners that focused on practices that supported effective training and learner outcomes: creating a climate of respect, encouraging active participation, building on experience, employing collaborative inquiry, learning for action, and empowering the participants. Additionally, Lawler described four aspects of the adult learning model of faculty development, which includes pre-planning, planning, delivery, and follow-up. Although developed with university faculty in mind, this model could also be used to prepare preservice special educators to manage, train, and supervise paraprofessionals. For example, pre-planning focuses on identifying the purpose of the professional development. In addition to identifying the goals that would be addressed, planning focuses on identifying the content and delivery of the professional development. Delivery focuses on instruction as well as continued monitoring of a new skill and follow-up focuses on continued support of a new skill. When considering the work of Lawler (2003) and the development of training for adult learners, it was possible these skills could be modeled for and practiced by preservice special educators to prepare them

for managing, training, and supervising paraprofessionals working with students with exceptionalities to implement EBPs.

Conclusion

Despite the unwavering focus over the last several decades to identify and implement EBPs for students with exceptionalities, particularly students with severe needs requiring intensive interventions and supports, there remains limited research regarding provisions or components needed to effectively train paraprofessionals to implement EBPs. This is a major concern given the increasing prevalence of students with significant needs who are being educated in various school settings and the growing number of paraprofessionals supporting students with severe needs that require intensive interventions in various school settings including general education. This chapter provided and discussed evidence indicating paraprofessionals could be trained to implement EBPs for students with disabilities and suggested the need for future research to focus on having special education teachers train paraprofessionals to implement EBPs for students with disabilities including students with severe needs.

Given the potential impact on future practice, one promising starting point within this area of investigation included training preservice special education teachers with the knowledge and skills needed to support paraprofessional implementation of EBPs. As noted previously, many special education teachers need specialized instruction on managing, training, and supervising paraprofessionals (Hall et al., 2010; Hughes & Valle-Riestra, 2008), therefore it is possible this dilemma could be proactively addressed through preservice special education teacher programs. Future research ought to consider impactful ways to provide preservice special education teachers with the knowledge and

skills necessary to train, and ultimately, prepare paraprofessionals to implement EBPs for students with exceptionalities. As we continue to look to policy and practice for guidance, such research could be highly informative and address the gap discussed throughout this chapter so the majority of students with exceptionalities in today's schools, particularly students with severe needs requiring intensive interventions and supports, could be provided EBPs aimed at addressing individual student needs and improving student outcomes.

CHAPTER III

METHODOLOGY

> I believe that research focused on discovery, insight, and understanding from the perspectives of those being studied offers the greatest promise of making a difference in people's lives. (Merriam, 2009, p. 1)

Purpose of Study

Over the last 30 years, the field of special education has experienced a lot of change. In addition to the increased inclusion of students with exceptionalities, we have experienced an increase in the number of paraprofessionals who support students with severe needs requiring intensive interventions and supports. Several major concerns surrounding this issue have been identified: (a) a persistent research-to-practice gap between the identification and implementation of EBPs; (b) special educators feel unprepared to manage, train, and supervise paraprofessionals to implement EBPs; and (c) paraprofessionals lack sufficient knowledge and training to effectively support students with exceptionalities, particularly those with significant support needs.

The purpose of this study was to explore university special education teacher programs' preparation of preservice special education teachers to manage, train, and supervise paraprofessionals to implement EBPs when working with students with exceptionalities. The goal of this study was to obtain information on preservice program preparation from a sample of university faculty members who engage in scholarly activities (e.g., publications, presentations, program development) about the

paraprofessional role in special education. Specifically, this study investigated their perceptions, experiences, and recommended practices for preparing preservice special education teachers to work with paraprofessionals throughout their teacher preparation program. Qualitative interviews were conducted with university faculty members about their university preservice special education teacher preparation programs' practices regarding preparing preservice special education teachers to manage, train, and supervise paraprofessionals who support students with exceptionalities in a school setting. These individuals included university department chairs, program coordinators, and faculty members from undergraduate and/or graduate programs who could speak to their programs' practices with regard to preparing preservice special education teachers to manage, train, and supervise paraprofessionals.

Exploratory Research Questions

The research questions for this study focused on how special education teacher preparation programs were preparing preservice teachers to manage, train, and supervise paraprofessionals during their teacher preparation programs. The following research questions were developed to investigate how preservice special education teacher preparation programs were preparing preservice teachers to work with paraprofessionals in an educational setting. The questions focused on the knowledge and skills necessary to adequately manage, train, and supervise paraprofessionals who support students with exceptionalities in educational settings. In addition to knowledge and skills, these questions addressed the ways in which preservice special education teachers were provided those skills as well as personal experiences and beliefs with regard to preparing

preservice special education teachers to work with paraprofessionals who support students with exceptionalities.

Q1 How have preservice special education teacher preparation programs prepared preservice special education teachers to work with paraprofessionals who provide support to students with exceptionalities including students with severe needs requiring intensive interventions and support?

Q2 What did the leading experts in the field of paraprofessional research experience and believe regarding preparing preservice special education teachers to work with paraprofessionals who provide support to students with exceptionalities?

Research Question 1

This question addressed how special education teacher programs were preparing preservice teachers to work with paraprofessionals who support students with exceptionalities during their teacher preparation programs. With this question, I sought to understand university faculty members' knowledge of their program's curriculum with regard to preparing preservice special education teachers to manage, train, and supervise paraprofessionals who support students with exceptionalities in educational settings. I asked questions about the standards university faculty members with expertise in teacher-paraprofessional relationships and collaboration used to develop course syllabi and content. I also asked questions about the courses, resources, and assignments, university faculty members with expertise in teacher-paraprofessional relationships and collaboration used to address these standards. To understand how experts prepared preservice special education teachers to work with paraprofessionals who support students with exceptionalities, I inquired about the practices and strategies they used to teach and the EBPs they focused on when preparing preservice special education teachers to work with paraprofessionals in an educational setting. This included EBPs used to

teach effective communication and collaboration as well as EBPs to train paraprofessionals to implement when working with students with exceptionalities.

Specifically, I wanted to understand how university faculty members with expertise in teacher-paraprofessional relationships and collaboration addressed the knowledge and skills preservice special education needed to manage, train and supervise paraprofessionals who support students with exceptionalities, particularly those with severe needs requiring intensive interventions and supports. I wanted to see if participants had similar or different strategies when preparing preservice special education teachers to manage, train, and supervise paraprofessionals who support students with severe needs requiring more intensive interventions and support.

Research Question 2

With this question, I sought to explore the participants' personal experiences and beliefs regarding preparing preservice special education teachers to manage paraprofessionals in the future. Since the majority of participants had both research and teaching experience with regard to preparing preservice special education teacher to work with paraprofessionals, I wanted to know how they felt about this topic (e.g., Is it important?) and the challenges they experienced in trying to prepare preservice special educators for this role. I also wanted to find out if participants thought universities as a whole did a good job preparing preservice special education teacher for this role and in what ways universities could better prepare preservice special education teachers for this role.

Research Design

Qualitative methodology was used for this research study. In its simplest form, qualitative research involves making meaning of how people experience the world and how they interpret, or make meaning of, those experiences (Merriam, 2009). Although there are different types of qualitative approaches (e.g., case study, ethnography, grounded theory, and narrative inquiry) and differences in how qualitative researchers describe qualitative research (e.g., Creswell, 2013; Merriam, 2009), several essential characteristics in qualitative research need to be addressed: (a) focus on understanding the participants' perspectives and understanding; (b) use of the researcher as the "tool" or key instrument in all aspects of the research design and analysis (e.g., developing research questions, data collection, and interpreting results); (c) use of multiple forms of data (e.g., observations, interviews, and documents); and (d) acknowledgement that subjectivity on the part of the researcher can never be fully controlled, also known as "reflexivity" (Brantlinger, Jimenez, Klinger, Pugach, & Richardson, 2005; Creswell, 2013; Merriam, 2009).

Qualitative inquiry also includes several indicators and measures used to insure the research is credible and trustworthy. In other words, researchers must work to ensure validity and reliability when conducting qualitative research. Some methods in qualitative inquiry were found to increase the credibility and trustworthiness of the research: triangulation; member checking; audit trail; descriptions that are rich, thick, and detailed; and clarification of researcher bias or reflexivity (Brantlinger et al., 2005; Creswell, 2013; Merriam, 2009). All of the aforementioned methods were used to ensure

this research study was credible and trustworthy. Procedures detailing credibility and trustworthiness measures are addressed in greater detail in the method section below.

Phenomenology

Phenomenological studies allow us to investigate and describe the meaning of an individual's "lived experience" of a phenomenon (Creswell, 2013; Merriam, 2009). Consequently, phenomenological studies allow us to understand the experiences and perspectives of others using a qualitative approach (Crotty, 1998). Because phenomenology is the study of people's experiences, it is the researcher's responsibility to describe the "essence" of these experiences for the individuals being studied (Merriam, 2009). Put simply, the researcher is responsible for describing commonalities among participants in relation to the phenomenon being studied (Creswell, 2013). According to Merriam (2009), to get to the meaning of an experience, "phenomenological interviewing is often the primary method of data collection" (p. 25).

Using a phenomenological interviewing approach, the purpose of this study was to understand the experiences and perspectives of department chairs, coordinators, and/or university faculty regarding their preservice special education teacher preparation program's preparation of preservice teachers to manage, train, and supervise paraprofessionals.

Interview Methodology

Interviewing is "a series of steps in a procedure" (Creswell, 2013, p. 164). Interviewing methodology involves several steps throughout the qualitative research process including the development of the research questions, selecting and recruiting participants, determining the type of interview, (e.g., one-on-one, telephone interviews or

face-to-face focus group interviews), determining the recording procedures, and designing the interview protocol (Creswell, 2013). According to Merriam (2009), interviews are necessary when researchers cannot directly "observe behaviors, feelings, or how people interpret the world around them" (p. 88). Essentially, the researcher relies on the experiences and perspectives of the individuals describing the phenomenon being researched. The most common type of interview is completed one-on-one and involves one person eliciting information from the other person (Merriam, 2009). Although interviews in qualitative research typically contain more open-ended and less structured questions (Merriam, 2009), another type of interview in qualitative inquiry includes semi-structured interviews. Semi-structured interviews include some structured questions while the majority of the questions in the interview are less structured and open-ended. Specifically, one of the qualitative interview methods that aligned with Merriam (2009) included audio-recording semi-structured, open-ended interviews with participants and then transcribing the audio-recordings of the interview (Creswell, 2013). According to Merriam, "This format allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic" (p. 90). Hence, developing a semi-structured interview protocol with open-ended questions allows the researcher to collect detailed information from the participants regarding the research topic.

Theoretical Lens: Phenomenology

Crotty (1998) indicated that in order to support the methods used in qualitative research studies, it is crucial to identify the theoretical frameworks and epistemologies that drove the research questions. When considering methods for this qualitative study,

the theoretical perspective was interpretivism and the epistemological perspective was constructivism. Interpretivism focuses on understanding individuals and their environments. Constructivism is based on the idea that humans engage with objects in the world to make meaning (Crotty, 1998). In accordance with the theoretical and epistemological perspectives, the research questions for this study were developed to better understand the experiences and perspectives of department chairs, coordinators, and/or university faculty regarding their preservice special education teacher preparation program's preparation of preservice special education teachers to work with, train, and supervise paraprofessionals.

Researcher Stance

Qualitative inquiry requires that clarification of researcher bias or "reflexivity" be provided to establish any bias that might impact the interpretation of the results. As a result, I attempted and continued to be reflective regarding any pre-existing assumptions throughout the process of data analysis that could impact the results (Creswell, 2013). Part of being a qualitative researcher is the ability to be aware of the personal experiences, values, and beliefs that might affect the research inquiry and findings. As a result, it was important that I share my beliefs and values with regard to this study.

I am a licensed special education teacher with qualifications for working with students with various exceptionalities (e.g., learning disabilities, behavioral disorders, and cognitive disabilities) in grades kindergarten through 12. Since earning my master's degree in special education, I have worked as an elementary autism support teacher, a middle school learning support teacher, an elementary learning support teacher, and a middle school significant support needs teacher. I have also obtained my certification for

Board Certified Behavior Analyst (BCBA). My current interests include working with students with autism, working with students with emotional and behavioral disorders, improving family-school partnerships, and teacher preparation.

I chose the topic of preparing preservice special education teachers to manage, train, and supervise paraprofessionals working with students with exceptionalities using EBPs because as a special educator, I have been responsible for managing, training, and supervising paraprofessionals throughout my career. During my time as a special educator, I worked with paraprofessionals in a variety of school settings including general education. In my experience, there is not a lot of time in the school day to collaborate with all of the paraprofessionals in a building who are working with students with exceptionalities, especially when the population being served includes students with severe needs that require intensive interventions and supports to be successful. As an instructor for preservice special education teachers, I have also experienced preservice special education teachers' lack of preparedness to manage, train, and supervise paraprofessionals using EBPs, particularly paraprofessionals supporting students with severe needs. In my experience, students might get exposure to the topic during one or two lectures throughout their coursework but it is rarely woven throughout their course sequence, ensuring that preservice teachers get exposure to this in various classes (e.g., theory, understanding exceptionality, instructional design and planning, assessment, behavior, transition planning).

I believe preservice special education teacher preparation programs are responsible for providing preservice special education teachers with the skills and tools necessary to be successful. With regard to preparing preservice special education

teachers to manage, train, and supervise paraprofessionals using EBPs, I believe preservice special education programs should be responsible for providing the tools necessary for special educators to be successful in this skill. Additionally, I believe in-service professional development should focus on continuing to develop and refine those skills.

Participants

Because this area of research included a very small population of researchers, selection of participants focused on university faculty members who engaged in research and other scholarly activities (e.g., publications, presentations, and program development for preservice and in-service special education teachers), thus demonstrating their expertise with regard to preparing preservice teachers to work with paraprofessionals in an educational setting. Consequently, when selecting the participants, it was important to identify inclusionary and exclusionary criteria to ensure the individuals selected for the study were the most knowledgeable and could provide the most information on the topic (Merriam, 2009). The next section provides inclusionary and exclusionary information for participant recruitment for this study.

Inclusionary and Exclusionary Criteria

To determine the most appropriate individual(s) to participate in the study, participants were selected based on the following inclusionary criteria: (a) full-time faculty member at a university that has a special education teacher preparation program; (b) experience and/or extensive knowledge in preparing preservice special education teachers; and (c) extensive knowledge about the management, training, and supervision of paraprofessionals working with students with exceptionalities in one or more courses

they teach or oversee and/or demonstrate expertise in the area through scholarly activities (e.g., publications, presentations, and program development). Participants who did not meet the above criteria were excluded. Specifically, exclusionary criteria included (a) an adjunct or part-time faculty member; (b) full-time faculty member at a university that does not have a special education teacher preparation program; (c) lack of experience and/or knowledge in preparing preservice teachers; and (d) lack of publications and/or other scholarly activities that demonstrated how they prepared preservice special education teachers to manage, train, and supervise paraprofessionals working with students with exceptionalities.

Participant Recruitment

Participants for this study were selected using a non-probability sampling method called purposeful sampling. Merriam (2009) described purposeful sampling as "based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (p. 77). Participants included experts and researchers who worked at universities with preservice special education teacher preparation programs. Using the inclusionary criteria as a guide for recruitment, the first step in finding participants included attending the paraeducator special interest group at the Teacher Education Division of the CEC conference in 2018. During the conference, the paraeducator special interest group met; the purpose of this group is to support practices for paraprofessionals and to promote the effective management, training, and supervision of paraprofessionals. During this meeting, the top experts in the field of preparing preservice teachers to work with paraprofessionals were

identified. Additionally, several experts in the field who prepare preservice teachers to manage, train, and supervise paraprofessionals were identified.

The second step in identifying participants involved making a list of experts and researchers from the literature review in Chapter II who were involved in scholarly activities (e.g., publications, presentations, and program development) in the areas of paraprofessional role and responsibilities, paraprofessional training, supporting students with severe needs that require intensive interventions and support, behavior management (including principles, strategies, and application of ABA), and teacher preparation and in-service special education teacher training.

After making the list of experts, an internet search of the experts and researchers identified in steps 1 and 2 was conducted to review their curriculum vitae on their university's page. A review of each potential participant's curriculum vitae focused on areas of specialty or research, courses taught over the last three years, and scholarly activities including publications and presentations. Institutional Review Board (IRB) approval for human participants was received (see Appendix A). Upon obtaining IRB approval, university faculty members selected for this study were sent an email (see Appendix B) to explain the purpose of the study and to offer the faculty members the opportunity to participate. This email included a brief description of the purpose of the study and the consent to participate (see Appendix C). If a university faculty member responded to the first email and indicated they wanted to participate, a phone interview was scheduled at their earliest convenience. Those who responded and indicated they did not want to participate were thanked for their time and their information was removed from the participant list. Another email was sent after one week (seven days) to

university faculty members who had not responded to the initial email. If university faculty members did not respond to the second email, a third and final email was sent to potential participants. Faculty members who had not responded by the third attempt were removed from the participant list.

Once participants indicated an interest in participating in the study, a follow-up email was sent to participants to schedule a date and time for the interview. A total of nine potential participants were identified and contacted through their work email posted on their university website. Seven of these participants agreed to participate. To access more potential participants not identified through this process, a snowball sample--in which key participants easily identified early on in the process provided referrals for more participants that meet the inclusionary criteria--was also used to help identify more potential participants not already identified (Merriam, 2009). Eight potential participants were identified through other participants and three agreed to participate in the study. A total of 10 experts and researchers participated in this study.

There were various standards regarding sample size and qualitative research (Creswell, 2013). In addition to the size of the sample, Creswell (2013) pointed out the small sample size in qualitative research allows for the researcher to "collect extensive detail about…each individual studied" (p. 157). Crouch and McKenzie (2006) discussed using a small sample size (under 20) in qualitative research in order to focus on the content of the interviews as opposed to how many interviews were conducted. Themes were then pulled from the thick, rich descriptions of the phenomenon provided by the participants or experts. As stated previously, a limited amount of research was available on preparing preservice teachers to manage, train, and supervise paraprofessionals and

the participants selected for this study represented the leading experts in the field. When asking participants about colleagues who might be interested in participating in the study, the same names of experts in the field kept being repeated.

Participant Demographics

Upon meeting the inclusionary criteria (described above), participants were recruited and then interviewed to investigate how preservice special education teacher preparation programs were preparing preservice special education teachers to work effectively with paraprofessionals on the implementation of EBPs for students with severe needs that required intensive interventions and supports. Ten university faculty members from six states in three different regions of the United States (including the Northeast, Midwest, and West) participated in this study. Most participants reported their primary roles were teaching, research, or a combination of teaching, research, and service. Participants for this study were employed by universities that represented a variety of research and teaching levels. For example, three participants reported they were employed by a Research Level 1 institution, three participants indicated they were employed by a Research Level 2 institution, and four participants reported they were employed by a Research Level 3 institution. Research Level 1 institutions primarily focus on research while Research Level 3 institutions primarily focus on teaching. Research Level 2 institutions focus on a combination of research and teaching. Five participants reported their preservice teacher education programs, both general education and special education as well as undergraduate and graduate, had less than 500 students. Five participants indicated their preservice teacher education programs, both general education and special education as well as undergraduate and graduate, had more than

500 students. Participants reported having 2 to 31 years of experience in their current position. Participants indicated they taught a variety of courses in the last three years including introduction to special education, current issues and trends, introduction to classroom management, collaboration, children with disabilities and their families, applied behavior analysis, students with severe and multiple disabilities, autism, early childhood, special education assessment, student teaching, and career development and transition. In an effort to protect participants' anonymity in compliance with the IRB, a participant table was not provided given the focus on participants who worked at universities with preservice special education teacher preparation programs and conducted research regarding paraprofessionals.

Data Collection Procedures

Interviews were conducted over the phone and were audio-recorded for the purposes of transcription. All audio-recordings, email exchanges, and documentation (e.g., transcripts) related to this study were kept on a on a secure, password-locked device. Interviews took anywhere from 27 to 97 minutes, depending on the individual responses of the participants. Participants were also provided with a "no signature consent form" (see Appendix C) via email that was reviewed at beginning of each interview to ensure all questions and concerns regarding participation in the study were addressed. All interviews were transcribed verbatim through the use of a digital transcription service. A follow-up interview was conducted with 20% of the participants to confirm themes developed from the first interview. Participants were asked if they agreed or disagreed with the initial findings and to provide any additional information they would like to the identified themes.

According to Brantlinger et al. (2005), the researcher is "the instrument" in qualitative research as the researcher is responsible for developing the research questions and identifying the appropriate research designs and procedures to address the research questions. An interview protocol (see Appendix D) was developed using my professional experience, relevant information from the literature review, and expert feedback from my dissertation committee. Questions focused on how the participants' preservice special education teacher preparation programs (undergraduate, graduate, or both) prepared preservice teachers to manage, train, and supervise paraprofessionals. The interview protocol also included questions regarding participants' own personal experiences and beliefs regarding preparing preservice special education teachers to work with, train, and supervise paraprofessionals in the future. An interview protocol with semi-structured, open-ended questions was used to encourage participants to share their thoughts and experiences in preparing preservice special education teachers to work with, train, and supervise paraprofessionals using EBPs. After developing the protocol, a member of the doctoral committee with experience with preparing preservice teachers to work with paraprofessionals was asked to review the protocol to ensure the interview questions accurately addressed the research questions.

Patton (2002) suggested using a variety of question types including (a) background/demographic questions, (b) knowledge questions, (c) experience and behavior questions, (d) opinion and value questions, (e) feelings questions, and (f) sensory questions. The semi-structured interview protocol focused on four areas: (a) participant demographics; (b) preparing preservice special education teachers to manage, train, and supervise paraprofessionals; (c) addressing the knowledge and skills special

education teachers needed to work with paraprofessionals who supported students who required intensive interventions and supports; and (d) the experiences and beliefs of university faculty members who had expertise in teacher-paraprofessional relationships and collaboration regarding preparing preservice special education teachers to work with paraprofessionals in the future.

The questions in the participants demographic portion of the interview protocol identified the participant's role within higher education and the classification of his/her university, size of his/her university's teacher preparation program, years in current position, area of focus or specialty, and types of courses taught over the last three years. After completing the structured demographic questions, participants were asked to answer questions regarding the following concepts using an open-ended format: (a) participants' knowledge of standards used to develop course syllabi and content, courses, assignments, and discussions in their program regarding preparing preservice special education teachers to work with paraprofessionals who supported students with exceptionalities in educational settings; (b) knowledge and skills including practices and strategies to teach those skills preservice special education needed to manage, train, and support paraprofessionals who supported students with exceptionalities in educational settings; and (c) beliefs and experiences with regard to preparing preservice special education teachers to work with paraprofessionals in an educational setting. All questions and sub-questions assisted in collecting data that allowed me to describe the experiences and perspectives of the department chairs, coordinators, and/or university faculty members regarding their preservice special education teacher preparation program's preparation of preservice teachers to manage, train, and supervise

paraprofessionals in great detail. Probes and follow-up questions were used to seek more information and to clarify information during the interview (Merriam, 2009).

Data Analysis

Phenomenological analysis "attends to ferreting out the essence or basic structure of a phenomenon" (Merriam, 2009, p. 199). Therefore, data analysis will occur throughout the data collection process and after the data collection is finished (Creswell, 2013; Merriam, 2009).

Interview Analysis

Interviews were analyzed using several steps. Merriam (2009) described the analysis of qualitative data like having a conversation with the data. First, the audio-recorded interviews were transcribed verbatim. All transcripts were kept in a secure, password protected file on a password protected device. Next, transcripts were coded using a three-step process described by Corbin and Strauss (2008) including open, axial, and selective coding. Transcriptions were coded using qualitative software for open and axial coding (Merriam, 2009). According to Merriam, open coding reduces the risk of preconceptions regarding the codes identified and axial coding indicates the codes are developed through interpretation of the data. NVivo software was used to develop categories using open coding. Open coding requires the researcher to make notations of information provided by the participants to begin classifying the data. During the process of open coding, each transcript was read line-by-line and participants' words and phrases were used to develop "open codes" that were organized by the code, definition, and an example of each code from the transcripts. Once all of the transcripts were reviewed and the data coded, the process of axial coding was used to review the data and identify

emergent themes. During the process of axial coding, open codes were grouped into larger, overarching categories that had similar themes. For example, two different open codes (e.g., lack of experience) that fell under a larger descriptive theme (e.g., "They don't know what they don't know") were listed as subthemes. Categories during the process of axial coding were named using the researcher, the participants, and the research literature (Merriam, 2009). Main themes were identified by collapsing the larger descriptive themes into major themes through a process called selective coding. During the process of selective coding, I examined the larger descriptive themes to identify the most prominent themes identified in the interviews (Corbin & Strauss, 2008). In addition, specific quotes from participants that were identified during the open coding process were provided to support the main themes identified through the analysis of the interview data.

Reliability

To maintain reliability, a second independent coder was included in the data analysis procedures (Patton, 2002). This second coder was an experienced qualitative researcher in the education department who was familiar with qualitative research methodology and special education practices. The second coder coded 20% of the interview data. The code list was available prior to coding the data. After completion of the reliability coding, each code was discussed between the two raters. Any disagreements were discussed between the two raters until mutual agreement about the code was established. If there were any disputes over those codes, a third independent coder was asked to participate in the process.

Credibility Measures in Qualitative Research

As indicated previously, credibility measures are often how qualitative researchers incorporate validity and reliability measures into qualitative research. Trustworthiness in qualitative inquiry is dependent upon the researcher's ability to "carry out the study in as ethical manner as possible" (Merriam, 2009, p. 234). To address the credibility and trustworthiness of this study, the following procedures were used to establish credibility and assist with reducing bias. Additionally, I used an audit trail or research journal throughout the research process. I also provided rich, thick descriptions of the settings, participants, and findings, which would allow readers to determine how the research related to them and how the information provided could be transferred in order to meet their individual needs (Creswell, 2013).

Triangulation

Triangulation is a credibility measure that includes the use of multiple sources of data (e.g., observations, interviews, and documents); multiple investigators (e.g., several researchers, evaluators, or peer debriefers); and multiple perspectives to interpret a single set of data (e.g., theory triangulation; Brantlinger et al., 2005). Triangulating the data coded from the interviews also assisted in identifying themes (categories) regarding participants' perceptions of their experiences preparing preservice special education teachers to work with paraprofessionals in an educational setting. After reading and coding the transcripts, themes were compared and reported.

Member Check of Synthesized Analyzed Data

Brantlinger et al. (2005), identified member checks as another way to ensure the credibility of a qualitative study by "taking analyses and interpretations of data to

participants (prior to publication) for validation of (or support for) researchers' conclusions" (p. 201). Member checking allows for the participants to review the data after it has been analyzed. Member checking that consists of analyzed data from all of the participants is appropriate when the researcher is seeking to make sure the interpretation of the data is representative of participants' experiences (Birt, Scott, Campbell, & Walter, 2016). Since the purpose of the study was to understand participants' experiences preparing preservice special education teachers to work with paraprofessionals, I provided participants with the opportunity to review the main themes after all of the interviews had been coded, themes had been identified, and data had been analyzed. I developed a member check survey using Qualtrics software to provide the participants with the main themes (including relevant participant quotes), the opportunity to agree or disagree with the themes, and provided written feedback. All 10 participants were sent an email (see Appendix E) with a link to a survey and asked participants to agree, disagree, and to add feedback on the identified themes. Fifty percent of the participants responded to the member check survey. None of the participants disagreed with the themes identified. One participant added additional feedback to one of the themes. This feedback was added to the results to ensure the interpretation and discussion of the main themes accurately represented participants' thoughts and feelings regarding the beliefs and experiences of the participants.

Peer Feedback: The Researcher's Doctoral Committee

Reliability was addressed by obtaining feedback from my doctoral committee. The committee was made up of four university faculty members at a medium-sized state university in northern Colorado. The committee was comprised of faculty members from

two disciplines within the College of Education and Behavioral Sciences. Three committee members worked in the special education department, taught classes in the university's preservice special education teacher preparation program, and had extensive knowledge in behavior and EBPs. The committee chair was an expert in qualitative research design, which ensured the methodology was thoroughly reviewed and analyzed to ensure a strong research design. Another member of the committee had extensive knowledge in supporting paraprofessionals who work with students with significant support needs and autism. The fourth member of the committee had expertise in ABA and consultation. The committee used their individual and unique expertise to provide valuable feedback regarding the methodology to ensure a sound, credible study investigating how preservice teacher programs were preparing special educators to manage, train, and supervise paraprofessionals who support students with exceptionalities.

Conclusion

It is clear paraprofessionals are increasingly becoming responsible for providing intensive interventions and supports to students with exceptionalities including students with severe needs requiring intensive interventions and support. Additionally, it is evident special educators are often responsible for managing, training, and supervising paraprofessionals despite the fact that they feel underprepared for this responsibility. Using qualitative inquiry, this study sought to understand how preservice teacher programs were preparing special education teachers for the responsibility of managing, training, and supervising paraprofessionals in the future. Although a dearth of research literature existed on this topic, we know paraprofessionals can be taught to implement

EBPs and special educators are capable of teaching paraprofessionals to implement EBPs through professional development based on coaching, feedback, supervision, and evaluation. However, special educators consistently reported their preservice teacher programs did not prepare them to manage, train, or supervise paraprofessionals. As a result, university faculty were asked to describe their experiences and beliefs with regard to preparing preservice special educators to work with, train, and supervise paraprofessionals within the context of their teacher preparation programs. The themes identified through the analysis of participant responses to the research questions contributed to the sparse research literature that exists with regard to preparing preservice special education teachers to manage, train, and supervise paraprofessionals who work with students with exceptionalities. The themes identified also provided useful insight on ways to continue to close the research-to-practice gap that exists between the identification and implementation of EBPs for students with exceptionalities by placing a specific emphasis on understanding how preservice teacher programs were preparing special education teachers to work with paraprofessionals who provide support to with students with exceptionalities including students with severe needs. Ultimately, the analysis of participant responses provided useful strategies for preparing special educators to manage, train, and supervise paraprofessionals that could be implemented to increase feelings of preparedness among special educators to work effectively with paraprofessionals supporting students with exceptionalities in school settings.

CHAPTER IV

RESULTS

All of the participants indicated they did not feel their teacher preparation programs did a good job preparing preservice special education teachers to work with paraprofessionals to effectively provide support to students with exceptionalities. Participants felt universities were not only neglecting to address the topic in their preservice programs but faculty and university preservice preparation programs in general experienced several key obstacles to addressing this necessary and important topic. Notably, there was consistency among every one of the participants regarding this issue. One participant summarized the dilemma best by saying, "In all of the universities that I've been associated with, I truly believe that not a one prepared their teachers adequately to work with paraeducators, period. It's not a priority." Another participant shared, "My inkling is that we're not doing well enough in this area." Meanwhile, another participant referred to literature on challenges new teachers face:

> I mean, across the board I would say no [to preparing preservice teachers], and that's really just looking at broader literature of teachers in the field who are saying, "I don't know what on earth I'm doing." Or the teachers who are like, "I've figured this out now, but it was a long journey to get me here."

Other participants echoed this sentiment and added it often did not get addressed because it is an afterthought: "I just sort of feel like that [preparing teachers to work with

paraprofessionals] tends to be something that ends up way at the back of the plate. I would say we have our work to do in that area." Some even addressed the importance of preparing general education preservice teachers to work with paraprofessionals as well: "Can we do a better job? Oh gosh, yeah, absolutely, and especially beyond special education. This is not just a special education issue. Especially schools that are trying to be inclusive, the paraprofessionals are in regular classes as well."

Five themes were identified and confirmed through member checks with the participants: (a) obstacles to preparing preservice teachers to work with paraprofessionals; (b) we do not do a good job preparing them to manage adults; (c) preservice teachers do not know what they do not know; (d) why paraprofessionals should be a part of preservice training; and (e) knowledge, skills, and approaches needed to prepare preservice teachers.

Obstacles to Preparing Preservice Teachers to Work with Paraprofessionals

Participants identified several obstacles related to preparing preservice special education teachers to manage, train, and supervise paraprofessionals who support students with exceptionalities. Three subthemes within these obstacles included (a) not a priority, (b) we do not talk about it, and (c) limited experience.

Not a Priority

Participants identified making the content a priority and having the time to address working with paraprofessionals in their courses as a major challenge with preparing preservice special education teachers to work with paraprofessionals. One participant simply stated, "It's not a priority," while another participant indicated, "Sometimes we just don't feel like we have the time to go really deep into what the roles

and responsibilities look like." Another participant also highlighted how the lack of direction in the standards impacted making the content a priority and finding the time to address it within preservice special education teacher preparation courses:

> I'll bring it back to those standards. In order to have an accredited program, you have to align your courses to the seven initial prep standards of CEC and so we do, but within that, there isn't anything that requires us to do paraeducator content, so we have to take care of what we have to take care of per those standards per accreditation and then we can fill in those other specialty sets that we feel are important such as paraeducators.

Although participants reported there were state and federal standards related to preparing preservice special education teachers to work with paraprofessionals addressed in their syllabi for program accreditation, participants indicated none of the standards addressed preparing preservice teachers to work with paraprofessionals specifically. One participant stated, "I don't know that they're actually specific to paraeducators." Another participant said, "It exists in the standards, though perhaps not as explicitly as we might anticipate it would be." These participants agreed that some standards, particularly the CEC Initial Preparation Standards and the CEC Initial and Advanced Specialty Sets, addressed them indirectly through collaboration rather than explicitly highlighting them as its own set of standards. One participant reported the standards for working with paraprofessionals were "tucked inside of other things...collaboration with other professionals or families." Overall, participants felt the lack of specific attention to standards related to the topic of addressing paraprofessionals was an obstacle in and of itself, particularly for faculty being able to justify the inclusion of paraprofessional

training topics in their preservice programs. Not surprisingly, the participants followed discussion of this obstacle by saying they felt there was a need to create or highlight opportunities to make this topic a priority for preservice programs.

We Do Not Talk About It

Most participants indicated department course or curriculum planning meetings often neglected to include any discussion about the importance of including paraprofessional information in their preservice programs. One participant reported discussions regarding preparing preservice teachers to work with paraprofessionals were "not a common occurrence"; meanwhile, another participant stated, "We do not talk about that at all." Another participant shared that "very little is being discussed as far as I know" when asked if discussions were happening during course or curriculum planning meetings regarding preparing preservice teachers to train, manage, and supervise paraprofessionals. Most participants felt faculty members did not perceive preparing preservice teachers to manage, train, and supervise paraprofessionals as a priority. Notably, two participants indicated conversations about preparing special education teachers to work with paraprofessionals were beginning to happen amongst faculty in preservice programs because they were starting to realize the importance of the topic. One participant indicated, "It's one of those things where people are understanding it is a relative topic but that it's been underserved, I think." Another participant reported: "When people get it, when they realize what a huge issue it is, and how interconnected it is to so many other things, then they get interested, but it's usually not the kind of thing that is high on a lot of people's lists." The one participant who described these discussions as occurring "frequently" indicated, "They're talking about adding some of

the consultation, adult learning sort of class, team building, something that relates that would very much speak to working with paraeducators as well."

Limited Experience

Participants described a lack of real classroom experience as another challenge that impacted being unable to provide preservice special education teachers the information and experiences needed to effectively manage, train and supervise paraprofessionals early on in their teacher preparation programs. These participants discussed limited preservice classroom experiences as affecting the preservice teachers' ability to practice working with paraprofessionals and, relatedly, thereby gaining insight into the value of being able to benefit from meaningful paraprofessional training, management, and supervision. One participant described the issue about timing as a challenge by saying, "It's difficult for teachers to realize how important all of that is until they actually get in the classroom." Consequently, all of the participants believed preservice special education teachers received limited experience managing, training, and supervising other adults until their student teaching experience. One participant discussed the importance of providing early experiences [before student teaching] to preservice special education teachers so they could learn to work with paraprofessionals before they entered the field. Such learning experiences could include both model and practice as preservice teachers could see how other educators worked with paraprofessionals, asked the master educators questions, and practiced the necessary skills in the field themselves. One participant described this challenge and need:

> I think the biggest challenge is getting them in practicum settings in which they can see appropriate models of these types of skills. I think one big challenge, and

> I found this off of my research from others who are doing this kind of work, is how do we provide a meaningful practicum experience?

Participants further pointed out that in order to address special education teacher competencies, we also need to focus on preservice teachers' "dispositions and skills." Relatedly, one participant shared:

> When you break down these competencies, there's very few of them that are about knowledge, and the rest are about dispositions and skills. I think what's challenging for me is just not really knowing the extent of which the things that we're doing in [university classes] are carrying over [into practice] and are really effective in a truly meaningful way.

We Do Not Do a Good Job Preparing Them to Manage Adults

The majority of participants stressed the significance of this topic by discussing teachers' lack of preparedness when it came to managing, training, and supervising adults in general. One participant stated, "They haven't thought about the fact that they have to not just manage the students, but they have to manage support staff." One participant stressed the importance of this issue by saying, "We do a good job preparing them to manage children. We do not do a good job preparing them to manage adults." Participants indicated that preparation programs primarily focused on preparing teachers to manage students and they did not do a good job of preparing teachers to manage adults. Another participant shared, "One of the greatest challenges they [teachers] face is supervising and managing other adults." Meanwhile, another participant pointed out how this topic had the potential to impact teacher turnover as well:

> I would say we already have such a hard time keeping teachers in the field. The burnout rate is maybe better, but it's still pretty high. If...they're not able to really utilize and lean on these other adults in the room...that's one more reason why they're going to burn out.

Another participant stated:

> Frankly they're [preservice teachers] just not taught how to work with adult learners. They're not provided with appropriate resources when they do get out into the [classroom] setting, to provide appropriate training...And many of them go in not even expecting that they're going have to provide feedback to another adult in the classroom.

Many participants focused on the relationship between the teacher and the paraprofessionals. One participant said, "I would tell the students that their relationships with other adults, especially with paraprofessionals, can make or break their job." Several participants mentioned age difference as an issue with preparing special education teachers for this role. One participant stated, "A young teacher who's right out of school, and who then is assigned to supervise a paraprofessional who's old enough to be their mother, becomes a real challenge for a lot of young teachers" while another participant said, "How do you [teach them to] anticipate the challenges of [working with] someone that's going to be a little bit older than them?" One participant even pointed out that "some [preservice teachers] have never had a job." Interestingly, one participant pointed out it really was not developmentally appropriate to have new teachers manage, train, and supervise adults before they had had the opportunity to experience teaching themselves. This participant stated, "Having to supervise people before they've really

had the opportunity to teach very much, so developmentally it's inappropriate. Regardless they need to be able to do this so that is a primary concern in teaching."

Preservice Teachers Do Not Know What They Do Not Know

Perhaps one of the more prominent challenges related to the preservice teachers themselves was the notion that because these preservice educators were not yet in the classroom and/or field, they did not necessarily know the value of learning the skills and consequently, they did not know to ask for it. Put simply, one participant shared: "They don't know what they don't know. I think certainly when I talk with teachers in the field, I hear that a lot. I didn't know this [paraprofessional training, supervision, and management] was an issue until I got my first job."

In addition to preservice special education teachers lacking experience working with adults, participants also reported preservice special education teachers did not realize the importance of this topic without getting early experience in the classroom working with paraprofessionals. One participant stated, "There were some students that questioned why we were focusing on all of this and then I realized, they didn't know." Another participant said, "They haven't thought about the fact that they have to not just manage the students, but they have to manage support staff." When referring to their own research regarding challenges first year teachers face, one participant stated, "There ended up being a gap of things that they were not good at...with what the teachers thought they needed to know versus what they needed to know...there were two areas and one was working with paraeducators." As a result, participants indicated preservice special education teachers not only needed knowledge in collaboration and adult learning

strategies but also experience and opportunities to apply what they had learned so they were able to understand the relevance and application side of things.

Why Paraprofessionals Should Be an Important Part of Preservice Preparation

Participants reported preparing preservice special education teachers to manage, train, and supervise paraprofessionals was a necessary topic. One participant stated, "I believe that this [paraprofessionals] is important" while another participant said, "I think it is critical we do this [train preservice special education teachers to work with paraprofessionals]." Participants also indicated preparing preservice special education teachers to manage, train, and supervise paraprofessionals was an important part of teacher preparation in general. As one participant said, "I think it should be an important part of preparation." Some participants reported their interest in preparing preservice special education teachers to manage, train, and supervise paraprofessionals was driven by personal experiences. Another participant stated, "This is an important area for me, in particular for me as I think about the work. I'm really interested in is really driven by my own experiences as a classroom teacher prior to kind of entering academic roles." Still another participant commented, "Since my own experience [working with paraprofessionals], I end up putting it in the syllabus on every single course." The participants also shared that because the topic of paraprofessionals was one of their primary areas of research, they focused on preparing preservice special education teachers to work with paraprofessionals. One participant said, "I have a strong interest in paraprofessionals so, I made sure that was a focus." Another participant stated:

> We spend two classes really dedicated to this topic, and other times during the semester we are certainly broaching the topic. Part of that, frankly, is my

> personal interest in this [working with paraprofessionals], and that I think it's really important, so I've built it [working with paraprofessionals] into my course.

The majority of participants indicated they were the "primary one who focuses on" preparing special education preservice teachers to work with paraprofessionals. Not surprisingly, the majority of participants indicated they ensured preservice special education teachers were prepared to work with paraprofessionals by addressing it in their syllabi and embedding it throughout the courses they taught. One participant stated, "I personally...put it [working with paraprofessionals] in every course."

Impact on Students with Severe Needs

In addition to reflecting on their own experiences and interest as motivation to teach the content, the participants also shared that working with paraprofessionals was an important topic for preservice special educator teachers who would be working with paraprofessionals who provide support to students with severe needs. One participant stated:

> I think it's [working with paraprofessionals] the only way that we can really think about how to improve services with students with severe needs. At least, one of the ways because if you can train some extra hands, and you have an extra set of eyes, that understands behavior plans and understands how to help you implement individualized instruction then we're going to be moving forward, but I think it's been a missed opportunity.

It was important to note that the majority of participants interviewed who focused on preparing preservice special education teachers to work with paraprofessionals also had expertise in working with or conducting research that addressed the unique needs of

students with severe needs. One major concern identified by these experts was **s**tudents with disabilities, particularly students with severe needs, were spending more time with paraprofessionals than with a licensed educator. One participant indicated:

> If you have an intellectual disability, or multiple disabilities, or autism, or severe behavior disorder, some more low incidence or higher support need, it increases the likelihood that you're going to get increasing percentages of your instruction from well-meaning, potentially very nice, but under-qualified, not certified, not highly qualified teachers.

Another participant pointed out that they "talk about what roles are appropriate for the paraeducator, including providing supplementary instruction, not primary instruction to students" in order to address these concerns with the misuse of paraprofessionals providing supports to student with severe needs. One participant also stated:

> I think that here is where we see some of the biggest challenges with paraeducator support. Not that we don't see them across sort of categories, but paraeducators naturally fall into different sorts of roles when they're working with kids with learning disabilities or kids with emotional-behavioral disturbances, whatever it is. But when we look at kids with more significant support needs, here's where we get these issues with over-reliance and paraprofessional support and those sorts of things.

Inappropriate Use of Paraprofessionals

In addition to needing to include paraprofessional content because of the impact the role was likely to have on students with significant needs, participants also talked

about the need to train preservice educators to proactively address the over-reliance on paraprofessionals, which, in turn, often results in the misuse of paraprofessionals when supporting students with severe needs. Participants discussed concerns with over-reliance on paraprofessionals and issues with inappropriate practices paraprofessionals have done because they were not trained, including over-prompting or "hovering." One participant stated, "We've talked a lot in courses around dangers of over-reliance and one-to-one paraeducator support." Several participants also focused on ensuring paraprofessionals promoted independence and did not "hover." For example, another participant said:

> There's quite a bit of data suggesting, for example, that excessive proximity and doing too much for students, over prompting them, being in too close a proximity all the time, can interfere with their peer engagement, can interfere with the teacher getting involved.

As a result, it is imperative preservice teachers learn to manage, train, and supervise paraprofessionals to support students with severe needs appropriately.

Knowledge, Skills, and Approaches Needed to Prepare Preservice Teachers

Participants identified several practices and strategies that could be implemented to better prepare preservice special education teachers to work with paraprofessionals in the future. Mainly, participants recommended embedding content about how to manage, train, and supervise paraprofessionals throughout different courses in their preservice program. Participants' responses also focused on issues like increasing experiences for preservice special education teachers to work with paraprofessionals and focusing on skills such as collaboration to help teachers to learn to manage, train, and supervise

paraprofessionals more effectively. Participants had several suggestions for preparing preservice special education teachers to work with paraprofessionals. One participant indicated preservice programs were already doing a lot of these things to prepare special education teachers and they could be utilized to prepare preservice special education teachers to work with paraprofessionals: "I do think we're doing a lot of nice things here [with preparing preservice teachers] that could carry over [to preparing them to work with paraprofessionals]." Specifically, participants' recommendations for training preservice teachers to work with paraprofessionals fell within four sub-themes: (a) knowledge and information, (b) skills needed, (c) best practices, and (d) approaches to teaching the content.

Knowledge and Information

Most participants focused on the importance of preservice teachers knowing the roles and responsibilities of paraprofessionals providing support to students with exceptionalities. One participant stated, "I think for them, they don't have any knowledge, so unfortunately I'd say 50% of my time is just helping them understand what the role of a paraeducator is, period." Several participants focused on making sure preservice teachers understood that the role of a para was to provide supplemental instruction. One participant stated, "What I would say first is I really try to emphasize their roles as paraeducators, which is pretty well versed within the literature." Participants also indicated preservice teachers needed to know how to train paraprofessionals. For example, what does a plan for that paraprofessional look like, so that the paraprofessional has all the tools to be effective? When discussing preparing special education teachers to train paraprofessionals, one participant pointed out:

> The para has probably no prior preparation, so really getting to know your para, and using some of those resources to identify their training needs, as well as also figuring out their work style, and how it matches with your work style….what materials they are going to need, what kind of skills or sequence of activities, when to fade, when to step in, all those things. And then the biggest thing that they include in that is data collection, because paraprofessionals typically are the ones who are going in the classroom with the students, so we talk about the lesson plan should include data collection too.

Overall, participants reported they did not do anything differently to prepare preservice special education teachers to manage, train, and supervise paraprofessionals who provided support to students with severe needs. One participant stated, "It's no different...the most significant difference is to make sure that my students don't hover, but they understand that paras aren't to hover." Another participant supported the sentiment by saying,

> The ways that we would train a preservice teacher to work with a para wouldn't be different. I would still be teaching them to do coaching and performance feedback and to model the strategy that they're doing with their students, but the content of what those para educators would be doing with their students would be different.

However, some participants did indicate that because of the unique challenges students with severe needs experience, some things needed to be addressed when preparing preservice teachers to work with paraprofessionals who support this population of learners. One participant stated:

> I teach them about different methods that will support students with more significant disabilities...so I talk about ways in which they could support those students, but we also have discussions about how they can provide training to help others in the classroom…we talk about data collection for example, I talk about how other people in the classroom might also collect data, like their paraeducators or student teachers or other therapists in the classroom. I think some of things that we do talk about is that likely if they're working with a student with that level of needs, they're probably going to have paraeducators that are going to be supporting that child as well.

Another participant focused on "giving them hands-on experience to take away that fear of 'am I going to be able to manage this, am I going to be able to handle it, what if they have a behavior or an incident, can I do it?' and giving that opportunity to practice those skills."

Skills Needed

The majority of the participants discussed the skills preservice special education teachers needed to manage, train, and supervise adults. Participants focused on the "complex skill set" or "repertoire" of skills special education teachers needed to effectively work with adults who are providing support to students with exceptionalities. The overall consensus among participants was "they don't have the skillset, they're not ready for it." Some of these necessary skills were described as "active listening strategies, and how they could use those to have better conversations between team members...adds to their repertoire, in dealing with paraeducators." During the member checks, one participant added additional feedback for the identified themes. When

reviewing practices and strategies that could be implemented to better prepare preservice special education teachers to work with paraprofessionals, one participant indicated, "Collaboration skills are important and so are the skills in the delivery of the feedback, goal setting, and modeling." Another participant also stated, "It's about helping young teachers learn how to navigate these issues, how to problem solve, how to think on their own feet, and how to use the science of it and the chemistry of it to their favor." As a result, many participants focused on collaboration strategies that addressed building and maintaining positive relationships between special education teachers and paraprofessionals. One participant summed this sentiment up by saying, "Our teachers also need to know…collaboration strategies." Participants also focused on collaboration with paraprofessionals using phrases like "team-work, building relationships, team building and work together." One participant stated, "I think there needs to be required and dedicated course work just on collaboration. Within that course work, instead of part of a course, it would be an entire course on collaboration. People would learn how to work together." Interestingly, 9 of 10 participants discussed the need for a required collaboration course in all preservice teacher preparation programs. When discussing having a collaboration course, one participant said, "I think having this course on collaboration is a really great strength and a clear touch point to really talk about these issues more in depth." Another participant shared, "We have a course on communication and collaboration. The focus of that course is on a lot of adult interaction...and working with paraprofessionals." Still another participant also stated that in the collaboration course they offered, "they discuss and figure out and teach special education majors how to support paras and the appropriate roles and responsibilities of paras."

Best Practices

When asked about EBPs used to prepare preservice teacher to manage, train, and supervise paraprofessionals, participants discussed two different approaches. First, participants identified EBPs to model. One participant stated, "There's the category of evidence-based practices that you use with students…for example, ABA procedures, like using prompting hierarchies, using reinforcement strategies." Second, participants identified specific skills related to communication and collaboration that are needed for teachers to effectively work with paraprofessionals. Participants indicated these "best practices," although not research-based, included coaching, problem-solving, performance feedback, and modeling. As a result, "best practices" was the term used by the experts interviewed for this study to describe the information they used to prepare preservice special education teachers to manage, train, and supervise paraprofessionals. When addressing these "best practices," one participant stated:

> I think what's tricky about this question is…I don't know that we have a strong research base in paraeducators. We have literature out there, but I don't know that it has risen to the level of research based at this point. So, I guess I teach them best practice…within their roles I talk about the need to supervise including observations of paraeducators, including providing lesson plans and training.

When describing these "best practices," another participant shared:

> I don't think we have them [EBPs] when it comes to really thinking about how we effectively train, manage, collaborate with, support… We don't have a lot of evidence on how teachers should do that well. And so I don't think we can point to teachers and say, 'Look here. Here are the things that we know work really

> well,' in part because this is much more complex. This is about sort of a complex set of factors that teachers need to consider as they with work paraeducators... So the way that I sort of look at the literature...we don't have any determination to say this method of working with paraprofessionals is evidence-based. What we do have though is a lot of information about coaching roles and about adult learning types of things that are evidence-based.

Another participant echoed this sentiment by saying:

> We can't point to preservice teachers and say, "Hey, look! Here's all of this great evidence about how to work paraprofessionals really effectively." That's why we need this research. We don't know. But what we do know is a lot about coaching roles, a lot about adult learning roles, a lot about other types of strategies that are so applicable to these relationships… We know that you can't just tell adults something and then magically they do it. That's not how you change the behavior of anyone, and certainly not as adults…so we know that...using all of these adult learning strategies and also thinking about how roles like coaching and problem solving and real collaboration, not just dissemination of information, are so critical when we think about training paraeducators.

The idea of "best practices" to prepare preservice special education teachers to manage, train, and supervise paraprofessionals was summarized by a participant who stated:

> The practical insight to managing adults and what it's really like when you get into the field and you have eight paraeducators and you have schedules and you have people's breaks and you have training and supervision, so…we're focused

more on performance feedback like coaching methods, showing visual, graphing some of their stuff that they're doing and how to do that.

Relatedly, participants discussed the importance of focusing on adult learning when teaching these knowledge and skills. One participant stated, "It's more appropriate for us to approach it [working with paraprofessionals] from an adult learning standpoint." Another participant stressed preservice programs needed "to really provide the skills to work best with the adults regardless of the situation that they find themselves in." No matter what population of learners a teacher is working with, they should have enough understanding of adults as learners to be able to effectively manage, train, and supervise paraprofessionals.

Approaches to Teaching the Content

Participants focused on several practices and strategies that should be used to prepare preservice teachers to utilize when managing, training, and supervising paraprofessionals.

Coursework and assignments. Most participants reported they required students to complete projects that prepared them to work with paraprofessionals within the courses they taught. The most common assignment mentioned by participants included writing a lesson plan that clearly identified the role of the paraprofessional in supporting that lesson as well as the strategies they needed to know to effectively follow the plan. One of the concerns was "They're [paraprofessionals] not getting clear, well-written, well-conceived lesson plans to implement. [Even] "during their student teaching practicum...if there are paraprofessionals associated with those kids, they have to...be able to implement what their role is...and time to train the paras." One participant indicated, "When they

design a series of lessons and they write a series of lesson plans, they have to put in the lesson plans some annotation, notation, related to how a paraprofessional will access that information." Those participants who did not identify specific assignments that addressed paraprofessionals discussed an open-ended assignment that students could pick working with paraprofessionals as a topic. For example, "They could do an applied assignment with paraprofessionals but, it's not a requirement." As opposed to a text or a portion of a text, participants identified peer-reviewed journal articles, "practitioner-oriented journal articles," websites, videos, modules, and their own research as common resources used to prepare preservice special education teachers to manage, train, and supervise paraprofessionals. Other coursework and assignments typically used to prepare preservice special education teachers to manage, train, and supervise paraprofessionals included article reflections discussions and analysis major paper assignments, role-playing various scenarios, gallery walks with resources and materials related to working with paraprofessionals, interviews with special education teachers and paraprofessionals, and panel presentations of special education teachers and/or paraprofessionals.

Embed content. The majority of participants discussed embedding content throughout the courses required in preservice special educator teacher programs. One participant stated, "It doesn't have to be one class, a separate class on it...the most important thing is it should be integrated or embedded in the coursework." Another participant indicated, "Work related to the roles and responsibilities of paraeducators are embedded into each of those courses." Other participants also supported this sentiment by stating, "I think it can't be one course" and "I think to the extent possible that we can embed this in natural, effective, appropriate ways throughout all of our courses, it would

be something that universities could do." Several participants also discussed the importance of providing the content before preservice special education teachers' student teaching experience when preservice teachers typically saw the management, training, and supervision of paraprofessionals become a relevant issue: "We do need to make sure that it's part of the program. It would be better if more of it were introduced prior to student teaching. I'm not sure to the extent that it is."

Notably, the majority of participants indicated there was at least a portion of a course dedicated to preparing preservice special education teachers to manage, train, and/or supervise paraprofessionals in their program. Several indicated this content was embedded throughout different course in their teacher preparation program. One participant stated, "Even though we dedicate two weeks to it, we kind of weave it through the class right from day one." Another participant indicated:

> So, we embed this sort of along throughout our program. Beyond that, students also have, what is it called, a collaboration class, which broadly addresses a lot of things. Not families, we have a separate class for that, but school team collaboration including supervisory and leadership roles with paraprofessionals.

Experience and real application. Most participants also discussed providing preservice special education teacher with more opportunities when it came to working with paraprofessionals. Participants suggested real application and earlier practicum experiences to better prepare preservice special education teachers to manage, train, and supervise paraprofessionals. One participant shared that an earlier practicum experience provided preservice special education teachers with exposure to working with paraprofessionals and the ability to see the importance, get the information, and practice

the skills needed to effectively work with paraprofessionals providing support to students with disabilities:

> I think a strength here is that students get these practicum experiences really early, this idea of working with adults, including, but not limited to, paraprofessionals shows up when they're 19 years old and all throughout their program and it's really important… I think one of the advantages of our program is in practicum. They start practicum their sophomore year… They are eager to learn and to talk about these issues because they see them in their practicum settings and they know that this is going to be important…so they have these experiences all along the way... I think for students in our program, because of the way we've structured it, they're getting exposed to this and other issues really, really early and starting to really think about them in that context.

Another participant stressed the importance of providing preservice special education teachers opportunities for "real application" by providing recommendations to achieve this goal: "Role play, and discussion, and article reading, and module completion, and online…that's not enough. They [preservice teachers] need to be able to go into the field and actually practice with a paraeducator, train them, work with them, deal with them."

Assessment of disposition and skills. Another interesting idea proposed by participants was the assessment of preservice special education teachers' disposition and skills when it came to managing paraprofessionals. One participant stated:

> I think if we added it to the more prominent assessment of our student teachers, and not necessarily in their last semester student teaching. They're all in experiences every semester, and they have supervisors, but if that was an actual

> portion of their evaluation, how did they do working with other adults and providing direction and collaboration? I think that would also almost fix the problem, because if we had an assessment, we would obviously have to train them and prepare them to be ready for that assessment.

Although this sentiment was addressed by only one participant, it highlighted the importance of assessing the skills that experts in this study deemed essential to preparing preservice special education teachers to manage, train, and supervise paraprofessionals.

CHAPTER V

DISCUSSION

Over the last several decades, an increased focus has been placed on improving student outcomes using EBPs (IDEA, 2004; NCLB, 2002; Wong et al., 2015). Evidence-based practices are the most effective interventions used to improve outcomes for students with exceptionalities. Yet, research showed educators were still implementing unproven practices (Hess et al., 2008) and outcomes for students with exceptionalities remained stagnant (Yell et al., 2005). Another concern compounding this issue was the increased number of paraprofessionals who worked with students with exceptionalities, particularly students with severe needs (DAC, 2010). The concern was we were asking paraprofessionals, the least knowledgeable and trained individuals (Breton, 2010), to implement EBPs when working with students with exceptionalities. Although there were many concerns with this issue (e.g., least restrictive environment, free and appropriate public education), this study focused mainly on how preservice programs prepared special education teachers to work with paraprofessionals and provided them with the skills they needed to manage, train, and supervise paraprofessionals. The fact of the matter was new teachers were expected to manage, train, and supervise paraprofessionals who supported students with exceptionalities (Carlson et al., 2002; Douglas et al., 2016; Drecktrah, 2000). Yet, we know from research on the challenges new teachers face and expert interviews conducted for this study that special education teachers reported feeling

their preservice preparation programs did not prepare them for this responsibility (Biggs et al., 2018; Carlson et al., 2002; Drecktrah, 2000; Wallace et al., 2001). It is also important to reiterate that research has proven that special education teachers are capable of training paraprofessionals (Brock & Carter, 2016) and that paraprofessionals are capable of implementing EBPs with fidelity to improve outcomes for students with exceptionalities when appropriately trained (Bessette & Willis, 2007; Brock & Carter, 2015; Hall et al., 2010; Quilty, 2007; Walker & Snell, 2017).

The purpose of this study was to investigate preservice special education teacher programs' preparation of preservice teachers to work with paraprofessionals. A major focus of this study was to examine how university faculty members prepared preservice special educators to manage, train, and support paraprofessionals who provided support to students with severe needs using EBPs. As a result, experts who researched paraprofessionals and worked at universities with a special education preservice teacher preparation program were interviewed to investigate not only their practice but also their experiences and beliefs with regard to preparing special education preservice teachers to work with paraprofessionals.

Five major themes were identified through interviewing some of the leading researchers and experts in working with paraprofessionals who work at universities with preservice special education teacher preparation programs: (a) obstacles to preparing preservice teachers to work with paraprofessionals, (b) we do not do a good job of preparing them to manage adults, (c) preservice teachers do not know what they do not know, (d) why paraprofessionals should be a part of preservice training, and (e) knowledge skills and approaches need to prepare preservice teachers.

When describing the obstacles university faculty members experienced with preparing preservice special education teachers to work with paraprofessionals, several participants referred to making the content a priority and having time to address it in class. Some participants expressed difficulty with making it a priority and finding the time to address it in class could be attributed to the lack of specificity with regard to preparing special education teachers to manage, train, and supervise paraprofessionals using special education teacher preparation standards. Participants indicated that since it was not directly addressed in state or national standards, many programs did not embed preparing pre-service teachers to manage, train, and supervise paraprofessionals within the courses in their program. Although policies are in place indicating paraprofessionals should be appropriately trained and supervised by a qualified special education teacher (e.g., ESSA, 2015; IDEA, 2004; NCLB, 2002), there are no regulations or specifics on how to effectively manage, train, and supervise paraprofessionals to work with students with exceptionalities. Information ascertained from research and participant interviews indicated responsibility of training the paraprofessionals often fell on the special education teacher but, again, the special education teacher preparation standards only vaguely addressed preparing them for this role. Other obstacles university faculty members reported with regard to preparing preservice special education teachers to work with paraprofessionals included lack of conversations surrounding the preparation of preservice teachers to manage, train, and supervise paraprofessionals and the inability to provide preservice teachers with more exposure to working with paraprofessionals in the classroom.

Participants indicated preservice special education teacher preparation programs do a good job of preparing preservice teachers to work with students but preservice special education teacher preparation programs did not do a good job of preparing preservice teachers to work with adults (Carnahan et al., 2009; Drecktrah, 2000). Participants stressed the importance of preparing preservice special education teachers to work with adult learners and teaching them specific strategies to work effectively with adult learners. This directly related to the principles of developing effective training for adult learners by Lawler (2003). In accordance with Lawler's principles, participants discussed the importance of building relationships and collaboration with paraprofessionals providing support to students with exceptionalities. A few participants even identified the age difference between new teachers and paraprofessionals as another issue that came with working with adults that new teachers were not prepared to address. Chen (2014) described adult learners as non-traditional students, usually over the age of 25, who thought of themselves as employees first and learners second. Understanding the principles of adult learners further highlighted the need to focus on the skills necessary to effectively manage, train, and supervise adults providing support to students with exceptionalities. Many participants discussed the importance of providing preservice special education teachers with direct instruction on the skills, or "best practices," shown to be most effective when working with adult learners. These included strategies like modeling, coaching, and performance feedback; these are addressed later in this section.

One interesting and unexpected theme identified through interviews with the expert participants was preservice teachers did not know what they did not know. Many

participants discussed the fact that preservice special education teachers received limited experience in the classroom to work with paraprofessionals before their student teaching; participants indicated they were finding preservice teachers did not realize they would be responsible for managing, training, and supervising paraprofessionals when they got into the classroom. In addition to getting instruction in collaboration and adult learning strategies, participants indicated preservice special education teachers needed more experience and opportunities to practice what they had learned. As stated previously, training alone was not effective (Brock & Carter, 2015). Participants felt preservice teachers should have the opportunity to observe master teachers working with paraprofessionals, learn the skills necessary to manage adults, practice the skills they had learned, and receive feedback on their performance.

Relatedly, participants highlighted several reasons why preparing preservice special education teachers to manage, train, and supervise paraprofessionals was an important part of preservice teacher training. It was important to know how to work with paraprofessionals in different capacities. One capacity discussed by the participants was the special education teacher as the manager. Managing paraprofessionals consists of the day-to-day operations of running a classroom (e.g., developing and maintaining paraprofessional schedules, including lunches and breaks). Another capacity participants addressed was the training component where paraprofessionals were able to access the knowledge and practice necessary to work with students with exceptionalities effectively. As indicated previously, paraprofessionals are capable of implementing EBPs proven to improve outcomes for students with exceptionalities when properly trained and provided with feedback (Hall et al., 2010). The last capacity discussed by participants included the

supervision component. This included "best practices" discussed by participants and included strategies such as goal development, modeling, coaching, and performance feedback. Participants differentiated between supervising and evaluating paraprofessionals. They agreed it was inappropriate to have teachers conduct evaluations of paraprofessional performance alone but special education teachers should be involved in the evaluation process (Hall et al., 2010), and that administrators and special education teachers should collaborate when conducting paraprofessional evaluations.

It was also important to know how to work with and prepare paraprofessionals who provide support to students with severe needs. Fisher and Pleasants (2012) indicated the most common responsibility of special education paraprofessionals is to support students with severe disabilities and not surprisingly, participants discussed meaningful inclusion and participation of students with exceptionalities including students with severe needs. They indicated that if a paraprofessional was working with a student with severe needs and was not properly trained, chances were likely that the paraprofessional would engage in practices not associated with improving student outcomes and demonstrate an over-reliance on paraprofessional support (e.g., hovering, over-prompting). Thus, participants were able to describe the knowledge, skills, and approaches necessary to prepare preservice special education teachers to manage, train, and supervise paraprofessionals. Within this theme, participants discussed the knowledge and information needed to effectively prepare preservice special education teachers to work with paraprofessionals providing supports to students with exceptionalities including students with severe needs. Many participants focused on helping preservice special education teachers to understand the roles and responsibilities of special

education paraprofessionals. Interestingly, one of the key features of providing supervision described by researchers was identifying paraprofessional roles and responsibilities (Capizzi & Da Fonte, 2012; Maggin et al., 2009). Relatedly, participants also discussed the "complex set of skills" and "best practices" preservice special education teachers need to be taught to effectively manage, train, and supervise adults in an educational setting. The complex set of skills identified by participants included the skills identified by Brown et al. (2014) including communication, collaboration, and problem-solving. Many of the "best practices" identified by participants were addressed as best practices based on the limited research literature for teachers training paraprofessionals to implement EBPs in Chapter II and included professional development, coaching with goal development and performance feedback (Stockall, 2014), modeling, and performance feedback (Hall et al., 2010).

Lastly, participants provided very specific feedback regarding different approaches that could be used to prepare preservice special education teachers to work with paraprofessionals by addressing, and even embedding, content into teacher preparation courses. Specifically, participants discussed activities in which working with paraprofessionals would be addressed as the content in the course. For example, participants talked about reviewing case studies or conducting role plays in which preservice teachers were required to respond to how they would handle different situations with paraprofessionals (e.g., addressing conflict, providing corrective feedback) in order to receive feedback from their peers and instructor. They identified other assignments and activities including article analysis, major paper assignment, interviews, and panel participation as ways to provide preservice special education

teachers with the necessary content for preparing preservice teachers to work with paraprofessionals. Participants also discussed embedding different assignments related to working with paraprofessionals throughout different courses in teacher preparation programs regardless of course content. Additionally, participants reported these assignments did not necessarily need to be big ones. For example, participants discussed how to incorporate paraprofessionals into lesson plans by including their role providing support before, during, and after instruction.

Implications for Special Education Preservice Preparation Programs

Several implications for special education preservice preparation programs are worth noting. First and foremost, special education preservice programs should incorporate preparing preservice teachers to work with paraprofessionals into their teaching if they were not already doing so. It is imperative that we teach preservice special education teachers the roles and responsibilities of paraprofessionals providing support to students with exceptionalities as well as how to effectively and appropriately use paraprofessionals for student support. In addition to teaching preservice teachers how to work with students, they need to understand adult learning and effective strategies for working with adults, e.g., modeling, coaching, and performance feedback, to improve communication and collaboration skills. One way to do this is to offer a course on collaboration in special education. Nine of 10 participants in this study talked about the benefits of having a collaboration course in their pre-service preparation program that addressed working with paraprofessionals. Recommended topics for a collaboration course might include communication skills, problem-solving skills, and other specific approaches to training adults such as goal development, modeling, coaching, and

performance feedback (Brown et al., 2014). In addition to collaboration with other service providers and family members, working with paraprofessionals could also be embedded throughout a collaboration course. Assignments in a collaboration course might include knowledge and application activities aimed at increasing communication and collaboration between special education teachers and paraprofessionals, e.g., creating lesson plans that incorporate paraprofessionals, analyzing practitioner manuscripts related to best practices for training paraprofessionals to implement EBPs, and interviews or panel discussions involving special education teachers and paraprofessionals. Other application assignments that allow for preservice teachers to apply what they have learned about the roles and responsibilities as well as the training needs of paraprofessionals to implement EBPs could also be beneficial. These types of application activities might include engaging in role-plays, or simulations, using real cases that dealt with conflict and problem-solving scenarios.

Another way to provide preservice special education teachers with the skills necessary to manage, train, and supervise paraprofessionals is to integrate activities for increasing communication and collaboration skills. Many different types of activities can be embedded within various courses, such as lesson planning, in which the role of the professional in supporting the student is clearly identified and described. Other activities used to train preservice teachers might include role-plays and simulations. These types of activities allow preservice teachers to practice communication and collaboration skills identified to effectively work with professionals such as goal development, modeling, coaching, and providing performance feedback. Simulations are another promising approach to incorporate paraprofessional training content into preservice courses.

Because preservice teachers are challenged with limited classroom experience, simulations could provide opportunities for preservice teachers to learn and practice the content without having to be in the actual classroom (Dotger, Harris, & Hansel, 2008). Preservice teachers are also able to engage in active problem-solving on real cases during simulations (Dotger et al., 2008). In fact, the use of educational simulations in preservice programs was recently identified as a promising practice that allowed preservice teachers the opportunity to learn and practice holding individualized education program meetings with their instructors present (Mueller, Massafra, Robinson, & Peterson, 2018). In this situation, the professors were able to provide knowledge, ongoing support, and guidance on the topic in a way that safely allowed preservice teachers to make mistakes and learn through application.

Special education teachers also need to be able to engage in other skills such as goal development, modeling, coaching, and performance feedback that can assist them with effectively training paraprofessionals to implement EBPs shown to improve outcomes for students with exceptionalities including students with severe needs. As indicated previously, special education teacher preparation programs need to focus on providing preservice teachers with the skills and practices necessary to perform the activities required to effectively manage, train, and supervise paraprofessionals. In addition to knowing how to take care of the day-to-day operations like scheduling paraprofessionals, special education teachers need to be able to collaborate with paraprofessionals to ensure student needs are being met (Brown et al., 2014). Practice activities that could be implemented to achieve this objective might include developing lessons that incorporate paraprofessional support into the plans, conducting role-plays

that allow preservice teachers to practice effective communication and collaboration strategies, and paraprofessional simulations that use real cases to practice problem-solving skills to deal with conflict.

Finally, it is worth highlighting findings that indicated special education teacher preparation programs need to increase preservice teachers' experiences and opportunities to practice managing adults. Training alone is not effective in training paraprofessionals to implement EBPs (Brock & Carter, 2015) and it is certainly not effective in preparing preservice teachers to manage, train, and supervise paraprofessionals. Preservice teachers need to practice the skills they learn, whether through real experiences in the classroom or role-plays and/or simulations in their programs. Opportunities to practice should be embedded throughout special education preservice preparation programs. Regardless of the course content (e.g., introduction to students with exceptionalities, students with moderate or severe disabilities, current trends and issues, behavior management, special education assessment), it is imperative that the paraprofessional role be discussed in relation to the content. For example, what is the paraprofessionals role in behavior management (e.g., conduct observations, collect data, provide reinforcement)? As stated previously, one of the key features of providing supervision described by researchers is identifying paraprofessional roles and responsibilities (Capizzi & Da Fonte, 2012; Maggin et al., 2009). Embedding information on the roles and responsibilities of the paraprofessional into the course content and opportunities to practice the skills needed to train paraprofessionals to engage in these roles effectively might better prepare special education teachers to supervise paraprofessionals in the future.

Implications for Policy for Special Education Preservice Preparation Programs

Participants also addressed important implications for policy change. One implication for policy change included updating preservice special education teacher preparation standards to include preparing preservice teachers to manage, train, and supervise paraprofessionals. Like the practice opportunities described above, these standards should include strategies to effectively build positive working relationships with paraprofessionals such as communication, collaboration, and problem-solving skills. These standards should also include strategies required to effectively manage, train, and supervise professionals such as goal development, modeling, coaching, and performance feedback. Meanwhile, policy change might also include focusing on preparing preservice, as well as in-service teachers, to work with adults. Again, special education preservice programs do a really good job of preparing teachers to manage children but they do not do a good job of preparing special education preservice teachers to manage adults. As a result, we need to make sure special education preservice teacher preparation programs are held accountable for providing teachers with information regarding adult learning theory and strategies found to be effective when training adult learners. Preparing school administrators, both preservice and in-service, to share the responsibility of managing, training, and supervising paraprofessionals was also an implication for policy change addressed by this study. This means administrators should be given direct instruction on how to manage, train, and supervise paraprofessionals in their preparation programs and how to support special education teachers working with paraprofessionals who provide support to students with exceptionalities. Lastly, it is imperative for policymakers, preservice programs, and school districts to share in the

responsibility of making this topic a priority and taking time to address it. Highlighting the importance of this topic and the need to address it is the first step. Next, we need to figure out how to best prepare teachers to work with paraprofessionals and to train them to implement EBPs known to improve student outcomes.

Limitations and Implications for Future Research

This study sought to understand how preservice special education teacher preparation programs prepared preservice teachers to work with paraprofessionals. However, the participants consisted only of experts who studied paraprofessionals and were employed at universities with special education preservice preparation programs. As a result, two major limitations are worth noting. Because interviews were conducted with expert faculty members, I did not actually get to talk with other universities about what they were doing to prepare preservice special education teachers to manage, train, and supervise paraprofessionals. Additionally, because such a small group of researchers focused on paraprofessionals and worked at universities with special education preservice preparation programs, the sample size was small and should not be generalized with the larger population. Nevertheless, this was the first study to investigate what experts in the field believed should be included in preservice programs including the challenges they identified with achieving this objective. This line of research ought to be the first of many that investigate how to best prepare preservice teachers to supervise paraprofessionals who are likely to work with vulnerable populations such as students with significant needs.

Findings from this study pointed to several promising future research studies. A next step to this study might first involve surveying faculty members who teach at special

education preservice programs across the United States to inquire about if and how they prepared preservice special education teachers to manage, train, and supervise paraprofessionals. This study could be beneficial in identifying what preservice programs are doing to address this issue including potentially investigating the skills and practices the university professors found to be most effective in preparing preservice special education teachers to manage, train, and supervise paraprofessionals. Adding to the growing literature on this topic could increase the resources available to help preservice teachers learn and apply the skills and practices needed to effectively work with paraprofessionals. Future research could also focus on teaching special education preservice teachers to train and support paraprofessionals to implement EBPs through simulations. As described earlier, these simulations could potentially address the challenges of providing preservice teachers with opportunities to practice the skills without having to be in the actual classroom. Lastly, to follow up with the theme of "they do not know what they do not know," future research could compare preservice and in-service teachers' perceptions about specific skill sets related to supervising paraprofessionals. The groups could complete a survey study that required them to report their perceptions about the level of importance related to an identified list of teacher expectations (e.g., provide feedback, model skills) with paraprofessionals. After both groups rated the importance of knowing how to manage, train, and supervise paraprofessionals, the two groups could be compared and identify what it is the preservice teachers really "know" and "don't know."

Conclusion

As paraprofessionals become increasingly responsible for providing supports to students with exceptionalities, it is becoming increasingly important to prepare preservice special education teachers to manage, train, and supervise these paraprofessionals. This study sought to understand how experts with experience researching topics related to training paraprofessionals prepared and perceived preservice teachers' skill sets related to managing, training, and supervising paraprofessionals. Aside from learning this was an important and neglected topic in university programs, effective skills and practices for managing, training, and supervising adult learners were also identified by the participants. Continued research on identification of these strategies is needed to add to growing research aimed at identifying skills and practices shown to be effective in training paraprofessionals to implement EBPs to improve outcomes for students with exceptionalities. It is my hope this study raises the level of awareness and understanding for both teaching and research related to the preparation of preservice teachers to manage, train, and supervise paraprofessionals.

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APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL

UNIVERSITY OF
NORTHERN COLORADO

DATE:	November 13, 2018
TO:	Aimee Massafra
FROM:	University of Northern Colorado (UNCO) IRB
PROJECT TITLE:	[1340652-2] A Qualitative Investigation of Pre-service Special Education Teacher Program Programs Preparation of Pre-Service Special Education Teachers to Work with Paraprofessionals
SUBMISSION TYPE:	Amendment/Modification
ACTION:	APPROVAL/VERIFICATION OF EXEMPT STATUS
DECISION DATE:	November 13, 2018
EXPIRATION DATE:	November 13, 2022

Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

Dear Aimee,

Thank you for making the requested changes to your documents. I overlooked one additional change that you will need to make to the Consent Form. The contact address at the very end of the Consent Form should be updated to reflect the new phone number and staff person so that it reads: "If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, Research Compliance Manager, Office of Research, Kepner Hall, University of Northern Colorado, Greeeley, CO 80639; 970-351-1910." ***Your project has been approved, but please make this change prior to initiating consent with any participants.***

I wish you the best in your research.

Sincerely,

Wendy Highby

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Nicole Morse at 970-351-1910 or nicole.morse@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

APPENDIX B

INITIAL EMAIL

Dear Faculty Member,

My name is Aimee Massafra and I am a doctoral student in the special education program at the University of Northern Colorado. I am contacting you today to see if you are interested in participating in a research study about preservice teacher programs and their practices with regard to preparing future special educators to work with paraprofessionals who support students with exceptionalities. The purpose of this research study is to investigate your experiences with preparing preservice special education teachers to manage, train, and supervise paraprofessionals. Specifically, I want to know your practices for preparing preservice special education teachers to manage, train, and supervise paraprofessionals working with students with severe needs requiring intensive interventions and support.

With your permission, I would like to set up an interview. The interview will consist of questions related to your experience with preparing preservice special education teachers to manage, train, and supervise paraprofessionals. The interview will be about 30-45 minutes over the phone. If you are interested in participating, a second email will be sent to set up a day and time for the interview.

Please read the attached consent from and respond to this email if you are interested in participating.

Respectfully,

Aimee L. Massafra, M.Ed.
School of Special Education
College of Education and Behavior Sciences
University of Northern Colorado

APPENDIX C

INFORMED CONSENT FOR PARTICIPATION IN RESEARCH

Informed Consent for Participation in Research

University of Northern Colorado

Project Title: A Qualitative Investigation of Preservice Special Education Teacher Programs Preparation of Preservice Special Education Teachers to Manage, Train, and Supervise Paraprofessionals Using Evidence-Based Practices

Researcher: Doctoral Student, Department of Special Education, Aimee Massafra

Email: aimee.massafra@unco.edu

Research Advisor: Dr. Tracy Mueller, PhD, Department of Special Education

Phone: 970-351-1664 Email:tracy.mueller@unco.edu

I am a doctoral student at the University of Northern Colorado and am researching the practices of preservice teacher programs with regard to preparing future special educators to work with paraprofessionals. Specifically, I am investigating participants' experiences with preparing preservice special education teachers to manage, train, and supervise paraprofessionals to support students with exceptionalities. Participation in this research will require you to respond to a qualifying questionnaire, participate in a 30 to 45-minute interview over the phone, and to provide documents, such as syllabi, activities, and assignments.

There are no foreseeable risks to the participant. All artifacts, including emails, documents, interview recordings and transcripts related to this research, will be kept in a locked cabinet in a locked room. All transcription and data analysis that occurs on a computer will be contained in a password protected file on a password protected computer. All personal and identifying information will be kept confidential. In order to protect the confidentiality of the participants, we will use a coding system to refer to the participants. We will change all other identifying information, including the university, state, county, and town or city of the participants. A potential benefit of this study is increased understanding of how preservice teacher programs and preparing future special educators to work with paraprofessionals. Additionally, this study may provide additional insights into how to prepare preservice special education teachers to manage, train, and supervise paraprofessionals to use EBPs when supporting students with exceptionalities.

If you have any questions throughout the study or would like to see the results, please contact the researcher.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, Research Compliance Manager, Office of Research, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

APPENDIX D

INTERVIEW PROTOCOL

1. What is your primary role within higher education (e.g., Research Faculty – tenure-track, research priority, teaching secondary, typically teaches 1-2 course; Teaching Faculty – tenure track, teaching primary focus, research secondary, typically teaches 3-4 courses; Clinical Professor non-tenure track, primarily teaching, usually R1, 4+ teaching load; Instructor or Adjunct – primarily teaching)?
2. How would you classify the university/college you are currently employed (e.g., Research level 1 – Research primary, Research level 2 - Equal, Research level 3 – Teaching primary, 4-Year Institution, 2-Year Institution)?
3. How large is your teacher preparation program? Undergraduate? Graduate?
4. How long have you been in your current position?
5. What is your area of focus or specialty?
6. What types of classes have you taught in the last 3 years? Undergraduate or graduate of both?
7. Are there professional standards (state or federal) related to preparing preservice teachers to train, manage, and/or supervise paraprofessionals that need to be addressed in your course syllabi?
8. Does your university/college have a course or portion of a course that focuses on preparing preservice teachers to manage, train, and/or supervise paraprofessionals?
9. Are preservice teachers required to complete projects and/or assignments related to training, managing, and/or supervising paraprofessionals?
10. In your experience, are there discussions happening during curriculum/course planning meetings regarding preparing preservice teachers to train, manage, and supervise paraprofessionals? If so, what is being discussed?

11. How do you prepare preservice special education teachers to work with paraprofessionals who provide support to students with exceptionalities? For what level: undergraduate or graduate or both? If more so one or the other, then why?

    Follow-up question: What practices and strategies do you use to prepare preservice special education teachers to manage, train, and supervise paraprofessionals (e.g., lesson planning for paraprofessionals, on the job training/modeling, job-embedded performance feedback and coaching techniques, team-building strategies)?

    Follow-up question: Do the preservice preparation texts that you utilize contain content related to training, managing, and/or supervising paraprofessionals? What other resources do you utilize in the preparation of preservice teachers training, managing, and supervising paraprofessionals (e.g., websites, peer-reviewed journal articles)?

    Follow-up question: What evidence-based practices do you teach or focus on when preparing preservice special education teachers to manage, train, and supervise paraprofessionals?

12. How do you address the knowledge and skills needed to work with paraprofessionals who support ***students with severe needs that require intensive interventions and supports***?
13. What are your experiences and beliefs regarding preparing preservice special education teachers to work with paraprofessionals in the future?

    Follow-up question: Do you feel it is important to prepare preservice teachers to manage, train, and supervise paraprofessionals? Why/Why not?

Follow-up question: What challenges have you experienced in preparing preservice special education teachers to train, manage, and/or support paraprofessionals (e.g., resources, priority, time, uncertainty on what to instruct, finding an appropriate place within student programming, faculty expertise, and clarity on standards and what to teach)?

14. Do you think universities/colleges do a good job preparing preservice teachers to train, manage, and supervise paraprofessionals?

    Follow-up question: In what ways do you think universities/colleges can better prepare preservice special educators to train, manage, and supervise paraprofessionals?

15. Do you have any other colleagues who might be interested in participating in this study?

APPENDIX E

MEMBER CHECK EMAIL

Dear Faculty Member,

Thank you for taking the time to participate in the study: Preservice Special Education Teacher Programs' Preparation of Preservice Special Education Teachers. The information and time you provided to the study was incredibly helpful.

One component of qualitative research like this, is that we contact a percentage of participants to see if they agree with the findings. This is called member checking. **We are writing to ask that you take about 5 minutes to complete the member check below**. The survey link lists the findings (themes) we identified after interviewing the experts who participated in this study. Please click on the link provided to read though and answer whether you agree or disagree with the themes.

Thank you again. Your time is much appreciated.

Respectfully,

Aimee L. Massafra, M.Ed.
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