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PARAPROFESSIONAL TRAINING: NEED, MODELS, AND EFFECTIVENESS

A MASTER'S THESIS SUBMITTED TO THE FACULTY OF BETHEL UNIVERSITY

BY

PHILIP R. DAY

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PARAPROFESSIONAL TRAINING:

NEED, MODELS, AND EFFECTIVENESS

PHILIP R. DAY

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APPROVED

Advisor's Name: Katie Bonawitz, Ed.D.

Program Director's Name: Katie Bonawitz, Ed.D.

ABSTRACT

This thesis reviews current literature regarding the training of paraprofessionals working in the field of special education. The questions guiding the review centered on whether a need for paraprofessional training exists, what are the current training methods being employed, and what training methods are effective in improving paraprofessional performance. Results of the literature review found that an ongoing need for paraprofessional training exists and that there are a variety of training models currently in use that are bringing about improvements in paraprofessional performance. The author puts forward the Paraprofessional Training Program (PTP) as a model for effectively addressing the training needs of paraprofessionals.

Keywords: special education paraprofessional, paraeducator, teacher aide

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CHAPTER I: INTRODUCTION

History of the Role of Paraprofessionals

Education in the United States has undergone some massive shifts in the last two centuries but the people who make up the classroom has not dramatically changed. Looking back at various points in history, one would find a teacher with a number of students in a classroom and this foundational make up is still evident today. Technology, teaching strategies, and the make-up of students has changed dramatically but schools still rely on adult teachers transferring knowledge to younger students. One significant change that has occurred is the increase in the number of adults present in classrooms. The strategy of co-teaching has increased the number of teachers that may be present in a classroom, while academic intervention teachers may also push into a large classroom to provide additional support for students (Baeten, and Simons, 2003; Rea, and Connell, 2005). Perhaps the greatest increase of adult intervention in the classroom has come through the advent of special education and the use of paraprofessionals as a method of supporting students with special needs in general education settings. It is not uncommon to see a teacher giving direct instruction to the class as a whole with a special education paraprofessional providing support to students with disabilities.

The role of the paraprofessional within the education system of the United States is one that has grown and evolved over a number of decades. The origins of the role can be traced back to Post World War II efforts to help alleviate a teacher shortage. A number of studies were conducted to assess whether the application of teacher aides in schools would alleviate time constraints that teachers were facing in the areas of planning and instruction (Fund for the Advancement of Education, 1961). The application of such positions did not significantly take hold during this period however. In later decades, the advent of social programs to promote the education of students from poor socio-economic programs created opportunity for educational positions in addition to teachers to come to fruition. Programs such as Head Start, and Title I created funding for the hiring of paraprofessionals to assist in the academic instruction of students, (Likins, Pickett, and Wallace, 2003). It was during this period that

the position of the paraprofessional became one that began to take hold within the American education system.

While the paraprofessional began as a presence in academic settings in the 1960s (Bowman, and Klopf, 1968), the use of the paraprofessional in regard to students with special needs began with the advent of the Education for All Handicapped Children Act in 1975. This law recognized the rights of students with disabilities to an education within the public-school system and an Individualized Education Program (IEP). The greater need for support in school settings for students with disabilities increased the use of paraprofessionals within the educational setting. Paraprofessionals continued to be used in clerical and other roles but there became a significant increase in the use of paraprofessionals working with students with disabilities. Amendments to special education law such as the provision of services for preschool age students in 1986 and also the transition of students from high school to employment in 2004 created an increased need for assistance for students with disabilities.

The growth of the paraprofessional position over the last number of decades has led to the formation of various organizations and unions, which advocate for improvements to paraprofessional working conditions and provide training and support for those working in the profession. Such organizations and unions include: National Education Association: Education Support Professionals (NEA: ESP); National Resource Center for Paraeducators (NRCP); United Federation of Teachers (UFT); and American Federation of Teachers (AFT).

The existence of such organizations and unions have increased the political and social voice of paraprofessionals. The position of the paraprofessional has become an established one within the American education system over the last thirty years, with the majority of paraprofessionals working in the special education field ("Getting Educated: Paraeducators", n.d.).

Although the use of paraprofessionals can be traced back to at least the early 1970s, parameters surrounding the qualification and training of these individuals did not come about until significantly later (Gartner, 1971). Amendments to special education and mainstream education law in the 1990s

created mandates for paraprofessional qualifications. Likins, Pickett, and Wallace (2003) note that, "The 1997 reauthorization of IDEA was the first federal legislation to proactively recognize the critical need to prepare paraeducators to assist with the delivery of special education services and the need to prepare teachers for their emerging supervisory roles" (p.16). The Individuals with Disabilities ACT (IDEA) in 1997 was the first legislative mandate that addressed the training needs of paraprofessionals and significantly, the need for special education teachers to be prepared to act as supervisors of paraprofessionals. While IDEA began to recognize the need for parameters regarding paraprofessional preparation, No Child Left Behind, 2001 gave clear cut guidelines of standards for employment, preparation, assessment, and supervision of paraprofessionals.

Current Paraprofessional Qualifications

As the paraprofessional has become an established part of the American education system and standards have been mandated by law for their qualification, what requirements have emerged in order to be employed as a paraprofessional? According to the Minnesota Department of Education, a Title I or special education paraprofessional must have either:

- Completed at least two years of study at an institution of higher education (a minimum of 60 semester credits or the amount required to complete two years of full-time enrollment as defined by the institution attended); or
- Obtained an associate's (or higher) degree; or
- Demonstrate knowledge of and the ability to assist in instructing reading, writing, and mathematics (or, as appropriate, readiness for each of these subject areas) by passing the *ParaPro* test with a minimum score of 460.

The above regulations are federally mandated in order to work as a paraprofessional in a Title I setting or in a special education setting in Minnesota. The federal mandate for minimum qualifications for paraprofessionals has created certain standards for paraprofessionals including a certain level of post-secondary education, however it does not require qualifications specifically related to working in a

school setting. The ParaPro test is not required if a paraprofessional candidate has completed at least two years at a higher education institution. With these parameters in place, an individual with a certain amount of college credit but without experience working in an educational setting is eligible to be employed as a paraprofessional.

While there are federal regulations governing the qualifications of paraprofessionals, the ongoing training and development of paraprofessional is the responsibility of individual school districts and educational institutions. Currently, there are no federal mandates or state mandates in Minnesota regarding the ongoing training of paraprofessionals. With paraprofessional qualifications requiring only a certain amount of college credit or proficiency on a test in reading, writing, and math, the importance of the training paraprofessionals receive from their employer cannot be overstated. The frequency and quality of paraprofessional training depends on the district or institution in which the paraprofessional is employed. The role paraprofessionals play in special education continues to be a major one. These individuals are often the school staff members that spend the most direct time with students with special needs and have a variety of responsibilities including data tracking, third party billing, behavior management and communicating with general education staff. As paraprofessionals continue to be a major part of the education of students with special needs, the question arises whether these staff members are receiving the necessary training to complete with competence, all aspects of their position. Without rigorous and ongoing training, paraprofessionals may be unable to adequately serve students with special needs and carry out the variety of tasks associated with their position (Causton-Theoharis & Malmgren, 2005).

Research Questions

Paraprofessional training takes place in the school or district in which the paraprofessional is employed (Fisher and Pleasants, 2012). When analyzing the role of the paraprofessional in special education and the training they are receiving it is necessary to ask the following questions: Does a need exist for paraprofessional training? What types of paraprofessional training are currently being

implemented? And, what types of training are bringing about improved paraprofessional performance? Research has shown the need for improved training for paraprofessionals, with many researchers focusing on the effects of short and focused training on paraprofessional performance related to working with students with autism (Koegel, Kim, & Koegel, 2014) and peer interaction for students with disabilities (Causton-Theoharis & Malmgren, 2005). The perspectives of administrators, teachers, paraprofessionals, and students are essential when raising the question regarding the need for paraprofessional training. It is important to establish whether paraprofessionals are performing their varied roles with fidelity on a consistent and ongoing basis.

Building on this question regarding the need for paraprofessional training, it is also important to research the types of training that are currently being employed both by researchers and educational institutions. Current systems and models currently in place to meet paraprofessional training needs will be addressed in this paper. Teachers participate in ongoing professional development throughout their career and this paper will explore the training models that paraprofessionals are currently participating in such as initial employee training, mentoring, and one-to one coaching.

Finally, it is essential to determine what methods and techniques are successful in improving paraprofessional performance and ultimately student performance. Evidence based practices that are having a positive impact on paraprofessional and student performance need to be identified in order to produce a successful paraprofessional training program.

CHAPTER II: LITERATURE REVIEW

To locate literature for this thesis, searches of Academic Search Premier, Bethel

University Digital Library, EBSCO MegaFILE, ERIC, Expanded Academic ASAP, and

ProQuest Education Journals were conducted from publications from 1960 to 2017. This list was

narrowed by only reviewing empirical studies and peer-reviewed journals and publications that

focused on special education paraprofessionals, their training needs, and training techniques that are

currently employed for paraprofessional instruction. Keywords that were used in these searches were

"special education paraprofessional", "paraeducator", and "teacher aide" The structure of this chapter is

to review the literature on paraprofessional training in three sections in this order: Need for Training,

Types of Training, Effective Training.

Need for Training

A major guiding question for research regarding the training of paraprofessionals centers on whether a need for training exists within the profession. Without a clear need for increased levels of training, future development of training models and techniques for paraprofessionals becomes unnecessary. In addition to assessing the need for paraprofessional training, it is also necessary to analyze the impact paraprofessionals have on student outcomes. Without evidence-based training, are paraprofessionals having the necessary positive impact on the performance of students with disabilities? In addition, are poorly trained paraprofessionals having a negative impact on student performance, particularly in relation to the inclusion of students with disabilities in the general education setting?

Although the research around paraprofessional training is limited, many of the published studies provide evidence of the need for paraprofessional training. A study predating the 1990 amendment to IDEA highlighted the need for certification for paraprofessionals. Frith and Lindsey, (1982) conducted a survey of several state education agencies in order to collect, evaluate, and synthesize data on special education paraprofessional training, certification, and other programming variables. The authors noted

the widespread growth in popularity of the usage of paraprofessionals in special education and highlighted that the position of a paraprofessional be addressed in the development of state and local comprehensive systems of personnel development. The authors developed and refined a questionnaire and used the questionnaire to survey fifty state educational agencies in the areas of paraprofessional certification, training and other programming variables.

Results of the survey found that eighty-six percent of state agencies did not have a standard for paraprofessional certification, with forty percent of agencies working towards creating a paraprofessional certification requirement. On the topic of training, fifty-eight of respondents reported that paraprofessional training was the responsibility of local educational agencies with a slight preference towards in-service training rather than pre-service training. Eighty-two percent of respondents predicted an increase in the use of paraprofessionals in special education programs. The authors concluded by suggesting agencies need to take leadership in the area of paraprofessional development including state educational agencies and the Office of Special Education and Rehabilitation Services. Frith and Lindsey also recommended strategies these agencies could implement including designing training elements and increasing the number of general and special education administrators who advocate for the use of paraprofessionals.

This early study predated legislation regarding the certification of paraprofessionals but highlighted the need for regulation of paraprofessional training by state agencies. As IDEA amendments addressed certification requirements for paraprofessionals, a growing body of research has indicated that there is a need for initial and ongoing training of paraprofessionals in relation to working with students with disabilities. A group of authors conducted an in-depth review of the literature surrounding paraprofessionals in inclusive school environments (Giangreco, Suter & Doyle, 2010). The study focused on reviewing prior research regarding paraprofessionals and the lack of research on the effectiveness of paraprofessionals in special education.

Giangreco et al (2010) focused on special education issues regarding paraprofessionals in the

United States and their roles in schools, which practice an inclusive educational model for students with disabilities. These same researchers focused on a number of topical issues surrounding paraprofessionals. One issue emphasized was the challenge of hiring and retaining qualified paraprofessionals due to issues such as lack of respect, training, and low pay and benefits. Another major issue that arose in the research was a lack of adequate training as a persistent need. The authors highlighted that quality training materials exist for paraprofessional training and that the most recent research shows that paraprofessionals can be effectively trained in multiple areas which can lead to positive student outcomes (Giangreco et al, 2010). Focusing on the impact of paraprofessionals on student outcomes, the authors noted that some research (Werts, Zigmond, & Leeper, 2001) pointed to paraprofessional presence in classrooms having a positive impact on students while other research studies (Malmgren, and Causton-Theoharis, 2006) highlighted the negative impact paraprofessional presence had on students, particularly in the inclusive setting. The research also highlighted paraprofessional concerns regarding their role and taking on responsibilities that exceed their levels of training.

When addressing future research and implications Giangreco et al, (2010) highlight that there are still deficiencies in research related to the effectiveness of paraprofessionals. They note that, "Considered in combination with the small amount of data on student outcomes, it can be concluded that the research on paraprofessionals remains insufficient to inform policy decisions with a high level of confidence." (p. 50). The authors suggest that in order to confirm the positive impact of paraprofessionals on student progress there should be an approach that includes (a) strengthening supports for existing paraprofessionals, (b) developing conceptually sound ways for making decisions about when paraprofessional supports are needed, and (c) explore alternatives to over-reliance on paraprofessionals. They also highlighted the importance of role clarification in the use of paraprofessionals and their effectiveness. Areas indicated for further research included effective training of paraprofessionals and conditions under which paraprofessional support is required.

Special Educator Perspective

Research has emphasized the important role special education teachers play in the supervision and training of paraprofessionals. Douglas, Chapin, & Nolan, (2016) conducted a study focusing on the special education teacher perspective in relation to supervising paraprofessionals. Thirteen special education teachers working in Pennsylvania who were considered to be successful at supervising paraprofessionals were interviewed for the study. IDEA notes that paraprofessionals need to be supervised by a certified professional, but the authors highlight research which shows that paraprofessionals lack training, adequate supervision and clarity around their roles (Giangreco et al, 2010). The authors also highlighted research that stressed how special education teachers spend minor amounts of their day focused on supervising paraprofessionals (Giangreco, Edelman, Broer, & Doyle, 2001). They highlighted the limitation of research in paraprofessional training but focused on the lack of research surrounding the supervision of paraprofessionals, particularly around the experiences of teachers supervising paraprofessionals (Douglas et al., 2016, p. 61).

Using the results of the teacher interviews, the authors highlighted effective educational teams and appropriate training and evaluation of paraprofessionals as essential elements for effectively supervising paraprofessionals and maximizing their performance in working with students in special education. In regard to effective educational themes, results of the research highlighted the importance of school staff sharing responsibilities and working together to bring about student success.

Participants highlighted four essential team members for students with disabilities which included the special education teacher, paraprofessionals, the general education teacher, and administrators. Team relationships, teamwork, mutual respect, and communication were also highlighted as characteristics of strong teams (Douglas et al., 2016). Focusing on ensuring appropriate training and evaluation of paraprofessionals, teachers highlighted the following areas as significant: teacher preparation to work with paraprofessionals, paraprofessional training, paraprofessional evaluation and feedback (Douglas et al., 2016). Participating teachers reported having a lack of training regarding the supervision of

paraprofessionals.

Paraprofessional Perspective

While the special education teacher perspective is a valid one emphasized in research, the paraprofessional perspective also needs to be heard. Fisher and Pleasants, (2012) surveyed over 1,000 paraprofessionals in one Midwestern state regarding their role in schools. The authors wrote3 that previous research noted that paraprofessionals were trained on the job rather than in advance, supervising teachers were reluctant to supervise or evaluate paraprofessionals they work with, and paraprofessional responsibilities were exceeding the limits drawn up in IDEA legislation (Carter, O'Rourke, Sisco, & Pelsue, 2009; Downing, Ryndak, & Clark, 2000; Minondo, Meyer, & Xin, 2001). Fisher and Pleasants, (2012) highlight studies by Giangreco et al (2001) which emphasize the negative impact close proximity of adults have on peer interactions, how the least qualified staff spend the majority of time with the highest need students and the limitations of current paraprofessional training. The authors also highlight how research has focused on the issue of job satisfaction for paraprofessionals (Doyle, 2008; Pickett, Gerlach, Morgan, Likens, & Wallace, 2007).

The study centered on five guiding questions:

- 1. Given a list of 12 roles that have been noted in the literature, which of these roles are primary roles for paraeducators in this state?
- 2. Do paraeducators view these roles as appropriate roles for paraeducators?
- 3. What are the concerns of paraeducators?
- 4. Do views differ based on assignment as either a "one-to-one" or "group" paraeducator?
- 5. Do views differ based on the amount of time paraeducators spent each day in general education settings? (Fisher & Pleasants, 2012 p.288)

Data was gathered from paraprofessionals working in a Midwestern state through a survey. The authors

received 1,867 responses which was 27% of the reported number of special education paraprofessionals working in the state that year.

In response to the question of the role of paraprofessionals, 57% of respondents listed behavioral and social support to students as a primary role with 94% of respondents indicating that this role was appropriate for a paraprofessional position. Other roles highlighted as primary included implementing teacher-planned instruction, and supervising students. With regard to the concerns of paraprofessionals, results indicated that lack of appreciation was the highest concern of paraprofessionals with 40% of participants rating it as a major concern. The response to this question was open ended. The authors categorized the responses into categories with major concern categories including treatment on the job, compensation, concerns about colleagues, preparation for required roles, administrative concerns, and concerns around inclusive education. Addressing the questions related to a paraprofessional's educational setting and the time spent in that setting, researchers found that responses differed for a number of the roles addressed in the research. Those paraprofessionals who spent the majority of their time in general education settings viewed planning meetings, adapting lessons designed by general education teachers, providing info between general education teachers and special education teachers and providing info between school and parents as appropriate.

In discussing results, the authors noted a lack of collaboration between paraprofessionals and teacher colleagues as an issue, especially as research shows that quality communication and teamwork are ways in which to engage paraprofessionals in their work. The authors noted concerns including that over twenty-five percent of paraprofessionals highlighted the role of lesson planning as an appropriate role when IDEA states that this role should be performed by a certified professional and that it was deemed appropriate for paraprofessionals without the necessary qualifications to be modifying general education material for students.

Another study focused on the paraprofessional perspective of their role in special education was

conducted by Shyman (2010). The author highlighted previous research related to evidence that paraprofessionals are serving as defacto teachers (French, 2003). Shyman notes various predictors of occupational stress which include job demand, role conflict, sense of efficacy, and perceived supervisor support. He looked at issues in the literature regarding teacher stress and burnout and researched to see if it would also apply to paraprofessionals. The author hypothesized that since the paraprofessional appears to be serving in a more instructional role, the paraprofessional may experience similar emotional exhaustion to that of teachers.

One hundred paraprofessionals who served students with disabilities were included in the study. Instruments used in the study included the Emotional Exhaustion Sub scale (MBI; Maslach & Jackson, 1981), the Copenhagen Psychological Questionnaire (COPSOQ; Kristensen et al., 2005), the Teacher Sense of Efficacy Scale (TES, short form; Tshchannen-Moran & Woolfolk Hoy, 1990), and the Social Support Sub scale of the Job Support scale (JCQ; Karasek & Theorell, 1990). Seventy three percent of participants noted their level of emotional exhaustion was notably high to very high. The study revealed that role conflict, a lack of clarity around an individual's rights and responsibilities in relation to their job, was the highest predictor of emotional exhaustion.

A study, conducted by Carter, O'Rourke, Sisco and Pelsue, (2009), focused on surveying paraprofessionals around their needs and responsibilities. The authors surveyed over three hundred paraprofessionals working across all grade levels in a Midwestern state regarding various aspects of their jobs including tasks that they performed, where they supported students, content knowledge, and training needs. With regard to training opportunities, the most common type of training reported was on-the-job training followed by in-service training. One-third of the paraprofessionals surveyed reported a considerable need for training. The authors reported there was a considerable amount of variability among paraprofessionals in the area of their knowledge to perform specific tasks. A possible cause of this is the length of time an individual has been in the position, which could suggest that paraprofessionals are accumulating knowledge gradually over time.

The authors noted their findings suggest that schools may be relying excessively on informal, individualized training approaches whose quality is dependent on the knowledge or skills of the educator with whom the paraprofessional works on a regular basis (Carter, O'Rourke, Sisco & Pelsue, 2009 p.354). It was also highlighted that educators receive very little training in how to effectively manage paraprofessionals and this impacts the feelings the educator has towards the task and also the quality of the training the paraprofessional is receiving. The authors reported that given the increasing level to which paraprofessionals are utilized in special education settings, the need for effective training is urgent.

Geographical implications. Another study highlighting the need for paraprofessional training was conducted by Bugaj, (2002). This study brought a geographical focus to the research surrounding paraprofessionals with the author focusing on rural areas. Bugaj cited that for the majority of paraprofessionals, training occurs on the job through teachers and other paraprofessionals. He notes that research has shown that few states train or certify their paraprofessionals (French, 1999). The author also noted the ineffectiveness of training models for paraprofessionals in which cost, limited time, and resources are contributing factors. Bugaj, (2002) emphasized that these issues are exacerbated in rural areas.

The study developed a training program for paraprofessionals in a rural school district in Pennsylvania. The training program consisted of four components which were chosen through surveying staff about the greatest areas of need for instruction. The top four areas that were included in the instructional program were 1) instruction in behavior management, roles and responsibilities; 2) CPR; 3) instruction in lifting; and 4) non-violent crisis intervention. The study emphasized the importance of training being an ongoing process with elements such as CPR and non-violent crisis intervention requiring annual "refresher trainings". Bugaj highlighted the paraprofessional training program through the University of Nebraska as a major resource and component of the implemented training program.

Types of Training

Another area of study addressing paraprofessional training focuses on the types of training programs being implemented for paraprofessionals across the United States. Research does indicate that paraprofessional training is taking place and a growing body of researchers have highlighted various training programs and models being implemented to address the issue of paraprofessional performance and their impact on student performance.

Personalized Coaching

Mason Schnitz, Wills, Rosenbloom, Kamps, and Bast (2017) conducted a study focusing on implementing evidence-based practice for working with students with disabilities. The authors noted districts' reliance on large group in-service training as a means of training paraprofessionals with little emphasis on instruction translating to practice in classroom settings. Also stressed were research examples where paraprofessional training resulted in participants implementing evidence-based practices focused in improving student behavior with fidelity (Brock, & Carter, 2015). The authors argue that quality instruction should include initial instruction for paraprofessionals to increase their knowledge of the procedures being implemented, modeling of techniques with paraprofessionals given the opportunity to practice, and paraprofessional coaching with performance feedback and ongoing progress monitoring. The authors used online instructional modules as a means to overcome financial, personnel, and time constraints that impact the implementation of paraprofessional training.

The focus of the study was the training of paraprofessionals in the evidence-based practice of Discrete Trial Training (DTT) for use with students with moderate-to-severe disabilities. DTT was chosen as it is procedural in nature and needs procedural integrity in order to be effective. The purpose of the study was to evaluate the efficacy of online training and teacher coaching to improve paraprofessional implementation of DTT with students with disabilities. Participants included teachers who received training to act as coaches for their paraprofessionals, and paraprofessionals who worked

with elementary aged students with moderate-to-severe disabilities. Five teachers and eleven paraprofessionals were chosen to be a part of the study. Implementation included firstly finding baseline data in relation to procedural fidelity of DTT. This was followed by a three-hour online training program and the implementation of weekly Practiced Based Coaching (PBC) sessions.

Results of the research indicated that the introduction of the online training brought minimal but statistically significant increases in fidelity of implementation of DTT. With regard to PBC, all paraprofessional participants strongly agreed that PBC was more effective and useful than other types of training. They noted they would like to participate in PBC for other aspects of their job-related tasks. Mason et al. (2017) noted, "Given that time and resources are often barriers to effective supervision and training of paras, implementation of PBC with teacher-as-coach is a model that can be utilized to support the development of paras" (p.1705). The participants' support of the PBC model coupled with its minimal use of time and resources make it a viable option for ongoing training of paraprofessionals. The authors conclude that online training alone does not produce improved results in implementation of DTT, but results from the study confirm previous research that it is a necessary first step to improve performance.

Professional Development

Researchers have also focused on professional development, a major training tool used across educational institutions for helping improve teacher performance, and its use as a training tool for paraprofessionals. Mackenzie (2011) noted the disparity in the amount of professional development paraprofessionals receive compared to other educators. The study focused on an urban school district in Colorado which implemented a paraprofessional development program. The special education director received funding for paraprofessionals to attend a one-day training prior to the school year, as well as monthly meetings. Paraprofessionals completed a needs assessment to determine the content that would be included in the training program. The initial one-day training included specific training for newly

hired paraprofessionals and returning paraprofessionals. Results of the training program indicate an increase in the retention of special education paraprofessionals, paraprofessionals pursuing further education to receive their special education teaching license, and increased collaboration among IEP team members.

Sauberan (2015) writes from a teacher perspective and emphasizes the importance of special educators' roles regarding professional development of paraprofessionals. The author developed a professional development-training program for the teachers and paraprofessionals working in his building, a public school in California serving early childhood special education population. The training was developed around three main ideas that were shaped through the author's personal experience and research. These ideas included the increasing importance of paraprofessionals in the preschool setting, increasing teacher support for paraprofessional staff, and the critical nature and scope of the professional development system in transforming practice. The author included a number of different formats within the overall professional development package, which included in-service professional development sessions, classroom collaboration and Professional Learning Community meetings. Results of the training program showed that participants responded positively to the change in format of professional development, and paraprofessional efficacy and feelings of value increased.

Individualized Training

Other research has highlighted individualized training programs that allow for focused training for paraprofessionals on an individualized basis. Brock and Carter (2015) highlight the usage of paraprofessionals across the United States, but also highlight the lack of formal training paraprofessionals receive. They write that it is clear paraprofessionals need training but argue a greater question is how that training should be implemented. The authors note that single session training as a standalone tool without other training elements has proven to be ineffective in increasing positive paraprofessional outcomes. Brock and Carter put forward modeling, accountability, and performance feedback as three critical elements of paraprofessional training, but they failed to find a study that

incorporated all three elements in training paraprofessionals. The authors created a training package titled Video Modeling Plus Abbreviated Coaching (VMPAC) with the purpose of providing individualized training to special education paraprofessionals. The goal of the study was to use proven quality training techniques while tailoring the program in the context of the logistical and resource limitations faced by school districts.

Twenty-five paraprofessionals participated in the study from suburban and rural school districts in the southeastern United States. Participants received an initial two-hour training, three weeks of video modeling instruction, and a follow-up one-to-one coaching session. The authors note that initial training provides quality instruction but requires the participants to implement the strategies they learn on their own without any ongoing support, which often leads to the strategies not being implemented with fidelity. This assertion lined up with the results of the study as paraprofessionals who received just the initial training demonstrated the poorest implementation fidelity. The coaching component proved to be the method that brought the most increase in fidelity.

Another study highlighting individualized training was conducted by Stockall (2014). The author highlighted the role special educators play in the effective application of paraprofessional supports for students with special needs. The author emphasizes that effective training should take place in the form of a Direct Instruction Training Model (DITM), which promotes confidence, independence, and where paraprofessionals can receive gradual release of responsibility. The authors describe in detail a DITM model for effective training which includes six steps: 1) Establishing training goals, 2) Instruction, 3) Demonstration, 4) Guided Practice, 5) Observe Independent Practice 6) Provide Performance Feedback. Stockall concludes:

Education is not a one-shot deal; it is a lifelong commitment to strengthen and build on teachers' and paraprofessionals' effectiveness. The role of the teacher as the leader of ongoing and daily professional development for paraprofessionals is one that is critical to the field, as students with disabilities need and deserve instruction from highly qualified teachers and highly qualified

paraprofessionals. (p. 204)

Summary

A number of common training models were identified in the research for this paper. Research noted the use of initial training programs including programs for newly hired paraprofessionals starting in the profession (Mason et al, 2017). Initial training programs are also regularly used by administration at the beginning of a school year for training returning paraprofessional staff (Mackenzie 2011). However, researchers emphasized that this form of training is effective in only providing knowledge related to paraprofessional responsibilities and roles and lacks structure and accountability regarding the implementation of knowledge and techniques. In order to ensure high levels of implementation by paraprofessionals, additional programming is needed to supplement initial the training paraprofessionals receive.

Research also highlighted programs, which promoted accountability for implementation (Brock& Carter, 2015). This method of training combines knowledge with a structure that allows for supervised implementation and performance feedback for paraprofessionals. This method of individualized instruction also requires defined structures and support for both paraprofessionals and special educators as they take part in an individualized training process.

Research is emerging which incorporates both initial training which focuses on knowledge transfer and also coaching models which allow for demonstration, modeling, and feedback (Stockall, 2014). As training programs are researched, developed, and implemented researchers need to focus on whether training programs are effective and if they are bringing about improved paraprofessional and student performance.

Effective Training

Having researched the ongoing need for paraprofessional training and also the types of training that are being implemented for paraprofessionals, it is essential to assess the effectiveness of training programs, models, and methods. Effective training and its impact on the efficacy of paraprofessional

performance is an essential area of research as it increases the validity of the role of the paraprofessional and the need for evidence-based training programs.

Improving Social Interactions

Various research studies have assessed the effectiveness of paraprofessional training programs on paraprofessional performance and student outcomes. Causton-Theoharis and Malmgren, (2005) attempted to assess the effectiveness of a training program on four paraprofessionals which targeted the area of helping students with severe disabilities communicate with their non-disabled peers. The authors asked if a designed training program could be an effective tool to teach paraprofessionals to assist students with severe disabilities to interact with their non-disabled peers. Furthermore, the authors predicted that the training program would have a positive impact on both the behavior of paraprofessionals and the interactions of students.

Four paraprofessional/student pairs from two elementary schools in Midwestern states participated in the study. The chosen paraprofessionals primarily worked in general education classrooms with students with severe disabilities. The student participants were four elementary students with severe disabilities receiving the majority of their instruction in the general education setting. The researchers used quantitative methods to analyze the data of the intervention used. Researchers carried out a four-hour in-service training with each individual paraprofessional that participated in the study. Data was collected using the Peer Interaction and Paraprofessional Facilitative Behavior Observation Instrument (PIOI) was adapted from the Educational Assessment of Social Interaction) (Beckstead & Goetz, 1990), which focused on the specific facilitative behaviors of paraprofessionals and reciprocal peer interactions between the participant students and their fellow classmates.

Results showed an increase in the facilitative behavior of the paraprofessionals and an increased level of interaction rates among the students. The authors noted that, "An important finding in this study was that a relatively small change in paraprofessional behavior yielded a substantial increase in

student inter-action. In many cases, one facilitative behavior resulted in numerous interactive exchanges between the target student and other students in the classroom" (Causton-Theoharis & Malmgren, 2005, p.441). The intentional training of paraprofessionals yielded an increase in positive student outcomes.

Another study focused on training of paraprofessionals and student interactions was conducted by Koegel, Kim, and Koegel, (2014). The authors assessed if training paraprofessionals in social interventions would enhance social development in students with ASD. To research this hypothesis, the authors asked:

(1) Can paraprofessionals be trained to implement social interventions that include variables of child-preferred interests, cooperative arrangements, and appropriate paraprofessional-student proximity; (2) Will the engagement between students with ASD and their typically-developing peers improve in a group setting if the paraprofessionals are trained in these variables; and (3) Will the rate of initiations made by students with ASD to their typically-developing peers in a group setting improve when the paraprofessionals are trained? (p. 2198)

Three schools were selected to participate with each school selecting a paraprofessional who:

(1) reported little to no knowledge of evidence-based intervention procedures, (2) was hired by the school district as a full-time employee, (3) was nominated by the Director of Special Education at each school as needing training on social facilitation; and (4) had an assigned student who lacked appropriate social skills as determined by the Director of Special Education at each school.

Data was collected through observations of paraprofessionals and their assigned students. After baseline observations, the participating paraprofessionals received training through a one-hour workshop focused on social interventions. The results of this study showed that all of the target students improved with respect to their engagement with typically-developing peers. The paraprofessionals also saw rapid results immediately after the training with all three participants reaching fidelity during the sessions that occurred post-intervention.

Students with Autism. Walker and Snell (2017) focused their study on providing paraprofessionals training on implementing Function-based Interventions (FBI) to students with Autism. Function Based Interventions are "guided by functional behavior assessment (FBA), the goal of which is to understand patterns of challenging behavior so that effective and efficient strategies linked to the function of the behavior are selected for intervention" (Walker & Snell, 2017 p.114). The authors note that much of the research to date on paraprofessional training has presented the fidelity of implementation collectively rather than focusing specifically on behavior training (Brock & Carter, 2013).

The study setting included two elementary classrooms and one middle school classroom with three paraprofessionals and three students participating in the study. Results of the study showed that the level of challenging behavior decreased for all three student participants. The paraprofessionals involved demonstrated high levels of fidelity when implementing the training they received around FBI. Addressing student and teacher relationships, Walker and Snell (2017) noted that, "If paraprofessionals are able to address challenging behavior effectively within inclusive settings, teachers' attitudes toward students with disabilities may change and result in improved inclusive experiences" (p. 121). The authors bring emphasis not only to the impact of effective training on the student and paraprofessional but also the impact effective behavior training can have on educators in inclusive teaching environments.

Another study focusing on students with Autism was conducted by Moudry Quilty (2007). The study assessed whether paraprofessionals could be taught to write and implement social stories. Three student-paraprofessional pairs were chosen to participate in the study. The paraprofessionals participated in two, one-and-a-half-hour training sessions which focused on various elements regarding the instruction of students in the area of social stories. Results of the research showed that paraprofessionals were effectively taught how to implement social stories with students. The author highlights that the results of the study show that paraprofessionals were effective in changing student

behaviors when they received appropriate instruction and support, which is consistent with the findings of previous studies.

Student performance. Brock, M., and Carter, E. (2016) conducted a study on four paraprofessionals who received training focused on implementing peer support arrangements for students with intellectual disabilities. The study utilized teacher delivered professional development as the training tool for helping participants implement the peer support arrangements. The professional development package included an initial training session, video modeling, and coaching with performance feedback. Participants included groups four groups each including a paraprofessional, a student with an intellectual disability, and supervising special education teacher.

Results of the study found that students and paraprofessional performance improved as a result of the training. The authors note that, "this study shows that given relatively brief training, special educators can accurately and effectively administer professional development strategies that enable paraprofessionals to implement peer support arrangements" (Brock, M., & Carter, E., 2016, p. 367). The authors emphasize that the training program conducted during the study was implemented by special education teachers and not outside trainers or professionals. They also note that, "teachers perceived the professional development they delivered to be both effective and feasible" (Brock, M., & Carter, E., 2016, p. 367). In order for paraprofessional training to be implemented by special education teachers, the training needs to be structured so that educators can execute the program in the day-to-day school setting.

O'Keeffe, B. V., Slocum, T. A., and Magnusson, R. (2013) researched the effectiveness of paraprofessional training on the academic performance of students. The authors emphasize fluency training as a positive technique for individuals retaining and applying certain skills. The authors applied fluency training to a group of paraprofessionals. The study was conducted in two public elementary schools with paraprofessionals facilitating small reading groups with third, fourth, and fifth grade students. Paraprofessionals received one hour long daily training sessions for five consecutive

days, with ongoing classroom observations. The paraprofessional training focused on assisting students improve their reading fluency. Results of the study found that the paraprofessional participants improved their level of performance after receiving the fluency training.

Previously mentioned studies such as Mason et al. (2017) highlight the effectiveness of Discrete Trial Training (DTT) along with Practiced Based Coaching (PBC). Results of this study found that the combination of initial training with accountability based coaching programs brought about improved results in paraprofessional performance. Brock and Carter (2015) created a training package, Video Modeling Plus Abbreviated Coaching (VMPAC) in order to counteract the logistical and resource limitations faced by school districts. The package included initial training, on-going video modeling, and follow up one-to-one coaching. Results of the study found that participants who received all three portions of the training program improved their performance.

Various studies have highlighted effective training programs that have improved paraprofessional performance (O'Keeffe, B. V., Slocum, T. A., & Magnusson, R. 2013; Brock, M., & Carter, E. 2016; Walker & Snell, 2017). Common elements of these programs combine initial knowledge training sessions with ongoing coaching, mentorship, and feedback. Research has also highlighted that paraprofessional training can be successful in improving student performance in the areas of behavior and academics.

Research Questions

Does a need exist for paraprofessional training?

In regard to the need for paraprofessional training, research suggests that there is an ongoing need for continued paraprofessional training. Studies noted that paraprofessionals receive much of their knowledge and training informally while on the job and that ongoing training of both special educators and paraprofessionals is a high priority for members of both professions.

What types of paraprofessional training are currently being implemented?

Informal on the job training and initial training sessions were the most common types of

training that researchers highlighted that were taking place across school districts. Many researchers highlighted that initial training is an important aspect of paraprofessional training as it forms a foundational knowledge for paraprofessionals. However, this type of training does not effectively ensure implementation of learned knowledge.

What types of training are bringing about improved paraprofessional performance?

Various studies highlighted programs and techniques that brought about improved paraprofessional and student performance. Effective programs did not include just one training technique but incorporated multiple methods of instruction in order to achieve positive results.

Modeling, one-to-one coaching, and structured feedback are important components of a comprehensive paraprofessional training program.

CHAPTER III: APPLICATION OF THE RESEARCH

Evidence Based Rationale

The rationale for this project stemmed from a review of research that attempted to answer three guiding questions:

- 1. Does a need exist for paraprofessional training?
- 2. What types of paraprofessional training are currently being implemented?
- 3. What types of training are bringing about improved paraprofessional performance?

A large amount of the research regarding special education paraprofessionals points to a continuing need for paraprofessional training. In their research, Giangreco et al, (2010) highlighted the lack of adequate paraprofessional training and how it continues to be a persistent need for those in the profession. In another research study, one-third of the paraprofessional participants reported a considerable need for training (Carter et al 2009). Further research highlighted the role special educators play in the training and supervision of paraprofessionals. Douglas et al (2016) noted how paraprofessionals lack adequate training and that special education teachers spend minimal amounts of their work day supervising paraprofessionals. The paraprofessional perspective was highlighted in a research study conducted by Fisher and Pleasants (2012). Their research noted that paraprofessionals were receiving their training on the job rather than in advance of beginning their work with students and also that special education teachers were reluctant to supervise or evaluate the paraprofessionals they are work with. Current research suggests that paraprofessionals are not resourced and trained to conduct their duties with fidelity, but points to a growing need for initial and on-going training of paraprofessionals. It also suggests the need for special education teachers to take on a greater supervisory role concerning paraprofessionals.

Research regarding paraprofessionals also highlighted a number of training models that are being implemented to address the training needs of paraprofessionals. Mason et al (2017) highlighted a

training model that used two forms of training, online instructional modules and Practice Based Coaching (PBC). Mason and his colleagues found that the use of online modules alone did not bring about major increases in performance, but participants found that the use of coaching was more effective than other training types that they had participated in. The Professional Development model was the focus of a study conducted by Mackenzie (2011). This model, implemented for paraprofessionals, focused on a variety of training needs. Results of the program showed an increase in the retention of paraprofessionals and also paraprofessionals pursuing further education to become licensed special educators. Many researchers highlighted training methods that used an individualized approach to paraprofessional training. Brock and Carter (2015) used a training package titled Video Modeling Plus Abbreviated Coaching (VMPAC) which incorporated modeling of techniques to be implemented by paraprofessionals and also individualized coaching. Results of the study found that the coaching portion of the training brought about the most increases in paraprofessional performance. The use of professional development, online training, modeling and personalized coaching are all models of training that are currently being implemented to facilitate the training of paraprofessionals.

A final question raised asks what training models have proven to be effective in improving paraprofessional performance working with students with disabilities? A number of researchers conducted studies that focused on training paraprofessionals in specific behavior techniques for working with students with disabilities. Causton-Theoharis and Malmgren (2005) and Koegel et al (2014) researched the effectiveness of teaching paraprofessionals techniques to assist students with disabilities in their interactions with their non-disabled peers. Mason et al (2017) used individualized coaching techniques with an emphasis on accountability to bring about positive results related to paraprofessional and student performance.

Based on the evidence from reviewed research, a project was designed that would meet the ongoing training needs of paraprofessionals and would incorporate a variety of training methods, include content directly related to the performance tasks expected of special education

paraprofessionals, and be implemented for both new and veteran paraprofessionals.

Paraprofessional Training Program

Purpose

The purpose of the Paraprofessional Training Program (PTP) is to train, equip and support special education paraprofessionals employed in a suburban school district in Minnesota. The PTP is a training program that addresses the ongoing needs of paraprofessionals and is designed to train both newly hired and veteran paraprofessionals working in special education. Please see Appendix A for an outline of the program for a newly hired paraprofessional and a veteran paraprofessional.

Roles

District staff will fulfill various roles within the PTP. A district level special education administrator will oversee the program and will chair the PTP committee. The PTP committee will include a paraprofessional and special education teacher from the elementary, middle, and high school levels. This seven-member committee will coordinate the various aspects of the PTP including determining the specific content included in the program, appointing building level coaches, coordinating content instructors, and managing the various logistical tasks related to running the program.

District staff will also serve as program instructors who deliver instructional content. The PTP will utilize various district staff including general education teachers, special education teachers, school psychologists, and other related service providers to deliver content during large group training sessions. To increase the sustainability of the PTP and decrease costs, the program will use the expertise of these staff members that already serve in the district to act as instructors for delivering training content.

Special education teachers and some veteran paraprofessionals will serve as coaches fulfilling multiple roles within their buildings for PTP participants. First, they will act as a support network for

paraprofessionals who are new to the district in order to help them feel connected and a part of the team serving special education students in their building. Secondly, coaches will provide ongoing modeling of various elements of the training program, and finally will review and evaluate participant performance.

PTP Training Tools

Professional development. Paraprofessionals will participate in large group professional development sessions focusing on delivering content specific to the roles and responsibilities of a paraprofessional working in special education. These sessions are designed to ensure paraprofessionals are receiving content that improves their job performance.

Individualized coaching. At the building level, newly hired paraprofessionals will be assigned two coaches, one of which will be a special education teacher, and another will be a veteran paraprofessional. The roles of the coaches are to assist the paraprofessional in learning building specific routines and expectations, and also create accountability regarding the implementation of the content received during the professional development sessions.

Modeling. Assigned coaches will model techniques and methods to be implemented by paraprofessionals participating in the program. Coaches will focus on modeling techniques in the areas of behavior management, academic intervention, and working in both general and special education settings

Review and evaluation. Paraprofessionals will receive ongoing review and evaluation from their assigned coaches during the participation in the PTP. The evaluation and review process will focus on evaluating staff

PTP Training Content

The content that is included in the PTP is designed to address the multiple roles that paraprofessionals fulfill throughout their work day while also providing background knowledge related to special education law and the role paraprofessionals fulfill.

Special education law. Participants will participate in a session outlining the history of special education law and also learn about various aspects of special education including the IEP, evaluation process, role of the paraprofessional, accommodations and modifications, disability categories, and related services. This content is included to provide newly hired paraprofessionals background knowledge of special education and also rationale for their employment.

Academic support. Paraprofessionals will learn techniques and practices for providing academic support to students with disabilities. This will include strategies related to core content areas including math and language arts and will include breakout sessions to address age specific strategies for elementary and secondary aged students.

Behavior management and de-escalation. Paraprofessionals will receive content and training related to managing the behavior of students and the usage of de-escalation strategies to help students regulate their behavior across school settings. Content examples may include:

- CPI Non-Violent Crisis Intervention
- Zones of Regulation
- The Nurtured Heart Approach

Working in resource rooms. Paraprofessionals will receive training related to working in special education environments and small group settings. They will learn how to best support students participating in direct special education classes and how to work with special education teachers delivering core instructional content.

Working in general education settings. Paraprofessionals will receive training on supporting students with disabilities in the general education classroom and how to effectively support general education teachers who have students with disabilities participating in their classroom on a daily basis.

Disability specific training. Paraprofessionals will receive training related to the specific disability category that they primarily work with. Examples of training content may include:

- EBD Mental Health Training
- DCD Supporting students with functional skill deficits
- ASD Sensory regulation and social interaction

Resources

The biggest resource needed for the PTP is the financial compensation required for the additional hours worked by the paraprofessionals participating in the training program. In a suburban school district in Minnesota paraprofessionals are compensated at an hourly rate. For the professional development portion of the training, paraprofessionals would need to be compensated for an additional 20 hours of work through the course of the school year. For the coaching portion of the training paraprofessionals, would need to be compensated for an additional 25-27 hours of work. For each newly hired paraprofessional participating, the district would need to pay at least \$1000 in additional compensation. Veteran paraprofessionals participating in the program would require an additional 18-20 hours of financial compensation. Paraprofessionals serving on the PTP committee and acting as coaches will also need additional financial compensation for their time working on PTP related activities. Other district staff are salaried and would not necessarily need to be financially compensated for their time.

Other resources needed include course material costs. Programs such as CPI training and the Nurtured Heart Approach include books and manuals that would need to be purchased as a part of the training program. There may also be costs incurred in using district facilities such as classroom space for professional development sessions

Sustainability

The sustainability of the PTP relies on district leadership making paraprofessional training a priority. It is possible that through the PTP, paraprofessionals will perform their roles with increased

fidelity. The program creates an opportunity for the district to create more uniform structures that can be implemented across school settings. Improved paraprofessional performance could also lead to improved student performance. Paraprofessionals consistently implementing evidence-based practices can have a positive effect on student performance. With increased levels of training, paraprofessional job retention rates could also increase.

The PTP model is designed to be fluid and flexible, especially in the content that is being taught to paraprofessionals. This allows the program to evolve and change to the needs of its participants. The PTP committee helps structure and shape the content which allows the program to continue to evolve within the wider framework of the program. This fluidity increases the sustainability as the program will not become inert over time as the ability to grow and change is built into the structure of the program through the PTP committee.

The committee also facilitates increased levels of collaboration among staff groups working in special education. Creating an opportunity for special education paraprofessionals, teachers and administrators to work collaboratively can bring about positive outcomes for all parties operating within the field of special education, including students and their families. Each group can bring their own unique perspective on the role of the paraprofessional and how to best meet their training needs.

CHAPTER IV: CONCLUSION

Summary

Paraprofessionals have been working within the American education system for over fifty years (Bowman & Klopf, 1968) with a majority of paraprofessionals now working within the field of special education (Getting Educated: Paraeducators, n.d.). While the position of the paraprofessional has become established in the field of education, educational law has created minimum qualifications for individuals seeking employment as a paraprofessional which include the acquisition of college credits. Educational law has addressed the issue of paraprofessional law, but the ongoing training and supervision of paraprofessionals is the responsibility of individual educational institutions and is not subject to educational law. This has led to the frequency and quality of paraprofessional training to vary across districts and schools. In order to perform their roles with fidelity, it is essential that paraprofessionals receive rigorous and ongoing training (Causton-Theoharis & Malmgren, 2005). With the knowledge that paraprofessional training takes place within schools and districts, the author deemed it necessary to ask the following research questions: Does a need exist for paraprofessional training? What types of paraprofessional training are currently being implemented? And, what types of training are bringing about improved paraprofessional performance?

Research related to the need for paraprofessional training notes that quality training materials exist for paraprofessional training and the most recent research shows that paraprofessionals can be effectively trained in multiple areas (Giangreco et al 2010). However, researchers have also pointed out that schools may be relying excessively on informal, individualized training approaches whose quality is dependent on the knowledge or skills of the educator with whom the paraprofessional works on a regular basis (Carter, O'Rourke, Sisco & Pelsue, 2009 p.354). Studies also emphasized that paraprofessional training needs to be an ongoing process in order to maintain high levels of paraprofessional performance (Bugaj, 2002). Researchers highlighted the paraprofessional perspective on their needs related to performing their duties with one study focusing on the level of emotional

exhaustion among paraprofessionals. Seventy three percent of participants noted their level of emotional exhaustion was notably high to very high with the major predictors of the exhaustion being lack of clarity around an individual's rights and responsibilities in relation to their job (Shyman, 2010).

Regarding the types of paraprofessional training currently being implemented in school settings, researchers highlighted the use of individualized coaching techniques as a method for training paraprofessionals in specific techniques to work with students with disabilities (Mason et al, 2017). Another model of training that has been utilized for the training of paraprofessionals is formal professional development sessions (Mackenzie, 2011; Sauberan, 2015). Brock and Carter (2015) note that single session training as a standalone tool without other training elements has proven to be ineffective in increasing positive paraprofessional outcomes. Brock and Carter put forward modeling, accountability, and performance feedback as three critical elements of paraprofessional training.

Stockall (2014) also emphasizes a multifaceted approach to paraprofessional training.

Reviewed studies also answered the research question of the effectiveness of paraprofessional training. Multiple studies produced positive student results with training focused on social interactions (Causton-Theoharis & Malmgren, 2005; Koegel et al, 2014; Brock, M., & Carter, E., 2016). Research also highlighted a variety of training methods that were effective in bringing about improved paraprofessional performance (O'Keeffe, et al 2013; Mason et al., 2017). Methods included in these studies were initial content knowledge training sessions, mentorship, individualized coaching, and evaluation and feedback.

Professional Application

This paper put forward the Paraprofessional Training Program (PTP) as a professional application to address the findings of current research regarding paraprofessional. A review of current literature provided a number of other professional applications. It is important for lawmakers and special education advocates to recognize the important role played by paraprofessionals in special education. Current federal legislation should be reviewed with the purpose of creating ongoing training

requirements for paraprofessionals in addition to the minimum qualifications that are currently a part of special education law. At the state level, the state board of education should review the current standard for special education teachers that addresses paraprofessionals. Currently the standard requires that teachers work in collaboration with other educational professionals and paraprofessionals. However, it does not address the supervisory role that special educators take in working with paraprofessionals. At the district level, special education administrators need to assess the effectiveness of current training programs that are offered to their paraprofessional staff. Special educators also need to assess current performance levels of the paraprofessionals they supervise and if unaddressed training needs exist. Finally, this study should challenge paraprofessionals to reflect on their own performance and training needs and advocate for effective evidence-based training.

Limitations

The research focus of this paper was related to the field of special education. Research regarding paraprofessionals that did not work with special education students was not reviewed. The research questions attempting to be answered through the course of this paper focused specifically on the training of paraprofessionals. As a result, research, that did not directly deal with paraprofessional performance and training was not considered for review.

Focusing on the reviewed literature, a limitation that has been highlighted has been the insufficient amount of research related to the field of paraprofessionals. Giangreco, Suter and Doyle (2010) emphasized the lack of research on the effectiveness of paraprofessionals in special education. The scope of research was also limited geographically. No research was identified during the course of this paper that researched data on a regional or national level related to special education paraprofessionals. Much of the research was specific to one state, city or district. While current research has provided quality data regarding paraprofessional training, one must be cautious to not generalize the results to geographical areas that were not targeted by studies. This issue with scope can also be applied to participant numbers. The largest study cited in this work included 1,875 participants

which is a significantly small number compared to the number of individuals working in the field of special education as paraprofessionals.

Implications for Future Research

One area that warrants further research is the sustainability of paraprofessional training models. Researchers have identified a number of training techniques, models, and programs that have achieved positive results in small sample sizes and over short periods of time. Future research needs to take training models that have proven to be successful and implement these programs over an extended period of time to see if these training programs are sustainable over longer periods of time. Related to this, it is also important to assess whether paraprofessionals are continuing to implement their training over extended periods of time. Over time does training produce diminishing returns or are the performance levels of paraprofessionals maintaining at a satisfactory level?

The special education teacher perspective was an area that researchers focused on in relation to paraprofessional training (Douglas, Chapin, & Nolan, 2016; Giangreco, Edelman, Broer, & Doyle, 2001). Future research needs to analyze the preparedness and training of veteran and newly licensed special educators to work with and supervise paraprofessionals. What are post-secondary institutions doing to prepare their teacher candidates to work with paraprofessionals? Do special educators feel they are adequately resourced to train and supervise paraprofessionals on an ongoing basis? Are special educators and paraprofessionals satisfied with their working relationship? These are all important questions worthy of research as special educators play a major role in the training of paraprofessionals and also their ongoing supervision.

A final implication for research relates to the retention of paraprofessionals and their future career path. There has been little to no research related to the demographics, socio-economic status, and employment history of paraprofessionals. Research of this data could lead to increased knowledge around what motivates individuals to enter the paraprofessional profession. Linked to this area of research, is the need for data related to paraprofessional retention and the career paths of individuals

who are leaving the profession. Are paraprofessionals staying in the field of education as a career?

What is the percentage of paraprofessionals that are pursuing further education and becoming licensed teachers? This kind of data can help administrators and educational leaders shape quality training opportunities for paraprofessionals.

Conclusion

This study attempted to answer if a need exists for paraprofessional training, what training methods are currently being implemented for paraprofessionals, and what training is effective for improving paraprofessional performance. Research has identified that an ongoing need for paraprofessional training does exist and that current training methods can be effective in improving paraprofessional performance, particularly when multiple training models are implemented together.

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APPENDIX A PTP Outline

Newly Hired Paraprofessional	Veteran Paraprofessional
One year of participation in initial PTP during	Once every three years participates in a year-
first year of employment.	long review process using components of PTP.
Individualized Coaching: One special education teacher and veteran paraprofessional coach.	Individualized Coaching: One special education teacher coach.
Participates in large group monthly professional development sessions focused on core content of PTP program: • History of special education • Academic Support • Behavior Management & De-escalation • Working is SPED Environments • Supporting in General Education Environments • Disability Specific Training	Supervising teacher and paraprofessional complete beginning of year review process to identify areas of focus for professional development. Participates in bi-monthly small group professional development sessions focused on areas identified in the beginning of the year review process.
 Three one-hour meetings per month with coaches focused on: implementing content and techniques from professional development sessions. Receiving individualized modeling of techniques. Review and evaluation of performance. 	 Monthly one-hour meeting with coach focused on implementing content and techniques from professional development sessions. Receiving individualized modeling of techniques Review and evaluation of performance
End of year review with coaches and building administrator.	End of year review with coach and building administrator.