Exploring the Professional Development Needs of Early Childhood Paraeducators and Supervising Teachers

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Abstract
Paraeducators play an important role supporting children with developmental disabilities in early childhood settings, and the current educational system has come to rely heavily on paraeducator supports. Unfortunately, most paraeducators receive limited training prior to engaging in their classroom roles and responsibilities, and teachers receive limited training related to supervising paraeducator staff. This study examined the roles and responsibilities, professional development experiences, perceived professional development needs, suggestions for professional development, and perceived barriers to professional development among early childhood paraeducators working with children with developmental disabilities and their supervising teachers using focus group method and a questionnaire. Implications for improving professional development practices among early childhood staff, remediating barriers to effective professional development, and future directions for research are discussed.

Keywords
paraeducators, personnel preparation, teachers, early education programs, disability populations

Paraeducators play an important role in early childhood settings by providing support to teachers and children within the classroom (Hughes & Valle-Riestra, 2008; Ratcliff et al., 2011). Paraeducators have become a highly utilized part of the educational system supporting children with developmental disabilities, especially as inclusive practices have expanded (Hughes & Valle-Riestra, 2008; Malian, 2011). In classrooms today, paraeducators provide children with individualized instruction and support early development (Blacher, 2007). Paraeducators also serve an important role in Head Start and other diversely attended early childhood settings by providing a "cultural match" for children enrolled in these programs. Paraeducators may sometimes serve as cultural liaisons—connecting diverse families to the classroom, communicating with families from shared cultures, and maintaining relationships (Chopra, Sandoval-Lucero, Aragon, Bernal, De Balderas, & Carroll, 2004; Fisher & Pleasants, 2012). Budgetary constraints and a shortage of qualified early childhood special education teachers has led to a dependence on a paraeducator support model within early childhood (Brownell et al., 2002; Giangreco & Broer, 2007). However, effective professional development (PD) for paraeducators working in inclusive early childhood programs remains insufficient (Jones et al., 2012).

The role paraeducators play in supporting children with disabilities has been noted in federal legislation (Yell & Drasgow, 2005). The Individuals with Disabilities Education Improvement Act (IDEA, 2004) stipulates that paraeducators must be provided with appropriate training and supervision, and Part C of IDEA specifically permits "appropriately trained" paraeducators to participate in the delivery of early intervention and related services. Furthermore, No Child Left Behind (2002) requires that local agencies ensure adequate training for paraeducators. Despite these federal laws, limited guidance is provided related to PD, and little progress has been made to ensure adequate training for paraeducators (Douglas, Uitto, et al., 2019; Walker & Smith, 2015). Yet, numerous issues arise when paraeducators are

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improperly utilized within inclusive settings (Giangreco et al., 2010). For example, in these situations, paraeducators may take on roles appropriate for the teacher such as lesson planning, adapting educational activities, assessment, and communicating with families. Reviews of previous research suggest that paraeducators who are provided with sufficient training can deliver effective interventions to children with disabilities (Brock & Carter, 2013; Walker & Smith, 2015). Unfortunately, other research indicates that paraeducators do not receive appropriate training or supervision at the preservice or in-service level (Hall et al., 2010).

Although previous research has focused on paraeducator training experiences, limited research has focused exclusively on PD for paraeducators working with young children with disabilities in early childhood settings. Most of the previous research related to paraeducators working in early childhood settings has focused on roles, responsibilities, and job satisfaction (Hughes & Valle-Riestra, 2008; Ratcliff et al., 2011). Given the differing focus within early childhood settings, such as a greater emphasis on social and emotional development (Hemmeter et al., 2006; Sandall et al., 2000), paraeducators working in these settings may have unique PD needs. Research is needed to understand how to best create and deliver effective PD for paraeducators who support children with disabilities within early childhood settings.

Early childhood paraeducators work as part of a classroom team, which includes a lead teacher who supervises their work in the classroom. Effective and collaborative partnerships among these teams are critical for providing high-quality educational experiences for children with disabilities (Goddard et al., 2007). However, research indicates that supervising teachers do not receive adequate training for their roles supporting and managing paraeducators (Biggs et al., 2016; Douglas et al., 2016). Supervising teachers must be prepared to provide support to their paraeducators, serve as a collaborative resource, and provide ongoing coaching in compliance with special education standards (Council for Exceptional Children, 2015).

It is important to explore specific, appropriate, and socially valid PD practices that prepare early childhood paraeducators and supervising teachers to coach paraeducators. We explored the perceived roles and responsibilities, PD experiences, PD needs, and barriers to PD as reported by early childhood paraeducators and supervising teachers. We conducted focus groups in two Midwestern states with paraeducators and teachers to gain an understanding of current PD practices and inform future practices. The following research questions guided our study:

Research Question 1: What are the roles and responsibilities of paraeducators and their supervising teachers?
Research Question 2: What are the PD experiences of paraeducators and their supervising teachers?

Research Question 3: What are the training needs of paraeducators and their supervising teachers?
Research Question 4: What barriers exist for PD to support paraeducators?

Method

Participants

Teachers and paraeducators were recruited from inclusive early childhood settings in Illinois and Michigan. Early childhood program administrators were contacted via email and asked to distribute informational flyers about the focus groups to teachers and paraeducators within their programs. Flyers included information about the study, researcher contact information, and a link to an online screening form for potential participants.

Inclusion criteria for teacher participants included (a) at least 2 years of experience working in an inclusive early childhood setting; (b) experience working with children with developmental delays/disabilities; and (c) experience working with paraeducators in their classroom. Inclusion criteria for paraeducator participants included (a) at least 2 years of experience working in an inclusive early childhood setting and (b) experience working with children with developmental delays/disabilities. Participants were excluded if they were not fluent in English. Participants included 15 paraeducators and 14 teachers working in a variety of inclusive early childhood settings. All participants were female with diverse teaching and educational backgrounds. Demographic information about participants is presented in Table 1.

Procedures

Focus group research methodology (Krueger & Casey, 2015) and a questionnaire were utilized in this study to investigate the training experiences and needs of inclusive early childhood teachers and paraeducators in Michigan and Illinois. Focus group methodology was selected to help identify common viewpoints and was determined to be the most suitable research design to understand paraeducator training experiences in inclusive early childhood settings. The questionnaire was used to triangulate findings from the focus groups. Focus groups were conducted with paraeducators and teachers separately, following institutional review board (IRB) approval. Each focus group included four to six paraeducators or teachers, except in the case of one group where only two paraeducators attended. In Michigan, two focus groups were conducted with paraeducators and two with teachers. In Illinois, two focus groups (one with two paraeducators) were conducted with paraeducators and two focus groups were conducted with teachers. Participants completed a questionnaire at the beginning of each focus group/interview.

Table 1. Paraeducator and Teacher Participant Demographic Information.

Participant	Age (Years)		Ethnicity (%)	Years of experience		Education level (%)	Program (%)
	M	Range		M	Range		
Paraeducators (n = 15)	46	22–63	White (80) Asian (6.7) Black/African American (6.7) Other (6.7)	11.32	3–29	BA (33.3) Some college (26.7) Graduate degree (20) AA (13.3) GED (6.7)	Head Start/Great Start Readiness (53.3) School district/community preschool (33.3) University Lab school (20)
Teachers (n = 14)	38	26–58	White (85.7) Black/African American (14.3)	9.43	2–17	Graduate (57.2) BA (42.8)	Blended ECSE program (50) Head Start/Great Start Readiness (35.7) School district/community preschool (7.1) Reggio inspired program (7.1) University Lab school (7.1) English Language Learners program (7.1)

Note. Some participants may have worked in more than one type of program. Great Start Readiness program is Michigan's State funded preschool program for children with factors that may put them at risk for educational failure. AA = associate's degree; BA = bachelor's degree; GED = general education diploma; ECSE = early childhood special education.

Questionnaire. A questionnaire was developed by the primary researcher to collect information regarding demographics along with paraeducator and teacher satisfaction with PD practices, PD needs, PD experiences that were perceived as most beneficial, and perceived barriers to PD. The questionnaire also included a training needs assessment which focused on the specific areas in which participants felt paraeducators needed the most support. Paraeducators and teachers were asked to rank each topic by need. Training topics included behavior management, language and communication, play, social emotional, fine and gross motor, cognitive, early literacy, communicating with families, and professional practices (e.g., collaborating, understanding roles, and responsibilities). Topics were chosen based on developmental domains supported in early childhood classrooms and roles and responsibilities of early childhood staff represented in the literature (e.g., Killoran et al., 2001; Ratcliff et al., 2011). The questionnaire was reviewed by all authors for content validity, which included experts in paraeducator literature and early childhood special education. The questionnaire included open-ended questions, such as "List any barriers you have experienced receiving or participating in professional development" and "What are your roles and responsibilities as an educator?" It also included a 3-point Likert-type scale (1 = *not needed*; 4 = *very needed*) related to training needs (e.g., behavior management, play, language, and communication). In addition, it included a Likert-type scale of satisfaction with previous training experiences (1 = *not at all satisfied*; 4 = *highly satisfied*). The questionnaire included six demographic questions, nine open-ended questions, 39 questions about training needs, and two questions about previous training experiences. The questionnaire can be made available from the first author upon request. The questionnaire took approximately 15 min to complete.

Focus groups. Focus groups were conducted using protocol developed by the authors using guidelines outlined by Krueger and Casey (2015). The first author created an initial protocol based on a review of PD literature, combined with expertise from the cumulative research and field experiences of the authors. The authors conducted a pilot focus group with experienced early childhood professionals to test and refine the research protocol, including eliminating questions beyond the scope of the study and adding questions deemed relevant and useful based on participants' professional experiences. After the pilot focus group, the research team finalized the protocol. The protocol included open-ended questions to pose to participants and a moderator script. The moderator's script consisted of a greeting, overview of the purpose of the study, guidelines for participation, and questions and probes (Krueger & Casey, 2015).

The first author served as a moderator for focus groups/group interview in Illinois and the second author served as moderator for focus groups in Michigan. Research assistants facilitated paperwork and took field notes during all focus groups/group interviews. Focus groups were conducted in person and were audio recorded for transcription. Focus groups took an average of 82 (range = 68–126 min). Each participant chose a pseudonym to use during the focus group to support confidentiality within written and recorded records.

At the beginning of each focus group, the moderator described the purpose of the focus group, provided guidelines for participation, and detailed procedures for ensuring confidentiality. Participants were then asked to introduce

themselves using their pseudonyms, including information about their work setting and professional experiences. The moderator then posed questions to gain further information about (a) perceived roles and responsibilities of paraeducators and their supervising teachers; (b) previous training experiences of paraeducators and their supervising teachers and satisfaction with those experiences; (c) specific training needs of paraeducators working with children with disabilities in early childhood settings; (d) training needs of supervising teachers in supporting their paraeducator staff; (e) training preferences of paraeducators and supervising teachers; and (f) perceived barriers to effective PD. The moderator asked follow-up questions as needed to clarify information provided by participants, probe for specific examples, or gain more information. At the end of the focus groups/group interview, the researcher asked participants whether they had any additional comments. Following completion of the focus groups, a member check was conducted, where an email summary was sent to each participant, to ensure accuracy of the information gathered from participants. Six participants responded to the member check, each confirming the information was accurate.

Data analysis. All focus groups and interviews were audio recorded and transcribed by a transcription service to support data analysis. The first author checked each recording against the transcript to ensure accuracy. Data were analyzed using content analysis (Berg & Lune, 2007). Paraeducator and teacher focus groups were analyzed individually. First, transcripts were read independently by the first, third, fourth, and fifth authors and categories were independently identified. The first author (postdoctoral fellow with experience and training in qualitative research methods) trained the other authors (doctoral-level graduate assistants) in the content analysis coding process. The researchers met to reach consensus about initial categories, which were identified separately for paraeducator and teacher focus groups. Any disagreements were further discussed until a unanimous agreement was reached by all coders. The consensus coding procedure was used to reduce the potential bias of a single judge and produce a richer interpretation of descriptive data (Greenfield et al., 2010). A coding scheme, with categories and subcategories, was then developed by the lead researcher and modified through discussion with the research team. The first, fourth, and fifth authors then coded each transcript independently according to the coding scheme. Researchers read and independently coded each transcript using a line-by-line approach. The authors compared codes and reached consensus for each coded line. After all transcripts were coded and compared, major themes, encompassing all categories for both paraeducator and teacher focus groups, were finalized through consensus with the research team.

Although the primary source of information was the focus group data, questionnaire responses were used to validate and expand on information gleaned from focus groups and provide triangulation of the data (i.e., training topics; Berg & Lune, 2007). Data from the focus groups and the questionnaire are presented together based on the primary themes from the data.

Quality indicators and credibility measures. Researchers aligned the methods and procedures for this study to meet quality indicators for qualitative research (Brantlingeret al., 2005) and establish credibility of the findings. Appropriate participants were selected for focus groups using a screening process, and efforts were made to recruit participants from a wide variety of early childhood settings. The focus group protocol included questions that were clearly worded, not leading, and sufficient for exploring the domains of interest. The focus group protocol was created and revised by all authors and tested through a pilot focus group with three teachers who were not included in the study. Adequate methods were used to record and transcribe focus groups, and transcriptions were verified by the lead researcher. Measures were taken to ensure confidentiality, including having participants choose pseudonyms. Member checks were conducted to assess accuracy of the data. Focus group data were coded and analyzed by a team of researchers (i.e., collaborative work) in a meaningful and systematic way using the procedures put forth by Berg and Lune (2007). Investigator triangulation was used to ensure the credibility of the measures (Denzin, 1978). The researchers also included thick, detailed description through the use of field notes and quotes.

Results

Findings align in part with the a priori research questions. Themes that emerged from the data include (a) roles and responsibilities, (b) PD experiences, (c) PD needs, (d) suggestions for PD, and (e) barriers to PD. A summary of themes are provided in Table 2 and discussed next.

Roles and Responsibilities

Paraeducators and teachers provided insight into the unique roles and responsibilities of paraeducators and supervising teachers in early childhood settings. No major differences were noted between focus groups related to the roles and responsibilities of paraeducators and teachers. Specifically, teachers reported similar roles and responsibilities and paraeducators reported similar roles and responsibilities. Participants also discussed shared roles within the classroom, which included a shift toward increased responsibilities for paraeducators.

Table 2. Summary of Focus Group Findings.

Theme	Subtheme	Summary of findings
Roles and responsibilities	Paraeducators	One-on-one support of children with disabilities; supporting social skills; behavior management; collaborating with other adults in the classroom
	Teachers	Paperwork/documentation; data collection; decision making; designating roles and responsibilities; providing lesson plans to paraeducators; collaborating with families
	Shared roles	Subtle differences in roles of teacher and paraeducator; paraeducator takes on many of the same roles as teacher
Professional development experiences	Paraeducators	Overall insufficient training; majority of training is on-the-job; some professional development offered by school districts and Head Start; supplementary training provided for limited number of paraeducators; some seek out their own training
	Teachers	Overall insufficient training; limited formal support
Professional development needs	Paraeducators	Specific disabilities; supporting social and emotional development; behavior management; complex trauma; instructional strategies
	Teachers	Coaching; supervision; conflict management; communication; preservice training; in-service training
Professional development suggestions	None	Direct coaching; participation in workshops and conferences for both teachers and paraeducators; webinars; team training; follow-up and ongoing training; incentives; professional networks; choice over professional development experiences
Barriers to professional development	None	Time; pay; administrative barriers; limited experience; societal attitudes; staff turnover

Paraeducator roles and responsibilities. Participants identified several roles and responsibilities of paraeducators related to supporting children and delivering instruction. Teachers and paraeducators identified one-on-one support, particularly for children with disabilities, as a primary role of paraeducators. A teacher commented, "sometimes they're there to support a student with special needs. Personally, I need them there to support that kid." A paraeducator confirmed, "if [a child has] a serious disability they come with an aide." During small-group instruction, paraeducators supported individual students or led instruction. Within large group instruction, paraeducators supported individual children by working on individual goals (e.g., feeding goals, communication goals), supporting children during transitions, assisting children to use visual schedules, supporting children using the Picture Exchange Communication System (PECS), and providing sensory breaks. In some cases, paraeducators were responsible for implementing specific interventions, such as Pivotal Response Training. Paraeducators were also responsible for supporting social skills, including behavior management, facilitating interactions with peers, and promoting communication and social emotional skills. Paraeducators and teachers both noted managing challenging behavior as a primary role of paraeducators. One paraeducator commented behavior management "almost exclusively falls onto the para in our classroom. Because that is what you are there for. You're kind of like the class bouncer."

Participants also identified paraeducator roles and responsibilities related to working with other adults in the classroom. Some paraeducators were responsible for collaborating with other adults, including the lead teacher and specialists such as speech-language pathologists or occupational therapists. Five paraeducators noted involvement in collaborative team meetings with their teacher, an approach most common in university lab and school district settings. During team meetings, adults in the classroom met to discuss individual students, problem solve, and make adjustments to support students. Four paraeducators noted that specialists worked to support paraeducators in learning specific strategies and approaches. For example, one paraeducator said she is "working collaboratively with [the speech-language pathologist] to work out the PECS system and teach [children] to label their environment and communicate."

Both paraeducators and teachers agreed that paraeducators play an important role in the classroom. Several teachers emphasized that they rely heavily on their paraeducators. One teacher explained, "You can't be everywhere at once. Sometimes, you have to have more than one of you in the room. So much of what we teach is social skills and [paraeducators] are critical in teaching and modeling." Another teacher commented, "They're there every day with the children, working with them. Their impact is just as vital. Just as important as the teachers." Paraeducators expressed similar views about their role in the classroom. One commented,

If it weren't for us, the kindergarten class wouldn't be able to sit. They wouldn't be able to interact with each other and walk in a line and have a little self-regulation. These are important skills . . . I am the child's foundation of their educational career.

Teacher roles and responsibilities. Participants described several roles and responsibilities of teachers related to overall classroom management and working with paraeducators, including tasks such as paperwork and documentation, data collection, decision making, designating roles and responsibilities, providing lesson plans to paraeducators, and collaborating with families. Teachers indicated sole responsibility for all paperwork, including duties related to documentation, Individualized Education Programs (IEP), and individual child portfolios. One teacher explained, "I do the IEPs because it's my 'you know what' that's on the line." More than half of the teachers indicated that they delegate some data collection tasks to paraeducators. One teacher said, "I like to keep all the documentation, but I also like for my aide to keep a running log of things that she notices." Another teacher noted, "I have it all written out, exactly what I'm looking for, the data that I need taken."

Teachers also indicated primary responsibility for making instructional decisions and communicating with families, but many sought feedback from paraeducators to inform their decisions. For example, one teacher said "If he [paraeducator] doesn't think something is going to work, he lets us know. If he thinks, 'Hey, I think we could take this a step further,' we're definitely open to his ideas and we build on it together." However, lead teachers were ultimately responsible for making instructional decisions. Participants also reported that teachers were responsible for communicating with families and collaborating with them in regard to their child's education. Paraeducators did not indicate any specific roles with families.

Teachers also discussed their role supervising paraeducators which included tasks such as planning and scheduling for paraeducators, providing lesson plans, and making expectations and procedures clear. One teacher stated, "I do have expectations that I type up for them . . . these are my classroom expectations, this is what I expect of you." Two Head Start teachers mentioned they provided regular performance evaluations. Teachers also provided paraeducators with informal training through modeling, feedback, and coaching. One teacher explained, "I like to offer support and model first. Then they kind of follow my lead." Another teacher stated she provides immediate feedback when she sees "something that could have gone a different way."

Shared roles. A common theme in both paraeducator and teacher focus groups was the subtle differences in the roles of paraeducators and teachers. One teacher stated, "If you come into the classroom, you can't tell who the para is the majority of the time." A paraeducator said she assists with "every aspect of the classroom except for attending meetings and paperwork that the teachers have to do." Another paraeducator expressed, "I am pretty much responsible for everything the lead teacher does, except she gets paid more." Teachers pointed out the increasing responsibilities of paraeducators. A Head Start teacher said, "It used to be our program aides were just riding the bus and bringing kids in and maybe cleaning tables and getting lunches. Now our program is evolving to having them be more engaged with the children."

Professional Development Experiences

Paraeducators and teachers discussed various PD experiences, including workshops, conferences, online trainings, and webinars. PD was supported by school districts and Head Start programs and included National Association for the Education of Young Children recommended trainings. Content of training in Head Start programs included topics such as autism spectrum disorders, behavior management strategies, literacy, and early childhood education. District provided trainings often focused on safety and health topics such as cardiac pulmonary resuscitation (CPR), mandated reporting, and safety procedures. Three paraeducators were provided with opportunities to participate in other supplementary training, including Strategies for Teaching based on Autism Research (STAR) Program, Safe Schools training, and Positive Behavior Support. Participants agreed that the majority of training was provided on-the-job. One paraeducator mentioned that classroom staff, "learn from each other or experience. It's 'Ok I tried that, didn't work, let me try this then.'" Another paraeducator commented, "No, there's never been training. It's just passed along through on-the-job experience." Two paraeducators indicated that they had to seek out training. The lack of formalized training for many paraeducators led teachers to share information with paraeducators from trainings they attended. One teacher expressed concern with secondhand training:

It's not fair to send one person to a training, one person to a different training, then have us all expect to get the same kind of information, because you're supposed to come back and share it with the team.

Paraeducator experiences. Descriptive data from focus groups suggest paraeducators and teachers were in agreement that training for paraeducators was insufficient. According to questionnaires, nearly half of paraeducators indicated that they were not satisfied with their training experiences (i.e., 33% *somewhat dissatisfied*, 13% *not at all satisfied*). Of note, paraeducators who were *not at all satisfied* with their training experiences worked in school district settings and paraeducators who were *highly satisfied* with their training experiences worked in Head Start

programs. Head Start programs appeared to provide more opportunities for training, including topics that were relevant to paraeducators. When commenting on whether or not she had received enough training, a paraeducator said,

> Nowhere close to enough. They expect that since you've taken some classes, or that you have your degree, that you just know how to do everything . . . you may have gotten your degree fifteen years ago. That may not be information that is readily in your brain.

Teachers also reported varied levels of satisfaction with the training experiences of their paraeducators. Over half indicated at least some dissatisfaction with paraeducator training (i.e., 43% *somewhat dissatisfied*, 14% *not at all satisfied*). The remaining 43% indicated that they were *somewhat satisfied* with the paraeducator training that was provided. One teacher said, "I feel that they're expected to teach, but they're not educated to do that." Another teacher shared, "There was no formal 'what to do in the classroom' training. I mean for any of my aides, it's either you have it or you don't, or the teacher does it." One Head Start teacher said, "The program assistants are expected to know a lot more than they are given. It's not fair to expect them to fully understand all of what they teach them in a week, because they're really not qualified." In reference to the growing responsibilities of paraeducators, another teacher commented, "They are not getting them trained as fast as they should be trained."

Teacher experiences. Teachers also reported dissatisfaction with the training and support they received to supervise paraeducator staff. One teacher stated, "There was no college course about teaching adults and dealing with adults." Another teacher who had worked for both Head Start and the school district reported, "There's no formal support. We're just expected to manage and know how to manage." Another teacher commented, "I graduated on Saturday, I started my teaching job on Monday, and then I was expected to manage TA's along with a co-teacher. And I had no experience and I was never formally taught how to even handle it."

Professional Development Needs

Teachers and paraeducators identified several training needs for paraeducators working with children with disabilities in early childhood settings. Specific topics were identified by both teachers and paraeducators. Teachers also identified training needs related to supervising paraeducators. According to completed questionnaires, paraeducators noted social emotional, behavior management, and professional practices (e.g., collaboration with other adults in the classroom, understanding roles, and responsibilities) most

often when asked about highest areas of need. Teachers noted behavior management, communication, and professional practices most often. Table 3 provides rank order of paraeducator training topics by paraeducators and teachers, as taken from the questionnaire.

Paraeducator needs. Participants identified specific training topics that would benefit paraeducators in the supports they provide within early childhood settings. First, paraeducators and teachers reported paraeducators would benefit from training related to specific types of disabilities and how to support children with disabilities compared with other children in the classroom. One Head Start teacher that had begun her career as a paraeducator reflected:

> I started as an aide, and I was assigned to be one-on-one with a child with autism. I had no clue what autism even was, and they're like here's this kid. He's four and he doesn't talk. There was no training for me at all. No autism crash course. Nothing.

A paraeducator from a school district explained, "When I first came, I didn't know anything . . . So this kid came in, and was banging his head. Nobody told me how to deal with a kid banging their head." Another paraeducator in a school district expressed, "It seems like a lot of the trainings deal with other topics instead of special needs . . . we do need to have more special needs training."

Participants also reported that paraeducators need more training on supporting social development, including behavior management skills. When referring to children with behavioral challenges, one paraeducator expressed, "We physically struggle with them and sometimes we hurt ourselves. Our backs, our hands get scratched . . . I really feel like the training that we need to focus on is how to deal with this behavior." Another paraeducator expressed wanting training related to understanding challenging behaviors. A teacher said, "I think that making it so everybody in the room is prepared and trained to help all those challenging behaviors would help the whole classroom." Another teacher commented,

> I think the biggest piece that we're seeing is that social emotional lack of development. It's just not there in a lot of our kids now. I think that there needs to be more training in that area. How to deal with kids that are just at their breaking point.

One teacher discussed the importance of paraeducators modeling behavior. She provided an example of how she would like paraeducators to handle disagreements between children: "I would hope that the [paraeducator] would be able to teach in that moment and model appropriate sharing skills or model empathy between the children, and facilitate good communication."

Table 3. Top Training Needs of Paraeducators as Perceived by Paraeducators and Teachers.

Training need	Paraeducator rank order	Teacher rank order
Specific strategies for promoting SE development	1	6
Behavior management strategies	2	1
Embedding instruction on SE into daily activities	3	7
Teaching SE in large and small groups	4	Not ranked in top 10
Collaboration with other professionals	5	3
Understanding roles and responsibilities	6	4
Identifying the function of behavior	7	Not ranked in top 10
Teaching phonological awareness	8	Not ranked in top 10
Collaboration with other adults in the classroom	9	9
Strategies for facilitating language and communication development	10	2
Modeling SE skills	Not ranked in top 10	5
Facilitating peer interactions	Not ranked in top 10	8
Identifying SE goals	Not ranked in top 10	10

Note. SE = social emotional.

Several teachers and paraeducators suggested training on trauma-informed practice as part of understanding social emotional development. One teacher said, "It would be nice to have more training on trauma . . . to hit on some of those social emotional skills—why students tear apart a room—how to handle that." A paraeducator expanded on this need:

> I see the complex trauma, the emotional trauma, the abuse on top of the developmental disabilities . . . It is very difficult to tease out what is a developmental delay or disability and what is trauma. And so, it would be very helpful to have more training on trauma.

Participants also agreed that paraeducators need additional training related to instructional strategies. When referring to previous trainings, one paraeducator commented, "All they do is tell me how to identify the kid. I can identify the child! I need tools. Give me ideas. What can I try with this child? You can never have too many tools in your toolbox." Participants mentioned several specific strategies that would be helpful to incorporate into trainings, including PECS, Discrete Trial Training, and Pivotal Response Training.

Teacher needs. Teachers discussed several training needs related to supporting paraeducators, including training to support coaching, supervision, communication, and conflict management. Teachers expressed preservice training and in-service training would be beneficial. One teacher commented it would be beneficial to have "training of how to manage other people." Another teacher indicated that "training of how to be in charge of people who are older than you" would be helpful. One teacher commented, "I think I need conflict resolution [training]. I

would rather just do it myself than tell them they did it wrong." Two teachers, who participated in a conflict management training touted its usefulness. One said, "There is a great training called 'Crucial Conversations' and there are resources that come with it and it's strictly on how to communicate with people and how to have challenging conversations."

Professional Development Suggestions

Participants provided perspectives on the types and format of training they would like to receive, and offered several suggestions for improved PD experiences. When asked about delivery preferences in the questionnaires, paraeducators reported they preferred direct feedback, followed by webinars, video feedback, self-reflection or self-monitoring, and online modules. Similarly, teachers reported that paraeducators would most benefit from direct feedback, followed by webinars, self-reflection or self-monitoring, video feedback, and finally online modules. Overall, many teachers and paraeducators reported that they found participation in workshops and conferences useful, because they are "immersive." Both paraeducators and teachers wished that paraeducators had more opportunities to participate in these activities. One paraeducator said,

> I love going to the early childhood conventions. That sparks my passion again . . . There's just so many ideas floating around. I just feel like a sponge and I have to absorb it and then it's still just not enough.

In regard to workshops, a paraeducator in a Head Start classroom expressed, "They don't extend that offer to [paraeducators] very often and I wish we did more of that. I'm not teaching any less now or less involved with children."

Participants expressed mixed opinions related to online training. One paraeducator said,

> Some trainings through the internet . . . that'd be helpful because especially if you didn't have a specific time that you had to be on it, you would shave a better chance to be able to watch it and not have it interfere with anything else that's going on with your schedule.

However, another paraeducator said, "For me when I sit in front of a screen, I don't get as much out of it." Paraeducators and teachers expressed interest in interactive online formats. One paraeducator said, "For me, the better part would be some sort of discussion where I get input from other people."

Participants reported that direct coaching or on-the-job training was also beneficial. One teacher expressed, "I'm thinking when you get thrown in the classroom, in the heat of the moment . . . you gotta visually see it and get the feel of it. So maybe they need someone doing some one-on-one with them." A paraeducator explained, "I wish if you had the child with a behavior problem, somebody will come and show me how to deal with that kid." Several participants agreed that having another person model the use of a strategy or technique was useful, rather than just explaining. One paraeducator said, "They have autism specialists who will tell us what to do, giving all these pictures and schedules and do this or that, but then don't actually do it when the kid is there." She expressed, "They are just giving us tools and walking away." Participants also suggested that video feedback might be another way to provide training.

Teachers and paraeducators reported a desire for more team training where staff attend workshops and conferences together. One paraeducator explained, "It's very important that everybody is on board because otherwise, you're not even going to have a chance to even try it to see if it works." Teachers also noted the benefits of team training. One teacher said, "They're hearing the same information you are instead of us going back and re-teaching." Another said "We all need to be trained as a team, no matter if it's just on something little."

Participants also provided recommendations for improving PD. Paraeducators and teachers agreed that follow-up and ongoing training would be beneficial, including more training at the beginning of the school year. Both teachers and paraeducators reflected on the importance of incentives that are tied to training experiences. For example, one teacher suggested that paraeducators do not have any incentives to pursue PD because, unlike teachers, they do not need Continuing Education Credits or Units. Another teacher also highlighted this issue, "If they had to do continuing education hours, then maybe they would be willing to do the webinars, or they would be willing to go to the workshops." Most trainings for paraeducators were optional. One paraeducator said, "We can get paid if we come, but if we don't come it doesn't matter."

Participants also provided the suggestion that they would benefit from professional networks and choice in PD opportunities. They highlighted the desire to be able to connect to, gain support from, and observe other teachers and paraeducators. One paraeducator suggested they would benefit from getting together with other paraeducators and "sharing experiences and how to deal with [those experiences]." Another paraeducator agreed that she would like "just talking to other people that have had similar experiences to what you're going through now." Participants also expressed a desire to be able to choose topics of benefit to them. One paraeducator commented, "I feel like people engage more when it is something that pertains to them." A teacher suggested giving paraeducators "ownership over their own PD."

Barriers to Professional Development

Paraeducators and teachers both agreed on many barriers to effective PD, including pay, limited experience, time constraints, societal attitudes, and staff turnover. Teachers also emphasized a lack of support from administrators as a barrier. A significant barrier, identified by both teachers and paraeducators, was pay, which aligns with the suggestion to include training incentives for paraeducators. One teacher reflected that paraeducators "don't want to participate in training after school hours because they are not paid." A paraeducator commented, "Sometimes I get frustrated [teachers] are getting more pay, but we're now teaching." Limited pay resulted in paraeducators with limited experience in early childhood or disabilities. One paraeducator from Head Start explained,

> In order to be a teacher assistant . . . all that you need is a Child Development Associate (CDA), so like 12 hours of child development classes. And taking a test and doing a portfolio, and that's it.

She explained the attitude, "Hey, you took a couple child development classes, you kind of know what you're doing, you're good. You can work here." Related to low pay, participants expressed concern at the minimal qualifications needed to be a paraeducator. One paraeducator commented, "There should be a bare minimum of a CDA before you're even allowed in the classroom." Time was noted as another barrier, and was often related to pay. Training was often not offered during paid hours for paraeducators or teachers. In addition, low pay led to many paraeducators holding second jobs, further limiting availability for training opportunities.

Participants also noted negative societal attitudes toward early childhood personnel as a barrier to appropriate allocation of resources for PD. A teacher summarized how societal views impacted PD: "I think until society changes their whole attitude about early childhood, we're still not going

to have the training." A paraeducator explained societal attitudes in this way:

> "Well, you're just babysitting" or "All you do is play with the kids." . . . I'm not playing! . . . I'm taking anecdotal notes, I'm observing. I've got to input this stuff, I'm going to make a report card, and I'm going to conferences. I'm a real live teacher!

Staff turnover was another barrier that impacted PD. One teacher mentioned, "with all that turnover, it's hard to maintain training for aides." Another teacher said, "You can't really afford to train somebody that is just going to work part-time and then quit after a year." High turnover often resulted in hiring inexperienced paraeducators because programs were "desperate to fill those positions."

Although not mentioned frequently by paraeducators, lack of administrative support was noted as a barrier to PD by teachers. Many teachers and one paraeducator reported not receiving sufficient support from administration, with only one paraeducator commenting she was happy with the support she received. One teacher reported that administration is often "too busy" and "they don't have time to come into the classroom to see what's going on." Another teacher said that classroom staff only get training around supporting children with disabilities when there is a problem. Another teacher said that is like "putting the fire out when it's already started."

Discussion

The data collected from this study's early childhood teacher and paraeducator focus groups reaffirm evidence from previous research that current PD practices for paraeducators are inadequate (Carter et al., 2009). However, our results provide insight on the PD experiences and needs of paraeducators working in early childhood settings with children with disabilities. Research recognizes the increasing roles and responsibilities of paraeducators, particularly in regard to supporting students with disabilities (Malian, 2011), which reinforces the need for improved PD programs. Our findings also suggest a need for PD related to teacher supervision of paraeducators, and add to the limited literature in this area (Biggs et al., 2016) with new insights relevant to early childhood settings. Our findings also highlight the training needs among early childhood staff and perceived barriers to PD, which has not been a focus of previous literature. Furthermore, this study provides insight from both paraeducators and supervising teachers, uncovering shared perspectives among early childhood staff in regard to roles and responsibilities, training needs, and barriers to PD. Our findings provide valuable information to guide PD for all early childhood staff.

Limitations

Although the findings from this study provide important insights, we acknowledge several limitations. First, this study included a small number of participants (i.e., 15 paraeducators, 14 teachers) who work in inclusive early childhood settings in two Midwest U.S. states. As such, the study findings may not generalize outside of this sample or to other regions of the United States. Furthermore, our findings may not represent K–12 settings or the experiences of paraeducators in other types of programs. More data are needed from various types of programs across the United States to broaden the scope of the study and the generalizability of our findings. An example of this limitation is that paraeducators and teachers from this sample did not identify paraeducators as having a significant role communicating with families. These findings are contrary to previous literature that suggests paraeducators play an important role in connecting culturally and linguistically diverse families to the classroom (Chopra et al., 2011). Furthermore, some of the paraeducator participants in this study had an undergraduate or graduate-level degree, which may not reflect the education levels of paraeducators in all programs. In addition, despite efforts to recruit diverse participants, there was limited diversity in the gender and racial/ethnic backgrounds of paraeducator and teacher participants. Paraeducators and teachers also came from some of the same classrooms, potentially limiting our findings. Given these limitations, results from this study may not generalize to other settings or represent the experiences of all paraeducators or teachers. Future research should seek to expand on this work with diverse paraeducators, those with lower education levels, and those in other regions of the country.

Participants in this study represented a wide range of preschool funding sources, including Head Start, state-funded programs, and early childhood special education programs. As such, some differences were noted in the PD funding and experiences of paraeducators and teachers based on program structures. However, the relations between program type and PD experiences could not be empirically tested. Future research should explore how program type impacts paraeducator and supervising teacher PD opportunities with an aim to understand how to equalize and improve PD experiences across programs.

Finally, data collected from the questionnaire must be interpreted with caution as the questionnaire was not validated, and no statistical measures are drawn from it. However, the questionnaire was only used to reinforce data gleaned from the focus groups.

Implications for Practice

As paraeducators take on additional roles in the classroom, especially in support of children with disabilities, it is

essential that they demonstrate appropriate knowledge and skills. The Council for Exceptional Children (2015) created the Paraeducator Common Core Guidelines (PCCG) in an effort to ensure all paraeducators working with students with exceptionalities have mastered core knowledge and skills through ongoing preservice and in-service training. The seven standard areas outlined in the PCCG mirror PD standards for teachers and include practices related to (a) learner development and individual differences, (b) learning environments, (c) curricular content knowledge, (d) assessment, (e) instructional planning and strategies, (f) professional learning and ethical practice, and (g) collaboration. Data collected from early childhood paraeducators and teachers within focus groups and questionnaires suggest that paraeducators require more PD related to these areas. In particular, data suggest behavior management as a priority topic for PD due to the significant role paraeducators take in managing challenging behavior and the overall perception among early childhood staff that paraeducators are often unprepared to take on this role. Another topic of particular interest to early childhood staff was trauma-informed practice. This may be an important area for PD, especially among Head Start staff and those working with high-risk populations, because of the high rates of trauma among these children (Saint Gilles & Carlson, 2015) and the impact of trauma on development and long-term outcomes (Shonkoff et al., 2012).

Our findings provide several implications for PD service delivery models, based on the preferences and suggestions of early childhood staff. Both teachers and paraeducators expressed the benefit of providing paraeducators with more opportunities to join teachers in "immersive" PD experiences, such as workshops and conferences, as these allow early childhood staff to collaborate about the learning process and apply knowledge as a team in their classrooms. Participants also agreed that paraeducators would benefit from more direct feedback in the classroom, which aligns with best practice for adult learners (Rush & Shelden, 2011; Trivette et al., 2009) and recommendations in the literature (Douglas, Uitto, et al., 2019). In regard to online learning, participants indicated a preference for interactive online training programs, and noted the convenience of online training options. These findings along with existing research highlight that staff preferences for PD should be integrated with PD that aligns with adult learning theory, including (a) introduction of the practice, (b) illustration of the practice, (c) active engagement demonstrating the practice, (d) learner engagement in evaluating the application of the practice, (e) self-assessment, and (f) mastery through implementation of the practice across various circumstances and contexts (Rush & Shelden, 2011; Trivette et al., 2009). Strategies based on adult learning theory have been successful in coaching caregivers (Douglas, Meadan, & Kammes, 2019; Inbar-Furst et al., 2020) and may be equally as effective for PD programs.

In addition to preferred service delivery models, early childhood staff provided several suggestions for enhancing PD. A suggestion that independently emerged in several focus groups was professional networks to provide paraeducators with an opportunity to connect with other paraeducators, share experiences, and learn from each other. Teachers and paraeducators also agreed that early childhood staff should participate in PD as a team, as roles and responsibilities are shared in the classroom and collaboration is key to student success. Paraeducators also expressed a desire for more choices in their PD, which both paraeducators and teachers felt would increase motivation to participate in PD, and ensure PD experiences directly related to paraeducator roles. Finally, participants noted the importance of career ladder opportunities for paraeducators and felt that such opportunities would provide incentives for paraeducators to seek further learning and receive recognition for that learning.

Our findings also emphasized the importance of preparing early childhood teachers to effectively supervise their paraeducator staff, as most of the teachers in this study did not feel adequately prepared in their preservice or in-service training. In particular, teachers expressed they would benefit from conflict management training to more successfully take on their role of leading a team of adults. These findings uphold calls from previous studies for improving preservice and in-service training for teachers related to paraeducator supervision (Chopra et al., 2011; Douglas et al., 2016). In addition, paraeducators and teachers from this particular study noted age differences that may impact the collaborative relationship. Paraeducators might be older and have more experiences than the teacher, who may have recently graduated from a preservice program. PD for teachers should include content related to collaborating with all types of paraeducators.

Finally, we identified several barriers to PD that should be addressed to ensure the adoption of PD opportunities. Barriers included limited pay for PD experiences, limited time to engage in PD, and inequality among early childhood staff that results in paraeducators not being provided with the same opportunities to participate in PD or not being afforded opportunities alongside teachers, therefore limiting instructional team cohesion. These findings highlight the need for policy changes that support PD efforts, such as required trainings for paraeducators, pay for PD opportunities, and policies to allow paraeducators and teachers to engage in PD together.

Implications for Research

Although findings from this study provide important insights and contributions to the literature, several future directions exist to help improve PD for early childhood paraeducators and supervising teachers. This study focused

on the perspectives of paraeducators and teachers, but it did not address the perspectives of administrators. Although research is beginning to emerge related to administrators and paraeducators, most of this research has focused on K–12 settings. To our knowledge, no studies have explored administrator perspectives related to paraeducators in preschool settings. Future research should explore this gap with an aim to develop policies and practices that will address the needs identified by paraeducators, teachers, and administrators. Similarly, this study did not directly evaluate PD programs for paraeducators. Although some research has explored the content within paraeducator training materials (Douglas, Uitto, et al., 2019), future research should explore implementation and evaluation of paraeducator PD through intervention research to inform best practice. For example, previous intervention research suggests Practice-Based Coaching holds promise for effectively coaching pareducators to implement evidence-based practices (Snyder et al., 2015). In addition, an assessment of current knowledge and observation of practices would help to further identify areas of PD needs among both paraeducators and teachers.

Conclusion

We addressed early childhood paraeducator and teacher perspectives related to PD, and our results can be used to develop and implement more effective PD programs. The increasing responsibilities of paraeducators and the inadequacy of current training practices highlight the urgency of this need. PD efforts should directly address CEC-recommended practices for paraeducators, with an emphasis on training needs identified by early childhood staff. PD service delivery models should integrate early childhood staff preferences with recommended practices for teaching adult learners. PD efforts may also be enhanced through the integration of professional networks, team training, choice, and career ladders for paraeducators. Preservice and in-service trainings should prepare teachers for their supervision roles with paraeducators.

Declaration of Conflicting Interests

Funding

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