Perspectives on Current Practices and Barriers to Training for Paraeducators of Students with Autism in Inclusive Settings

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Abstract

Both the No Child Left Behind (NCLB) legislation and the Least Restrictive Environment (LRE) clause within Individuals with Disabilities Education Act (IDEA) of 2004 have impacted the educational service delivery for students with disabilities and the paraeducators that provide support services. As more schools turn to inclusionary practices, the impetus for highly trained paraeducators becomes of even more importance. The purpose of this mixed-methodology survey study was to identify the current practices and barriers of training for paraeducators who work with students with autism in inclusive settings and to compare and contrast the perspectives of principals, special education teachers, and paraeducators regarding these practices and barriers. This survey included 96 participants across the three participant groups. Discussion centers on the inadequate amount of training paraeducators receive, confusion on who is responsible for providing paraeducator training, the use of ineffective training methods, and making paraeducators a priority within the school structure.

Keywords: paraeducator, teaching assistant, paraprofessional training, inclusion, autism

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Along with the rising diagnosis of autism (Bolton & Mayer, 2008), specifically those identified as having high functioning autism (Crosland & Dunlap, 2012), comes one of the most complicated obstacles facing the field of education: how to provide services to children with autism that are effective, developmentally appropriate, and least restrictive (Schwartz, Sandall, McBride & Boulware, 2004). Over the last decade the field of education has shifted to more inclusive educational practices for students with autism. Inclusion has been a suggested practice for children with autism due to the social benefits associated with learning alongside non-disabled peers (Causton-Theoharis & Malmgren, 2005). Due to the difficulty with communication and social interactions that many students with autism experience (Crosland & Dunlap, 2012), practitioners have turned to the general education classroom as an environment where students can improve socialization skills and develop peer relationships (Harrower, 1999). Although there is a dearth of outcome research on inclusion, the majority of the existing literature suggests that inclusion can have positive social effects on students with autism (Ferraioli & Harris, 2011).

In addition to the social benefits it provides, inclusion has become a focus of school practice due to the mandates set forth by legislation (Harrower & Dunlap, 2001). While the federal legislation for students with disabilities does not include the term "inclusion," the least restrictive environment (LRE) requirement from the Individuals with Disabilities Educational Act (IDEA) serves as the basis for interpretation and practice. IDEA, as amended in 2004, requires that school districts educate students with disabilities in the LRE and meet their specific needs within these environments with supports and services (IDEA, 2004). School leaders have turned to inclusive practices as means to address these mandates set forth by legislation (Harrower, 1999).

The continuing increase in the number of students with autism who are eligible for special education services (Bolton & Mayer, 2008) and the focus, both school practice and legislation, on providing services to students with disabilities in inclusive settings, has dramatically redefined the role of paraeducators who provide inclusive support services (Carter, O'Rourke, Sisco, & Pelsue, 2009). Most school districts allocate paraeducator support to provide services to students with autism in inclusive programs (Robinson, 2011), making the use of paraeducators a common practice (Hall, Grundon, Pope, & Romero, 2010). Not only are paraeducators utilized more, but also their role has dramatically evolved and expanded (Killoran et al., 2011). In the general education environment paraeducators are now providing 1-to-1 academic instruction (Carter, Cushing, Clark, & Kennedy, 2005; Hall et al., 2010), serving as primary interventionists, adapting academic materials, encouraging student communication (Minondo, Meyer, & Xin, 2001), delivering literacy instruction (Causton-Theoharis, Giangreco, Doyle, & Vadasky, 2007; Lane, Fletcher, Carter, DeLorenzo, & Dejud, 2007), providing support for related services, communicating with parents (Riggs & Mueller, 2001), and delivering social skills instruction (Causton-Theoharis & Malmgren, 2005; Quilty, 2007).

With the expanding role of paraeducators, the No Child Left Behind (NCLB) legislation mandates that paraeducators participate in some form of training (No Child Left Behind [NCLB], 2002). Unfortunately, a mounting body of literature shows that paraeducators lack the necessary training needed to support students with disabilities (McCulloach & Noonan, 2013). Paraeducator training is generally unavailable, deficient, or limited in content (Hall et al., 2010), yet they work with the most difficult student population (Cautson-Theoharis & Malmgren, 2005). Although the placement of paraeducators is intended to help students with disabilities succeed in inclusive settings (Giangreco, 2010), the deficient amount of training provided to paraeducators has been shown to negatively affect the progress of the students they support (Giangreco, Edelmanm Luiselli & MacFarland, 1997). Unfortunately, the support of an untrained paraeducator can actually hinder the intended objectives of inclusion (Cautson-Theoharis & Malmgren, 2005).

As more students continue to be diagnosed with autism (Bolton & Mayer, 2008; Crosland & Dunlap, 2012) and as more school districts look to inclusive practices (Giangreco, Suter, & Doyle, 2010; Minondo et al., 2001), the impetus for highly qualified and trained paraeducators becomes of even more importance. Further, due to a lacking body of empirical literature, it is unclear what guidance the research base provides on training paraeducators who support students with autism. While the current literature suggests that paraeducators would benefit from more training, it is less clear how such training should be delivered (Brock & Carter, 2013). Training

approaches for paraeducators have been experimentally tested in a limited number of studies, and most of these studies lacked replicable training processes (Brock & Carter, 2013), leaving paraeducator training one of the least investigated and potentially most significant areas of special education (Giangreco et al., 2001).

Currently 15 experimental studies (Bessette & Wills, 2007; Bingham, Spooner, & Browder, 2007; Brock & Carter, 2013; Causton-Theoharis, & Malmgren, 2005; Feldman & Matos, 2013; Maggin, Fallon, Sanetti & Ruberto, 2012; Malmgren, Causton-Theoharis, & Trezek, 2005; Martella, Marchland-Martella, & Macfarlane, 1993; McCulloch & Noonan, 2013; O'Keefe, Slocum, & Magnusson, 2013; Owens, Fredrick, & Shippen, 2004; Quilty, 2007; Robinson, 2011, Singer, Sowers, & Irvin, 1986; Toelken & Miltenberger, 2012) have examined the effects of training on paraeducators who support school-age students with disabilities in a public school setting in the United States. Almost all of the studies focused on adaptive and behavioral skills, while two targeted academic interventions (O'Keefe, Slocum, & Magnusson, 2013; Owens, Fredrick, & Shippen, 2004). Although all studies reported positive outcomes in response to providing training to paraeducators, all of the studies, except one (Robinson, 2011), concentrated on isolated skills or skills specific to a particular student (e.g., Picture Exchange System, social stories). Unlike the other studies, Robinson (2011) examined a training package that included several universal behavior management strategies that could be applied across students. Moreover, of the 15 studies, only six studies conducted some portion of the study in an inclusive setting (Causton-Theoharis & Malmgren, 2005; Feldman & Matos, 2013; Malmgren, Causton-Theoharis, & Trezek, 2005; Quilty, 2007; Robinson, 2011; Toelken & Miltenberger, 2012), and six studies (Causton-Theoharis & Malmgren, 2005; Feldman & Matos, 2013; McCulloch & Noonan, 2013; Quilty, 2007; Robinson, 2011; Toelken & Miltenberger, 2012) included at least one participant with a diagnosis of autism. The training procedures used across the studies fell into categories by those that used didactic instruction (Causton-Theoharis & Malmgren, 2005; Koegel et al., 2014; Malmgren et al., 2005; Quilty, 2007; Toelken & Miltenberger, 2012), didactic instruction with performance feedback (Brock & Carter, 2013; Feldman & Matos, 2012; Maggin et al., 2012; Martella et al., 1993), performance feedback with modeling (Robinson, 2011), online instruction (McCulloch & Noonan, 2013), or video modeling (Brock & Carter, 2013). Although the paraeducator training research base does not shed light on the most effective paraeducator training methods, there is a strong research base for effective teacher training practices. Within the teacher training literature base researchers have found that didactic instruction alone is not enough to maintain newly acquired skills (Hans & Weiss, 2005; Noell et al., 1997) and that training packages that include performance feedback have shown promising effects (Duchaine, Jolivette, & Fredrick, 2011; Hawkins & Heflin, 2011). Although performance feedback has been found to have strong positive effects with teachers, it appears to be infrequently used with paraeducators. Paraeducator training is most often conducted through single-event workshops (i.e., school in-service days; Brock & Carter, 2013), which have shown to be minimally effective on paraeducator behavior (Barnes, Dunning, & Rehfeldt, 2011).

Overall, authors from these 15 experimental studies found that providing relatively brief training programs improved both paraeducator and student performance. Further, across all six studies most paraeducators were able to maintain, and in some cases generalize, the newly acquired skills. Paraeducators also reported moderate to high satisfaction with the training they were provided, and most said they would recommend the training to other paraeducators. Those

paraeducators that were provided with some type of coaching reported that they greatly appreciated and benefited from the specific feedback.

In addition to the experimental studies, 15 survey studies investigated paraeducator training in the United States to varying degrees. Many of the studies approached the training needs of paraeducators relative to a specific area, such as gym class (Davis, Kotecki, Harvey, & Oliver, 2007; Lieberman & Conroy, 2013), transition services (Morehouse & Albright, 1991), and occupational education (Whitaker, 2000), while several others touched on the training needs of paraeducators within a broader survey (Carter, O'Rourke, & Sisco, 2009; Downing, Ryndak, & Clark, 2000; Hilton & Gerlach, 1997). Of the 16 survey studies only three focused specifically on the general training needs of paraeducators (e.g., adequacy of training, amount of supervision, continued training needs, responsibilities; Breton, 2010; Passaro, 1994), with just one survey (Riggs & Mueller, 2001) that investigated the training needs of paraeducators who work in inclusive settings. All three manuscripts addressed many aspects of the paraeducator profession with a brief section that focused specifically on training needs. These three studies consistently revealed a lack of paraeducator professional development, with most training being provided intermittently from coworkers. The findings from these studies also indicated that paraeducators need more training that specifically focuses on preventing and responding to student problem behavior. Although Riggs and Mueller (2001) focused on paraeducators who work in inclusive environments, there are currently no surveys in the literature that examine the training needs of paraeducators who work in inclusive settings and specifically support students with autism. Further, two of the three studies that examine the general training needs of paraeducators do so by considering the perspectives of solely the paraeducators. Only Passaro (1994) considered the perspectives of special education teachers and administrators and found that although most of the paraeducators felt somewhat prepared for the responsibilities associated with their position, school administrators and teachers felt that the paraeducators lacked the necessary competencies for their position. Passaro (1994) suggested that further research is needed that examines the specific needs and most effective training delivery approaches for paraeducators. With paraeducators most often working directly under the supervision of a special education teacher (Carnahan, Williamson, Clarke, & Sorensen, 2009; French, 2003) and with the leadership role principals hold, it may be beneficial to consider their perspectives on paraeducator training as well.

With both limited and dated survey literature relative to the training needs of paraeducators, this survey sought to add to the current research-base by identifying the most current paraeducator training practices being used, assessing the barriers to paraeducator training that schools face to the literature, focusing on inclusive settings, targeting paraeducators who specifically support students with autism, and obtaining multiple perspectives within the school structure. Therefore, the purpose of this exploratory study was to identify both the current practices and barriers to training for paraeducators who work with students with autism in inclusive settings and compare and contrast the perspectives of principals, special education teachers, and paraeducators relative to these training practices and barriers.

Method

Survey Distribution and Data Collection
This anonymous survey was conducted in public schools in both Pennsylvania and Tennessee. E-mail addresses were obtained through the Tennessee Department of Education and through the Pennsylvania Tri-State Area School Study Council. Pennsylvania professionals were of primary interest; however, in order to extend the sample size, Tennessee professionals were also included in the study. The targeted survey population was elementary school principals, special education teachers who work within an inclusive model, and paraeducators who support students with autism in an inclusive environment.

The survey was created and disseminated through the Qualtrics Survey Software. Survey links, along with an explanation of the study, were e-mailed to elementary school building principals. Building principals were then asked to both complete the survey and forward the e-mail containing the survey links (i.e., a link for principals, a link for special education teachers, and a link for paraeducators) to their special education teachers and those paraeducators who work in inclusive settings. Once the survey was distributed, participants had eight weeks to complete the survey, with a reminder e-mail sent at four weeks. The reminder e-mail contained a similar explanation of the study as well as the survey links.

Survey measure. The survey measure was created following several steps. First, the experimental and survey literature on paraeducator training was reviewed. Then, using the survey literature base as a guide (Passaro et al., 1994; Vasa, Steckelberg, & Ronning, 1982) preliminary survey questions were drafted. A school psychologist, elementary school paraeducator, elementary school principal, university special education research faculty member and two elementary special education teachers piloted the study and then assessed both the face and content validity of the survey (Litwin, 1995). Reviewers provided feedback based on the structure of the questions, the design of the survey, the addition or removal of specific questions, and the ease of understanding the questions. Minor revisions were made to the questions based on the received feedback and the school psychologist and university research faculty member reviewed the survey one final time.

Each survey was comprised of two components. The first component addressed individual and building demographics specific to the position of the respondent. The second component of the survey asked questions about current paraeducator training practices and the barriers faced in regard to such training. The style of response varied among the questions, consisting of multiple-choice, open-ended, and rating scales. Multiple choice questions required participants to either select one or two responses, while open-ended questions asked participants to respond with one answer or list three responses. Table 1 outlines the survey questions presented to each participant group.

Table 1
Survey questions per participant group.

Principals	Special Education Teachers	Paraeducators
Component A		
1. What is the race/ethnicity make up of the student population in your building? 2. What percentage of the student population receives free and reduced lunch? 3. Describe the area in which your building is located. 4. How many paraeducators are employed in your building that work in inclusive settings?	1. What is your race/ethnicity? 2. How many years have you been a special education teacher? 3. What is the highest education you have received? 4. If you have a degree(s), please specify. 5. Please describe any other certification you hold or training that you have received. 6. Describe the average breakdown of your teaching hours between self-contained/special education settings and inclusive settings per day. 7. How many of the students on your caseload have a diagnosis of ASD? What percentage of your caseload do these students make up? 8. Of those students on your caseload with ASD, how many are included in the regular education environment for the following durations during the day? 9. Of those students with ASD on your caseload included in the regular education classroom for any portion of their school day, how many have paraeducator support services provided to them while in the regular education	1. What is your race/ethnicity? 2. How many years have you been a paraeducator working with special education students? 3. What is the highest education you have received? 4. If you have a degree(s), specify what the degree(s) is/are in. 5. Please describe any other certifications you hold or specific training that you have received relative to your training.

environment? What percentage of your students with ASD do they make up?

10. On average, how many students with ASD do the paraeducators under your direction support at one time in an inclusive setting?

Component B

1. How often are the paraeducators that work with students with ASD in inclusive settings in your building trained on special education content during the school year?
2. What type of content is most often focused on during training sessions?
3. How is this training primarily conducted?
4. Who normally provides paraeducator training?
5. Do you feel that the paraeducators that work with students with ASD in inclusive settings are provided with an adequate amount of training throughout a school year?
6. In what ways/why do you feel training is adequate or inadequate?
7. List three barriers that prevent your building from implementing more effective and tailored training opportunities to your paraeducators that work with students with ASD in inclusive settings.

1. Do you feel that the paraeducators that work with students with ASD in inclusive settings are provided with an adequate amount of training throughout a school year?
2. In what ways/why do you feel training is adequate?
3. List three barriers that you feel prevent your district from implementing more effective and tailored training opportunities to the paraeducators.
4. List three ways you think the paraeducator training in your building could be improved.
5. How many hours a week do you dedicate to assisting, training, and/or guiding paraeducators?
6. What content/topics do you think would be most beneficial for paraeducator training to focus on?
7. Is there anything else you think we should know about paraeducator training in your school?

1. How often are you trained on special education content during the school year?
2. What type of content is most often focused on during training sessions?
3. How is this training primarily conducted?
4. Who normally provides the training?
5. Do you feel that the paraeducators who work with students with Autism Spectrum Disorders (ASD) in inclusive settings are provided with an adequate amount of training throughout a school year?
6. In what ways/why do you feel training is adequate or inadequate?
7. List three barriers that you feel prevent your building from implementing more effective and tailored training opportunities to you.
8. List three ways you think the paraeducator training in your building could be improved.
9. How often are you observed and provided with individual and formal (i.e., written documentation, discussion with notes, conferencing) performance feedback (i.e., feedback on your performance with

8. List three ways you think the paraeducator training in your building could be improved.
9. Is there anything else you think we should know about paraeducator training in your school?

students and specific strategies) by a trained professional during a school year?
10. How comfortable are you with the role and responsibilities you hold as a paraeducator in relation to the amount of training you have received?
11. Is there anything else you think we should know about paraeducator training in your school?
12. How would you rate your overall job satisfaction as a paraeducator who supports students with ASD in inclusive settings?

Data analysis. Multiple-choice questions were analyzed qualitatively and quantitatively. Open-ended questions were analyzed by (1) identifying and categorizing common themes that emerged from the participants' responses, and (2) calculating the total number of common responses within each participant group. Once the descriptive data was coded and grouped by theme, quantitative comparisons could be made across the participant groups. Both multiple-choice and open-ended questions were further analyzed using the non-parametric Mann Whitney U test of mean ranks to identify possible differences in responses across the three participant groups. All Mann Whitney U tests were conducted at the p <.05 significance level.

Results

Participants

A stratified sampling method was employed by sending 551 e-mails to all of the elementary school principals. Of the 551 e-mails sent, 96 individuals completed the survey across the three participant groups. Of the 96 individuals who completed the survey, 61 participants identified themselves as a principal, resulting in a response rate of 11% for principals. Additionally, 13 elementary special education teachers and 22 paraeducators who work with elementary students with autism in inclusive settings completed the survey. Although the current figures calculate a 17% response rate, the true response rate is unable to be determined. Due to the distribution of the survey being dependent on principals (e.g., principals forwarding the e-mail to teachers and paraeducators), it is unknown how many special education teachers and paraeducators were presented with an opportunity (i.e., received an e-mail) to participate in the survey.

School population. Building principals were asked to provide demographic information regarding the composition of their student population. Across the 61 elementary schools most principals reported that their schools primarily served Caucasian students. Further slightly more than half of the schools were located in a rural setting, with the other half of schools located in either a suburban or urban environment. On average, across all of the schools, building principals reported that 52%, with a range from 9%-100%, of their school population received free and reduced lunch. Table 2 provides the demographics of each school.

Special education teachers. All of the special education teachers identified themselves as Caucasian. More than half of the special education teachers reported earning a Master's Degree, with 38% of special education teachers reporting an earned Bachelor's Degree. Years of experience varied across all special education teachers ranging from less than one year to more than 15 years, with all special education teachers reporting that they held at least one additional related certification. Table 2 provides the demographics of the special education participants.

Paraeducators. Most of the paraeducators included in the study identified themselves as Caucasian. Reported years of experience ranged from one year to more than 16 years and just under half of the paraeducators reported high school as their highest level of education. Four paraeducators reported having earned a degree beyond high school, all in a field unrelated to education. Table 2 provides the demographics of the paraeducator participants.

Table 2
Participant Demographics
*Note: The number of participants within each group differ depending on how many individuals from that subgroup responded to the survey.

School Population (n=61)

Race/Ethnicity	Caucas.	Af. Am.	Hispan.	Asian	Multi.	Nat. Am.	Other
	94%	3%	1.3%	1.16%	.81%	.06%	11%

Location	Rural	Suburban	Urban
	53%	36%	11%

Sp. Ed. Teachers (n=13)

Race/Ethnicity	Caucas.	Af. Am.	Hispan.	Asian	Multi.	Nat. Am.	Other
	100%	0%	0%	0%	0%	0%	0%

Education	B.S. Ed.	M.S. Ed
	38%	62%

Certifications	Early Ch.	El. Ed.	ESL.	SLP.	Admin.	Psy.
	23%	54%	8%	8%	15%	15%

Years of Experience	<1	1-5	6-10	10-15	15+
	15.38%	23.08%	7.69%	7.69%	46.15%

Paraeducators (n=22)

Race/Ethnicity	Caucas.	Af. Am.	Hispan.	Asian	Multi.	Nat. Am.	Other
	95.45%	0%	4.55%	0%	0%	0%	0%

Years of Experience	<1	1-5	6-10	10-15	15+
	0%	19.05%	23.81%	33.33%	23.81%

Education	HS Dip.	College	Assoc.	Bach.	Grad.	Other
	47.62%	14.29%	9.52%	4.76%	4.76%	19.05%

Paraeducator Training

Each participant group answered questions relative to the adequacy and frequency of training, the provider of training, the approaches used to conduct the trainings, and the content most often focused on during training sessions. Table 3 details the participants' responses per each question.

Adequacy. When asked whether or not paraeducator training was adequate about half of each participant group reported that the current training opportunities given to paraeducators were not adequate.

Frequency. Although significantly more paraeducators than principals reported that they are trained between 21-30 hours per school year, a significant number of principals conversely reported that paraeducators are only trained an average of 0-10 hours per school year.

Trainers/Instructors. When asked who most often provides paraeducator training, almost half of the paraeducators reported that an outside agency representative most often provides professional development, while principals mostly reported the director of special education implements such trainings. Further, some principals reported that the special education teacher is the main paraeducator trainer, while only one paraeducator identified special education teachers as someone who provides training. Moreover, almost half of the special education teachers reported that they spend less than one hour a week providing training and assistance to paraeducators.

Training approaches. Half of the paraeducator participants and just over half of the principals stated that paraeducator training is primarily conducted through a presentation format. In regard to performance feedback (i.e., a brief meeting between a consultant and a consultee following the consultant observing the consultee in the natural environment; Fallon et al., 2014), only 5% of paraeducators and 13% of principals reported this as a current training practice. Almost half of the paraeducators reported that they are never provided with any type of formal or written performance feedback.

Content of training. A little under half of both paraeducators and principals indicated that the focus of professional development is often on behavioral management and practices. However, when asked which topic area would be most beneficial for paraeducators to receive training, 83% of special education teachers reported that behavior management and practices as the area that needed the most additional professional development.

Table 3
Paraeducator training results.

Adequacy

	Yes	No
Principals	45%	55%
Sp. Ed. Teach	38.48%	61.54%
Paraeducators	57.14%	42.86%

Frequency (hours)

	0-10	11-20	21-30	31-40	40+
Principals	57.14%*	23.81%	11.90%*	4.76%	2.38%
Paraeducators	19.05%*	28.57%	47.62%*	0%	4.76%

	<1	1-2	3-4	5-6	6+
Sp Ed. Teach: Time spent training	41.67%	41.67%	8.33%	0%	8.33%

Trainers (select 2)

	Sp. Ed. Dir.	Sp. Ed. Tch.	Agency	Admins.	Other
Principals (n=65)	38.46%	16.92%	27.69%	16.92%	0%
Paraeducators (n=20)	25%	5%	45%	15%	10%

Approach (select 2)

	Present.	Online	Modeling	Model + PF	Readings	Other
Principals (n=60)	78.57%	21.43%	16.67%	19.05%	7.14%	0%
Paraeducators (n=36)	90%	40%	25%	10%	10%	5%

Content (select 2)

	Policies	Academic	Behavior	General	Other
Principals (n=79)	42.86%	45.24%	59.52%	40.48%	0%
Paraeducators (n=42)	60%	15%	90%	35%	10%
Sp. Ed. Teach: Content needed to be focused on	0%	8.33%	83.33%	8.33%	0%

*denotes significant difference between participant groups, p. <05 according to Mann Whitney U, test of mean ranks.
**Note: The number of responses within each group differ depending on how many individuals from that subgroup responded to each specific question.

Barriers to Training

When given an open-ended question to identify barriers to implementing more effective training for paraeducators 12 common categories across all three participant groups emerged. These 12 categories are displayed in Table 4. Across the three participant groups the most frequently reported barriers included time and money. Further, there was a significant difference between the number of paraeducators and principals that identified a lack of paraeducators on staff as a barrier. Additionally, significantly more special education teachers than paraeducators reported that the lack of quality trainers posed a barrier to providing paraeducator training. Lastly, significantly more paraeducators than principals identified a lack of respect towards paraeducators as a barrier. Specifically paraeducators identified "poor listening skills on the part of administration," "not being invited to participate in IEP meetings," lack of time allocated to "communicate about our students," "not enough substitutes for paraeducators," and "lack of respect from administration" as barriers surrounding paraeducator training.

Table 4
Reported barriers to paraeducator training.

Barrier	Paraeducators (n=30)	Sp. Ed. Teach. (n=19)	Principals (n=95)
Time	30%	42.11%	30.52%
Money	20%	15.79%	28.42%
Lack of Trainers/Quality Training	3.33%*	31.58%*	16.84%
Lack of Respect/Priority/Communication	16.66%*	5.26%	3.15%*
Varying Disabilities/Student Needs	3.33%	5.26%	6.31%
Paraeducators Understaffed	10%*	0%	1.05%*
Contracts/Policies/Mandates	0%	0%	5.26%
Turnover Rate	0%	0%	1.05%
Varying Levels of Experience	3.33%	0%	0%
Schedule Conflicts	3.33%	0%	3.15%
Location/Space	6.66%	0%	0%
Lack of Substitutes for Paras	3.33%	0%	1.05%

denotes significant difference between participant groups, p. <05 according to Mann Whitney U, test of mean ranks.
**Note: The number of responses within each group differ depending on how many individuals from that subgroup responded to each specific question. Participants were encouraged to select up to three responses.

Improving Paraeducator Training

When given an open-ended question to share ways to improve paraeducator training, responses yielded 10 reoccurring themes. Table 5 shows these 10 themes across the three participant groups. Paraeducators suggested that providing options for training, such as team/group trainings, and structuring training sessions in a more focused and detailed manner would be most helpful. Additionally, several paraeducators reported that establishing an increased level of respect for paraeducators and improving communication among administrators and paraeducators would improve paraeducator training overall. Specifically, paraeducators identified "ask paraeducators what they feel would help us do our jobs better," "take us seriously and give us respect," "communication among coworkers," and "training in the areas

you work, for example do not give copier training when you do not copy," as suggested improvements.

Special education teachers felt that increasing the frequency of trainings would be most helpful, while several also felt that more team/group trainings would improve paraeducator training. Further, special education teachers identified more focused trainings, improved paraeducator respect, additional training options, more outside agency speakers, contractual changes, and increased pay for paraeducators as possible means to improve paraeducator training.

Building principals indicated that increasing the frequency of training, obtaining more funding, and allocating time for trainings would improve paraeducator training the most. Further, several principals reported that giving paraeducators more options for training and providing more focused sessions would be beneficial. Significantly more principals than paraeducators identified increased funding as a way to better the training given to paraeducators. Lastly, significantly fewer principals than paraeducators identified increasing the level of respect given to paraeducators as a way to improve paraeducator training.

Table 5
Reported ways to improve paraeducator training.

Improvement	Paraeducators (n=31)	Sp. Ed. Teach. (n=17)	Principals (n=67)
Increase Frequency of Trainings	12.90%	41.18%	17.91%
More Team Meetings/Trainings	12.90%	11.76%	8.96%
More Detailed & Focused Trainings	22.58%	5.88%	10.45%
Respect/Priority/Communication	22.58%*	5.88%	1.50%*
More Options for Training	16.12%	5.88%	11.95%
More Agency & Guest Speakers	3.22%	5.88%	5.98%
Contractual Changes	0%	5.88%	8.96%
More Funding/Grant Money	0%*	0%	14.93%*
Designated Time for Training	9.68%	0%	11.95%
Increase Pay for Paras	0%	5.88%	1.50%

denotes significant difference between participant groups, p. <05 according to Mann Whitney U, test of mean ranks.
**Note: The number of responses within each group differ depending on how many individuals from that subgroup responded to each specific question. Participants were encouraged to select up to three responses.

Job Satisfaction
Responses varied when paraeducators were asked about their comfort with the responsibilities they hold as a paraeducator in relation to the amount of training they have received. Paraeducator responses evenly ranged from somewhat comfortable to very comfortable in regard to how comfortable they are in their current position. Further, relative to job satisfaction, half of the paraeducators reported that they love their job, but it is very difficult, while the other half of paraeducators reported that they either love every aspect of their job or they have neutral feelings towards their position.

Discussion

The purpose of this study was to identify the barriers and current practices of paraeducator training for those paraeducators who support students with autism in inclusive elementary classrooms. In addition this survey sought to compare and contrast the perspectives on paraeducator training of building principals, special education teachers and paraeducators. The responses across all three participant groups suggest that schools face several common barriers when planning and implementing paraeducator training. The responses also suggest that the current training practices being used may produce greater effects if several specific areas are targeted for improvement.

On average, just over half of the participants reported that paraeducator training for those paraeducators who support students with autism in inclusive settings is inadequate. Although only just under half of paraeducators reported that their training was inadequate, 62% of special education teachers, those individuals who are considered the experts of their field and often directly supervise paraeducators, reported that paraeducator training was insufficient. All three participant groups recognized the need for increasing the frequency of training. Specifically, 81% of principals reported that paraeducators receive less than 20 hours of training per school year. Because the Pennsylvania School Code requires school districts to provide a minimum of 20 hours of training per school year for paraeducators (Pennsylvania School Code, 2008), the reported lack of this minimum amount of training may be a cause for concern.

This study also identified some concerns about the paraeducator training approaches employed by schools. Although a review of the literature revealed that there is minimal research on effective paraeducator training methods, the teacher training literature suggests that training packages that include performance feedback outperform those training approaches that rely on didactic instruction alone (Duchaine, Jolivette, & Fredrick, 2011; Hawkins & Heflin, 2011). Despite performance feedback being an evidence-based practice (Cornelius & Nagro, 2014) the results of this study suggests that it tends to be used infrequently with paraeducators. Over half of the paraeducators and principals reported presentation as the primary method of paraeducator training and only 6% of paraeducators and 13% of principals identified performance feedback as a commonly used training method. Further, almost half of the paraeducators reported that they had never received any form of individualized performance feedback. Reliance on didactic instruction as the primary paraeducator training approach may limit the effect on paraeducator performance. For example, 43% of paraeducators and 32% of principals reported that paraeducator training most often focuses on behavioral support for students with autism, yet 83% of special education teachers reported the need for paraeducator training to concentrate on behavioral support. If the focus of most paraeducator training sessions is on behavior, yet the actions of the paraeducators in the classroom indicate the need for behavioral support training, the current didactic training approaches may not be effectively preparing paraeducators.

There may also be some confusion in regard to who is responsible for providing training. Just under half of the paraeducators reported that an outside agency representative most often provides their training, whereas 38% of principals reported that it is the director of special education's role to provide such training. Further, several principals reported that the special education teachers were the main providers of paraeducator training, yet most of special

education teachers reported that they spend less than two hours per week assisting paraeducators. With inconsistencies being reported across the three participant groups it appears there may be some misperceptions on who should be providing training to paraeducators. Further, with a large number of paraeducators providing special education services to students with autism in inclusive settings, paraeducators are spending less time under the direct supervision of a special education teacher, resulting in less time for informal training provided by the special education teacher. With this shift in the delivery of support services for students with autism, clarifying who is responsible for providing paraeducator training may help to ensure that paraeducators are provided with an adequate amount of training per school year. This clarification would further help to alleviate the assumption that someone else is providing the training.

An additional concern raised by this study is the varying perceptions of respect and priority given to paraeducators. Although all participant groups recognized the need for increased training opportunities for paraeducators, time is often not allocated for such trainings. Additionally, several paraeducators reported that it is common for training sessions to be repetitive in nature, while several special education teachers and principals indicated that the training sessions offered are often of low quality. Both the minimum amount of time dedicated for training and the poor quality of trainings suggest that paraeducator training may not be a high priority within the school structure. Further, 23% of paraeducators also reported the need for more focused areas of training relative to their roles and responsibilities. Specifically, one paraeducator's response to ways to improve paraeducator training was to provide "training in the areas [paraeducators] work, for example, [do not provide] copier training when you don't copy." This statement indicates that some schools may be missing the importance of paraeducators and the intended objective of paraeducator training. Further, significantly more paraeducators than principals reported the need for more paraeducator respect and communication, suggesting that there may be a notion of under-prioritization felt by paraeducators which building level administrators might be unaware of. By not allocating an adequate amount of time for training, engaging in minimal communication with paraeducators, and delivering poor quality trainings, school administrators may unknowingly be sending an unintended and unappreciative message to paraeducators. Since paraeducators work with some of the most challenging students (Cautson-Theoharis & Malmgren, 2005), it is important to ensure they are given high quality and effective training, but it is also of equal importance to make sure their role and contribution to the school structure is valued.

Limitations
There were several limitations of this study. First, the data collected is based on the report of principals, special education teachers, and paraeducators who elected to participate in the survey, therefore limiting the diversity of the sample population. Additionally, an e-mail was sent to elementary school building principals requesting their participation in the survey and that they forward the survey onto the special education teachers and paraeducators who work in inclusive classrooms in their building. It is unknown how many principals forwarded the survey, making the response rate for special education teachers and paraeducators unable to be determined. This also may have impacted the total number of responses across all participant groups. Because the survey was anonymous the responses made by all three participant groups could not be linked, leaving it unclear which participants were employed by the same school. Lastly, since

paraeducator training practices are left to the discretion of the state, responses from Pennsylvania and Tennessee participants may have varied due to state-level mandates.

Implications for Practice
The findings of this survey affirm the need to continue to improve the training provided to paraeducators who support students with autism in inclusive settings. Several recommendations can be made based on the results of this study. First, moving beyond didactic instruction and incorporating some form of performance feedback may be a more effective approach to train paraeducators. In addition to being an evidence-based practice, performance feedback may also help encourage dialogue between paraeducators and school administrators, giving paraeducators more of a voice within the school structure. Second, clarifying who is responsible for paraeducator training throughout the school year may help to ensure that trainings are scheduled and executed. By eliminating the assumption that paraeducator training is being provided by someone else it is more likely that trainings will actually be carried out. Third, matching training sessions to the roles and responsibilities of the paraeducators may be more beneficial than universal school-wide professional development sessions, usually designed for teachers. Using the needs of the paraeducators, specifically those who support students with autism in inclusive settings, to inform training would both improve the communication between paraeducators and administrators and help to alleviate training sessions from being redundant. Lastly, recognizing the important role paraeducators play in the delivery of special education services and allocating time to foster the skills needed to support students with autism in inclusive classrooms may ultimately help to make inclusion successful for both the students and faculty.

Implications for Research
With the use of paraeducators being a common intervention for students with disabilities in inclusive settings (Hall, Grundon, Pope, & Romero, 2010) continued examination of training approaches for paraeducators who support students with autism in inclusive settings is needed. Building off of the recommended training practices discussed within the teacher training research base, paraeducator training research that investigated performance feedback as a training approach is needed. Further, studying training approaches that give paraeducators time to engage in professional dialogue with both their colleagues and supervisors may show positive effects on paraeducator performance. Lastly, the results of this survey suggest that many paraeducators feel underappreciated and not valued as a team member. Studies examining the level of respect given to paraeducators, the effect it has on both their performance and that of their students, and training approaches that enable paraeducators to have a voice may shed some light on the importance of making paraeducators a priority. Further, examining more effective ways to promote paraeducators as collaborative team members may serve to better prepare paraeducators for their ever-evolving role.

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