

Training Need Assessment for Administrators/Teachers of School for Children with Autism Spectrum Disorder

Dr. Muhammad Javed Aftab

Assistant Professor (Special Education), Department of Special Education, Division of Education (DoE), University of Education, Township, Lahore, Punjab, Pakistan

Email: drmjavedaftab@ue.edu.pk

Tehreem Jaffar

M.Phil. Scholar (Special Education), Department of Special Education, Division of Education (DoE), University of Education, Township, Lahore, Punjab, Pakistan, Email: tehreemjaffar2001@gmail.com

Ayesha Areej

MS (Clinical Psychology), Centre for Clinical Psychology, University of the Punjab, Lahore, Punjab, Pakistan, Email: ayshaareej10@gmail.com

Sana Jaffar

Lecturer Psychology, Higher education department, Punjab, Pakistan, Email: sanajaffar11@gmail.com

Abstract

This descriptive study explores a training needs assessment for administrators and teachers working with children with Autism Spectrum Disorder (ASD) in Pakistan. The study uses qualitative data from literature evaluations and past research to identify significant concerns relevant to ASD education today. Expert review was done to ensure the content validity of the questionnaire used in the study. The study included a sample of 100 educators from 15 special education schools in the Punjab region who provided information about their confidence, expertise, and skills in ASD. 40 questionnaire items were administered as part of the data collection process. After that, SPSS software was used to analyze the data, which used t-test, ANOVA test, and descriptive statistics. The results show that respondents generally felt confident about their understanding of ASD traits and their capacity to deal with related difficulties. However, training programs benefitted from additional focus on assistive technology, universal design learning, and Applied Behavior Analysis (ABA) therapy. The study highlights the significance of specialized training programs to close current gaps and improve teachers' skills to assist children with ASD. The study's conclusions include suggestions for further research, such as increasing the study's national reach, enhancing survey instruments for multidisciplinary use, and investigating various training options for professional growth. It also recommends looking into how healthy administrators who work with people with ASD might benefit from ABA therapy training. Through better policy and practice in special education, these results hope to progress the lives of children with ASD in Pakistan and around the world.

Keywords: Training need assessment, Autism Spectrum Disorder, Administrators, and Teachers, Children

Introduction

Autism spectrum disorder (ASD) is a neurodevelopmental disorder that affects people of all ages. It often manifests in early childhood as limited and repetitive behavior patterns and varying deficits in social communication exchanges (American Psychiatric Association, 2013). Different things influence children with autism. While some people with milder symptoms grow up to live independently, others may experience more severe symptoms that require ongoing help in their homes and places of employment. Consequently, it is essential to remember that autism is a spectrum condition that affects people in different ways and

to various degrees. The profile of learning difficulties and capacities is slightly different for every child with autism. Autism's precise etiology and causes are still a mystery. Since autism is a "spectrum disorder," meaning that each child's experience with the condition is unique, there are numerous treatment options for the condition, but they are all contentious. The treatment of autism has become increasingly complex due to the lack of recognized causes, as there are numerous treatment philosophies to consider, including behavioral, educational, medical, developmental, and cognitive. Although these viewpoints are similar, they each emphasize distinct areas (Seigle, 2003).

ASD now affects one in every 54 children in the US, making it the developmental impairment with the most significant rate of growth in the country, According to Maenner et al. (2020). Children from all social, racial, and ethnic origins are impacted. From roughly 296,000 in the 2007–2008 school year to 699,541 in the 2017–2018 school year, the number of pupils in public schools between the ages of 3 and 21 who were classified as having ASD more than doubled (National Centre for Educational Statistics, 2018).

Special education administrators' responsibilities, including directors, executive directors, and coordinators, are to plan for the delivery of special education and related services, distribute resources, and guarantee that instruction is appropriate (Thompson & O'Brian, 2007). Understanding the conditions in these settings is crucial for several reasons, including the complexity of the educational requirements of students with ASDs. First and foremost, special education administrators have to guarantee that children with disabilities have a free education that is tailored to their specific requirements. Secondly, administrators need to be aware of the demands of the students to distribute the resources required to achieve favorable results. Special education administrators must also be qualified to advocate the interests of the district and the students in legal matters. Parental and school district disputes over what qualifies as a free, adequate public education (FAPE) for kids with ASD are common. As Zirkel (2002) notes, the most quickly expanding area of litigation in special education is due process hearings and cases involving students with ASDs.

The awareness of ASDs among special education administrators will influence the kinds of instruction, resources, and related services offered for the development of academic and functional abilities as more children with ASDs are treated in the public school system. To guarantee a free and suitable education for this growingly diverse population, special education administrators must possess information and training about ASDs. Furthermore, education is a prerequisite for complicated decision-making, which is frequently required for an ASD diagnosis. Although several studies (Heidgerken et al., 2005; Schwartz & Drager, 2008) have looked into the knowledge and training of ASDs among professionals in the school environment and community, a literature search of electronic databases (ERIC, EBSICO, & PsychLit) did not turn up any studies that specifically looked into the knowledge of ASDs among special education administrators.

In Pakistan, researchers conducted a study to find out viewpoint of school administrators regarding services available for children with ASD and found that different therapeutic services are available (Fazil, & Sulman, 2024). Some other Training Need Assessment for teacher was carried out with special need children (Pasha et al., 2021) but specially no work has done regarding Training need assessment for administrator or teachers for ASD children. This study emphasizes how important it is for teachers to receive the right training to support children with Autism specifically in Pakistan where this ailment is rising at greater rate. It will also help spread awareness about ASD symptoms, risk factors, nature, and therapy selection.

Statement of Problem

It might be difficult for many schools that serve students with autism spectrum disorder (ASD) to give their administrators and instructors' hands-on training. There might be gaps in the training given to educators in this profession, although the distinctive needs of children with ASD call for specific knowledge and abilities. To ensure the best possible growth and support for students with ASD, it is imperative to identify these gaps and implement focused training programs to close them.

Objective of the Study

The study aimed to:

1. Determine the administrators' and teachers' training needs to comprehend and assist students with ASD efficiently.
2. Determine the administrators' and instructors' existing expertise in meeting the requirements of students with ASD.
3. Examine how much any current training programs meet educators' needs in this field.
4. Provide suggestions for the development and execution of focused training initiatives to close identified gaps and improve administrators' and educators' capacities to assist students with ASD.

Significance of Study

The study is significant because it has the potential to improve the ability of administrators/ teachers dealing with students who have ASD by identifying areas of need for training, assessing the level of current knowledge, and recommending specialized training programs. By filling in critical educational gaps and promoting inclusive learning settings, this can result in better support and outcomes for children with autism spectrum disorders.

Literature Review

This section of the literature review includes research areas such as autism symptoms, awareness, the influence of teacher training on children's improvement, and obstacles they face during therapy sessions and therapy implementation.

Autism is a neurobehavioral and neurodevelopmental illness that is characterized by a deficit in verbal and nonverbal communication, poorly maintained eye contact, a speech delay, and abnormal body movements. 62 out of 10,000 people are estimated to have autism spectrum disorders (ASD) (Elsabbagh et al., 2012). Nevertheless, DSM-V combined these conditions into one category, "autism spectrum disorder" (ASD), resulting in new diagnostic criteria consisting of four domains: Deficit in communication and social interaction, Unusual and repetitive behaviors, activities, and movements) Presentation in the early years of childhood and impeded daily activities (APA, 2013).

Autism is linked to several additional issues, including violence, self-harming behaviors, a poor attention span, epilepsy, and trouble sleeping. According to Imran and Azeem (2014), a small percentage of individuals with autism also have genetic problems such as Fragile X syndrome and Down syndrome. Autistic children also have high rates of anxiety and obsessive-compulsive behaviors. Negative social experiences like isolation, harassment, rejection, and stigmatization are commonplace. The general population frequently believes that children with autism are "mentally retarded," although this is untrue. While it is true that some people with ASD have mild to severe intellectual disabilities, many autistic people also have ordinary or even brilliant IQs. Occasionally, autistic people, "Savants," exhibit extraordinary aptitude in music, computer, mathematics, or remote memory (Treffert & Rebedew, 2015).

Also, understanding professional development for paraprofessionals serving students with ASD was sought. Through an explanatory, sequential mixed methods design, this knowledge was attained. Insight into training methods, requirements, and obstacles was obtained (Austin, 2013). By considering the perspectives of paraprofessionals who assist students with ASD, instructors of kids with ASD, and directors of special education, an interpretation of their professional growth was created. A deficiency in skills, training, and supervision was observed. Because they were not trained or supervised, paraprofessionals had to learn by making mistakes. Paraprofessionals who assist kids with ASD feel competent in carrying out their responsibilities due to their personal traits and efficient supervision. Paraprofessionals working with students with ASD want to receive customized training in behavior control (Austin, 2013).

Instructors' preparation for pupils with autism spectrum disorder (ASD) was experimentally assessed (Alexander et al., 2015). The authors compiled the study's qualitative data and participant characteristics. Next, factors about students' instructional strategies and learning objectives were grouped according to the evidence-based practices (EBPs) for people with ASD that Odom, Collet-Klingenberg, Rogers, and Hatton had identified.

Another factor used to categorize training components was the instructional format (individual, group, and self-instruction). Lastly, the application of standards made evaluating each study's rigor easier (What Works Clearinghouse). The results indicate that most research has been conducted on giving instructors individualized training on utilizing behavioral interventions to enhance students' communication skills (Alexander et al., 2015).

The training requirements for educators working with autistic students in South African special schools are the main topic (Ameen, 2021). It describes the education, skills, and attitudes educators with special education programs have toward working with autistic students. They conducted in-depth semi-structured interviews, observations, and field notes with eight teachers from four distinct schools in the province of Gauteng. According to the study, instructors' training helped them understand autism in general and how to instruct kids with autism using a variety of tactics. Evidence indicated that, in some instances, there was insufficient supervision over the training given. It brought to light teachers' preferences about training sources, with private providers being chosen over training provided by the Department of Education for various reasons, including training protocols and perceptions of expertise (Ameen, 2021).

To assess the professional development needs of educators and establish the most effective ways to help them deliver high-quality programming for children with autism spectrum disorders (ASD) within an inclusive educational system (Corkum, 2014). Educators have had a challenging time providing for the diverse and wide-ranging requirements of kids with ASD while adhering to a rigidly defined inclusive education approach. Teachers have always stressed the importance of multileveled, multipronged professional development that is timely, accessible, and available when needed. It emphasizes the importance of designing educational curricula that include students with ASD.

According to Desnoyer et al. (2019), the ASD-Diagnostic Criteria Questionnaire evaluates the kind and degree of training provided. The findings showed that, in comparison to their general education counterparts, special educators reported getting higher explicit levels of preservice and in-service instruction in the DSM-IV and DSM-V (APA, 2013) criteria as it relates to ASD. When means were compared to the maximum possible score, both groups had low scores even though they reported higher levels of training. Furthermore, general or special educators reported no variations in training between the DSM-IV (APA, 2000) and DSM-V (APA, 2013). Both general and special educators displayed misconceptions about the traits of ASD, expressed a lack of confidence in their ability to recognize a student with ASD, and indicated a need for more explicit training in their pre-service teacher preparation programs, according to qualitative analyses that supported these findings.

These results imply that the quality of instruction, coursework, and field experiences offered to teacher candidates in general and particular education teacher training programs should be evaluated about the education of students with disabilities and, more significantly, ASD (Desnoyer et al., 2019). Additionally, school districts must incorporate training programs that mainly

address the unique needs and difficulties faced by kids and teenagers with ASD. By providing clear guidance on operative diagnostic criteria, prejudices as a basis for student referrals will be less frequently used.

Special educators participated in answering questions about general knowledge, understanding of educational programming, awareness of classroom behaviors, and needs for professional development related to autism. They found that special educators knew little about autism in general and even less regarding educational programming and the behaviors of autistic students in the classroom. Furthermore, their degree of education and years of job experience differed, as did their awareness of autism. They highlight the necessity of raising awareness by educating and training special educators who work with autistic children (Tiwari & John, 2017).

Teachers are perceived as constructive agents of social transformation. At its best, teacher education focuses on future goals rather than telling students how things are now because it prepares them for what is ahead. Training programs contain lessons that help students understand social and ethical issues. Theoretical ideas, including learning, inclusive education, diagnosis, and disability, are taught to them. Information about the evolution of special education throughout history is covered in programs. Students study the critical components of education and how to evaluate how accessible different learning settings are (Raemae et al., 2019). As a result, the literature study revealed that a crucial component of the education of children with ASD is teacher training, which helps them understand autism in general, develop skill sets, and instruct kids with autism using a variety of tactics, etc.

Methodology

Research Design

In Pakistan, microscopic researches have been conducted on “Training Need Assessment for Administrators/Teachers of School for Children with Autism Spectrum Disorder”. The type of research is “descriptive”. Therefore, the qualitative data from previous research from different countries and literature reviews from articles, journals, reports, and books will be used to identify the research issues. Descriptive research studies are planned to acquire valid and particular information about the present position of a phenomenon and, wherever probable, to draw an effective overall conclusion from the particulars discovered (Kombo & Tromp, 2006).

Content Validity

A panel of experts was consulted to determine the content validity of the questionnaire. Each item of the questionnaire was consulted with field experts, and each item's application was discussed, modified, updated, and finalized with the experts' opinions. Ambiguous and confusing statements were changed to make the meaning clear and easy to understand.

Content Reliability

The self-developed questionnaire was used as a data collection instrument. The consistency of the questionnaire was used to collect data on the students observed by teachers of mentally challenged children. The reliability of the tool was checked. Cronbach's Alpha of the instrument was (.956).

Population & Sampling

The study's population includes administrators/teachers of different Special Education schools in the Province of Punjab. Fifteen schools with a total of 100 (approximately) respondents were used for the study. A total of 100 teachers, 29 male and 71 female, participated in the study. A simple random sampling procedure was used to select participants. The sample size consisted of 100 educators who were conveniently selected from the following institutions: 15 Special Education schools in the Province of Punjab.

Research Instruments

The questionnaire was the only instrument used to collect data for this research. It was prepared and presented to the experts for their opinion about the format and contents in English to determine its validity. The experts returned the questionnaire along with their comments and suggestions. Finally, the questionnaire contained 40 items covering all the components of training need assessment for administrators/teachers of schools for children with autism spectrum disorder.

Procedure of the Study

The researcher established a self-administered questionnaire comprised of 40 statements. The participant must respond on a 5-point Likert scale. The administrators/teachers of special education were given the questionnaire in hard and soft form. Only willing candidates were welcome to submit their responses. The qualified participants for this study were the special education teachers, psychologists, speech therapist and other school personal. The data were analyzed by using SPSS software. Based on the analysis, the findings were explained. According to the study results, recommendations were designed for further improvements.

Data Collection

Data was collected on the questionnaire-based instrument. The participants were provided the instrument in hard and soft form to submit their responses.

Data Analysis

The data were analyzed by using the statistical software SPSS. Descriptive statistical method, t-test and ANOVA test were applied to the collected data for analysis.

Limitations

Due to time constraints, our data gathering was restricted to some regions of Pakistan. If we had more time, we could have included two or three more cities nationwide in our data collection efforts.

Data Collection and Analysis Interpretation

Table I

Demographics of Sample

Category	Respondents	Frequency (f)	Percentage (%)
Gender	Male	29	29%
	Female	71	71%
Designation	SSET	15	15%
	JSET	21	21%
	Psychologist	24	24%
	Headmaster	12	12%
	Speech therapist	28	28%
Academic Qualification	B.A./B.Sc./BS (Hons)	29	29%
	M.A./M.Sc.	18	18%
	MS/M.Phil.	53	53%
Professional Qualification	M.Ed. Special Education	17	17%
	B.Ed. Special Education	41	41%
	BS Psychology	14	14%
	Diploma in ASD	6	6%
	PDG in SLT	12	12%
	Others (if any)	10	10%
Administrators Experience	1-5 Years	58	58%
	6-10 Years	22	22%
	11-15 Years	9	9%
	16-20 Years	4	4%
	21-25 Years	3	3%
	26-30 Years	4	4%
Age of Respondents	25-30 Years	62	62%
	31-35 Years	15	15%
	36-40 Years	4	4%
	41-45 Years	8	8%
	46-50 Years	2	2%
	51-55 Years	7	7%
	56-60 Years	2	2%

Research Instrument

The only instrument used to gather data for this study was the questionnaire. To ascertain the validity of it, the questionnaire was developed and checked by experts for their feedback. The specialists returned the questionnaire with their feedback and recommendations. There were 40 items on the questionnaire that addressed every aspect of evaluating the training needs of administrators and teachers who work with ASD children. The questionnaire was finalized, and it was given to five people for pilot testing. The results were completed, and the final 40 items were included in the instrument.

Data Collection and analysis

Table 2

Frequency Distribution of responses

Knowledge and understanding of ASD

Sr.	Items	SA	A	N	DA	SDA	M	SD
1	I'm confident in my comprehension of how children with ASD deal with sensory sensitivity issues.	16	54	17	4	9	3.64	1.08
2	I am knowledgeable about the severity levels of ASD and its distinct characteristics.	22	53	12	8	5	3.79	1.03
3	I understand the importance of early intervention for children diagnosed with ASD.	44	37	4	10	5	4.05	1.15
4	I feel confident describing ASD- related symptoms and challenges to others (e.g., parents, colleagues).	30	51	4	10	5	3.91	1.09
5	I understand the impact of ASD-related symptoms on their academic learning and social interaction-related development.	30	48	4	15	3	3.87	1.09

Table 3
*Frequency Distribution of responses
 Communication and Social Interaction*

Sr.	Items	SA	A	N	DA	SDA	M	SD
6	I can create visual supports (such as social stories and visible schedules) that help children with ASD communicate and understand one another better.	19	57	11	10	3	3.79	0.96
7	I can instruct children with ASD in social skills and practical language in an efficient manner.	23	56	8	8	5	3.84	1.03
8	I have experience utilizing assistive technologies to help children with ASD who are non-verbal or minimally verbally communicate.	22	52	11	6	9	3.72	1.14
9	I am knowledgeable about the challenges in social interaction faced by children with ASD and can address them in educational settings.	19	57	10	7	7	3.74	1.07
10	I serve nonverbal children with ASD by using augmentative and alternative communication (AAC) devices with confidence.	33	37	15	8	7	3.81	1.18
11	Throughout the classroom setting, I actively encourage and support peer connections and chances for	29	49	11	4	7	3.89	1.09

inclusion for children with ASD.								
12	I am skilled at guiding children with ASD through social settings by using social stories and scripts.	31	45	12	7	5	3.90	1.07
13	I promote self-determination skills in children with ASD, encouraging them to express their needs and preferences in social settings.	23	55	7	10	5	3.81	1.06
14	To enhance the social and communication skills of children with ASD, I am always looking for and implementing new strategies.	31	48	8	8	5	3.92	1.07

Table 4
 Frequency Distribution of responses
 Behavior Management

Sr.	Items	SA	A	N	DA	SDA	M	SD
15	I am skilled in using techniques for positive behavior support in the classroom.	31	46	10	8	5	3.90	1.08
16	I know how to apply the principles of reinforcement in behavior management plans.	32	49	6	6	7	3.93	1.12
17	I feel competent in carrying out functional behavior assessments to identify the causes of problematic behaviors.	26	48	8	13	5	3.77	1.12
18	I can distinguish between behaviors that indicate other problems (such as anxiety or sensory overload) and symptoms that are typical of children with autism spectrum disorders.	20	51	16	11	2	3.76	0.96
19	I actively look for and apply evidence-based practices (behavior methods) that help children with ASD manage their behavior.	24	54	8	11	3	3.85	1.00
20	Individualized behavior intervention plans (BIPs) that are suited to the requirements of every children with ASD are effectively created and implemented by me.	27	46	14	6	7	3.80	1.11
21	I have techniques for handling difficult situations and defusing tense situations with children who have ASD.	25	54	6	10	5	3.84	1.07
22	I am adept in identifying and resolving	22	48	15	10	5	3.72	1.07

	triggers/factors that could cause challenging behaviors in children with ASD.							
23	I know the fundamentals of Applied behavior Analysis (ABA) and how to use them to help children with Autism Spectrum Disorder.	31	41	16	5	7	3.84	1.13

Table 5
Frequency Distribution of responses
Individualized Instruction

Sr.	Items	SA	A	N	DA	SDA	M	SD
24	I can create and implement individualized education plans (IEPs) for children with ASD.	20	60	9	2	9	3.80	1.07
25	I can adept IEP and teaching methods to the unique needs of children with ASD.	32	49	10	0	9	3.95	1.1
26	I know how to use data to monitor the child's progress and modify instructional methods accordingly.	30	49	10	4	7	3.91	1.09
27	I am adept at helping children with ASD develop independence and self-regulation (thoughts, feelings, and behaviors).	31	48	8	8	5	3.92	1.07
28	I can work well with special educators to fulfill the unique needs of children with ASD.	31	45	8	9	7	3.84	1.17

Table 6
Frequency Distribution of responses
Collaboration and support

Sr.	Items	SA	A	N	DA	SDA	M	SD
29	I can build collaborative support with parents/guardians of children with ASD through effective communication.	39	49	8	6	7	3.89	1.1
30	I collaborate with other professionals (e.g., occupational and speech therapists) to assist children with ASD.	34	36	19	4	7	3.86	1.14
31	I support including and accepting children with ASD in the educational setting.	34	37	4	6	9	3.81	1.22

Table 7
Frequency Distribution of responses
Continuous Professional Development

Sr.	Items	SA	A	N	DA	SDA	M	SD
32	I continuously participate in	27	49	11	8	5	3.85	1.06

Sr.	Items	SA	A	N	DA	SDA	M	SD
33	continuous ASD-related development opportunities to learn from professionals. I look for webinars, seminars, and workshops highlighting the most effective methods for helping children with ASD.	14	60	13	4	9	3.66	1.06
34	I regularly study the most recent ASD research literature to guide my work.	25	51	13	4	7	3.83	1.07
35	I improve my knowledge and abilities in ASD education by utilizing online resources and training courses.	24	54	6	9	7	3.79	1.12
36	I continuously assess my teaching strategies and ask colleagues and supervisors for feedback on how I can best support children with ASD.	25	55	11	2	7	3.89	1.03

Table 8
Frequency Distribution of responses
Overall Training Needs Assessment

Sr.	Items	SA	A	N	DA	SDA	M	SD
37	In general, I feel that to effectively fulfill the needs of children with ASD in my educational context, I need more training and assistance.	23	53	11	4	9	3.77	1.12
38	I am confident in my present capacity to serve children with ASD, but I also understand the need for continued professional growth in this field.	24	56	4	7	9	3.79	1.15
39	To improve my approach, I'm willing to hear opinions and advice from professionals in ASD education.	33	50	4	4	9	3.94	1.16
40	To better assist families and children with ASD, I'm dedicated to constantly enhancing my knowledge and abilities.	35	46	4	7	8	3.93	1.18

Table 9
Overall descriptive Analysis

Sr.	Items	M	SD
1	Knowledge and understanding of ASD	19.26	4.78
2	Communication and Social Interaction	34.42	8.15
3	Behavior Management	34.41	8.01
4	Individualized Instruction	19.42	5.07
5	Collaboration and support	11.56	3.28
6	Continuous Professional Development	19.02	4.76
7	Overall Training Needs Assessment	15.43	4.24

Difference in the opinion among teachers about the Training Need Assessment

Table 10

Difference in the opinion among administrators/ teachers about the Training Need Assessment based on Gender

Gender	N	M	df	T	Sig.
Male	29	142.51	45.18	-1.69	0.09
Female	71	158.01	30.38		

*P < .05 Level of Significance

Above table shows that there is no significant difference in the opinion of the male and female participants regarding the training need assessment of administrators / teachers for the children with ASD.

Table 11

Difference in the opinion among administrators / teachers about the Training Need Assessment based on age of respondent (Independent sample t-test)

Age	N	M	S.D.	t	Sig.
25-30 years	62	151.24	35.63	-0.25	0.80
31-35 years	15	153.93	43.68		

*P < .05 Level of Significance

The above table indicates no significant difference in the administrators/teachers' opinion based on their ages.

Table 12

Difference in the opinion among teachers about the Training Need Assess based on type of designation (one-way ANOVA)

Descriptive Statistics

Designation Type	N	M	S.D.	Lower Bound	Upper Bound
JSET	21	155.23	23.37	139.89	170.58
Psychologist	24	141.50	4.05	127.14	155.85
Speech therapist	28	164.67	27.59	151.39	177.96

Groups	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	7612.37	4	1903.09	1.51	0.20
Within groups	11914.2	95	1254.13		

P < .05 Level of Significance

The mean value of the three conditions was not the similar as a One-Way ANOVA $F(4, 95) = 1.51, P = .20$. The pairwise comparison revealed that mean value different for all three groups as $M = 155.23, 141.50, \text{ and } 164.67$ with the significant value $P = .20$, which showed that there was no significant difference in the opinion of the administrator and teachers regarding the training need assessment based on their designation type.

Findings

Most respondents agreed they are confident about their knowledge and understanding of ASD. They know about the characteristics and severity level of ASD and understand the impact of ASD-related symptoms on their academic learning and social interaction-related development.

The utmost number of the participants responded that they can create visual supports (such as social stories and visible schedules) that help children with ASD communicate and understand one another better, experience utilizing assistive technologies to help children with ASD who are non-verbal or minimally verbally communicate, knowledgeable about the challenges in social interaction faced by children with ASD and can address them in educational settings, actively encourage and support peer connections and chances for inclusion for children with ASD, and promote self-determination skills in children with ASD, enabling them to express their needs and preferences in social settings. Maximum administrators /teachers feel they are competent in carrying out functional behavior assessments to identify the causes of problematic behaviors, distinguish between behaviors that indicate other problems (such as anxiety or sensory overload) and symptoms that are typical of children with autism spectrum disorders, create and implement individualized education plans (IEPs) for children with ASD. A record number of participants agreed that they continuously participate in ASD-related development opportunities to learn from professionals and look for webinars, seminars, and workshops highlighting the most effective methods for helping children with ASD. Most respondents

responded that the following training areas needed attention: applied behavior analysis (ABA), assistive technology, and universal design learning.

Conclusion

The study looked into a general understanding of ASD, the programming knowledge of ASDs, the training and experiences of special education administrators, and whether any of these variables expected trial. The interpretations of these results concerning the particular study issues are covered in this section: (1) Determine the administrators' and teachers' particular training needs to understand and assist students with ASD efficiently (2) Determine the administrators' and instructors' existing skill in meeting the requirements of students with the ASD (3) Examine the degree to which any current training programs meet the needs of educators in this field (4) Provide recommendations for the development and execution of focused training initiative to close identified gaps and improve administrator' and educators' capacities to assist students with ASD. This study observed that administrators/teachers face applied behavior analysis (ABA) therapy challenges. This part also discusses the possible significance of the findings on current procedures and ASD litigations and offers suggestions for future research.

Recommendations

- A more comprehensive understanding of the professional development requirements unique to special education administrators and ASDs would be possible if this line of inquiry was extended to include individuals from around the nation and region.
- Future studies to improve the survey tool for interdisciplinary use would make it more useful for examining professionals' knowledge and training requirements for ASDs in a variety of contexts.
- Observe the professional development preferences of special education administrators on supposed need themes through an examination of different training channels, including webinars, online courses, distance learning, web based modules, and on-site training, would be another subject of further research.
- The efficacy of educating administrators dealing with people who have Autism Spectrum Disorder (ASD) in Applied Behavior Analysis (ABA) therapy should be examined further.

References

- Alexander, J. L., Ayres, K. M., & Smith, K. A. (2015). Training Teachers in Evidence-Based Practice for Individuals with Autism Spectrum Disorder: A Review of the Literature. *Teacher Education and Special Education, 38*(1), 13-27. <https://doi.org/10.1177/0888406414544551>
- Ameen, N. (2021). Training needs for teachers teaching children with autism in special Schools. *Advances in Religious and Cultural Studies, 83-100*. <https://doi.org/10.4018/978-1-7998-4867-7.ch006>
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th Ed. Arlington, VA: American Psychiatric Association; 2013
- Austin, K. M. (2013). Training needs of paraprofessionals serving students with autism spectrum disorders.
- Corkum, P., Bryson, S. E., Smith, I. M., Giffin, C., Hume, K., & Power, A. (2014). Professional Development needs for educators working with children with autism spectrum disorders in inclusive school environments. *Exceptionality Education International, 24*(1). <https://doi.org/10.5206/eei.v24i1.7709>
- Desnoyer, B. J. (2019). An Analysis of Teacher Training Concerning the Identification of Students with Autism Spectrum Disorder.
- Elsabbagh, M., Divan, G., Koh, Y. J., Kim, Y. S., Kauchali, S., Marcín, C., Montiel-Nava, C., Patel, V., Paula, C. S., Wang, C., Yasamy, M. T., & Fombonne, E. (2012). Global Prevalence of autism and other pervasive developmental disorders. *Autism research: official journal of the International Society for Autism Research, 5*(3), 160–179. <https://doi.org/10.1002/aur.239>
- Fazil, H., & Sulman, S. (2014). Perceptions of School Administrators about Facilities Available in Schools for Children with Autism in Pakistan. *Academic Research International, 5*(4). 348-359.
- Finch, K., Watson, R., MacGregor, C., & Precise, N. (2013). Teacher needs for educating children with autism spectrum disorders in the general education classroom. *The Journal of Special Education Apprenticeship, 2*(2). <https://doi.org/10.58729/2167-3454.1027>
- Hughes, H., Bertina, H., Metha, S. S., (2012). Managing Autism: Knowledge and Training in Autism Spectrum Disorders Among Special Education Administrators in Texas. *Journal of Special Education Leadership, 25*(2). 90-98
- Imran, N., & Azeem, M.W. (2014). Autism spectrum disorders: perspective from Pakistan. In comprehensive guide to Autism. *Springer New York, 2483-2496*.
- Layden, S. J., Maydosz, A. S., Crowson, T. G., Horn, A. L., & Working, A. F. (2022). Administrators' roles in the use and training of evidence-based practices for students with autism spectrum disorder. *Journal of Special Education Leadership, 35*(1), 33-49
- Raemae, I., Pirttimaa, R., Ojala, T., & Pesonen, H., & Kontu, E. (2019). Teacher Training for Children with Autism Spectrum Disorders in Finland. http://doi.org/10.1007/978-981-13-8203-1_12.
- Tiwari, S., & John, J. (2017). Special educators' knowledge and training on autism in Karnataka: A cross-sectional study. *Indian journal of psychiatry, 59*(3), 359–365. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_133_17
- Treffert, D. A., & Rebedew, D. L. (2015). The savant syndrome registry: A preliminary report. *WMJ, 114*(4), 158-162.