

Exploring Indian Speech-Language Pathologists' Knowledge, Attitudes, and Practices in Assessing and Managing Feeding Difficulties in the Children on the Autism Spectrum

Shalini, M.¹, Swapna, N.²

¹M.Sc. SLP, (Ph.D.), Ph.D. Candidate, Centre for Swallowing Disorders, All India Institute of Speech and Hearing, A recognized Research Centre of University of Mysore, Mysuru, Karnataka, India.

ORCID ID: 0009-0005-2712-7639

²Ph.D., Professor and Co-ordinator, Centre for Swallowing Disorders, All India Institute of Speech and Hearing, A Recognized Research Centre of University of Mysore, Mysuru, Karnataka, India.

ORCID ID: 0000-0002-7381-4561

Corresponding Author: Shalini M.

DOI: <https://doi.org/10.52403/ijhsr.20260305>

ABSTRACT

Background: Feeding challenges in the children on the autism spectrum and the role of speech-language pathologists in its management have been documented in the literature. However, studies on understanding the knowledge, perceptions and practice patterns of Speech-Language Pathologists (SLPs) in India are limited.

Aim: This study investigated the knowledge, attitudes, and clinical practices of Indian SLPs on feeding challenges in the children on the autism spectrum.

Method: A questionnaire, which was developed through literature review and validated for its contents by experts was distributed via Google Forms to the Indian SLPs in the professional social media networks.

Results: A total of seventy-six responses were analyzed. Nearly, 84.2% of Indian SLPs recognized feeding issues in the children on the autism spectrum, however most acquired their knowledge through self-study (63.2%). Majority of the SLPs (92.8%) relied on informal procedures for assessing the feeding challenges in their autistic children. Most SLPs utilized oral sensory-motor (71.6%), sensory (64.2%) and behavioural (56.7%) approaches for feeding intervention, however evidences supporting their effectiveness were limited. Despite the awareness, most SLPs demonstrated limited confidence in service delivery and expressed their need for structured training in terms of specialized training courses (76.3%) and supervised clinical training (75%). Furthermore, significant correlations were witnessed between perceived confidence of the SLPs and amount and the appropriateness of training received ($p < 0.05$).

Conclusion: Indian SLPs were mostly aware of the feeding issues in the children on the autism spectrum, yet lacked the confidence in providing effective services, reflecting insufficient training. Clinical practice patterns varied widely among the SLPs. This could be likely due to the absence of consensus guidelines, lack of standardized assessment protocols, and limited but evolving evidence base for the treatment approaches. Enhancing structured training, developing standardized tools and supporting research-driven practices were crucial for improving care quality for these children.

Keywords: Autism Spectrum Disorders, Pediatric Feeding Disorders, Feeding difficulties, Speech-Language Pathology, Clinical practices in India, SLP knowledge and attitudes.

INTRODUCTION

Feeding difficulties are increasingly recognized in the children on the autism spectrum. These children have an increased likelihood of feeding problems in comparison with the typically developing children. [1] Research has shown that nearly 46%-89% of autistic children experience feeding difficulties [2], while the prevalence in neurotypical children was reported to be 25%-45%. [3] Children with autism have a heterogeneous profile of feeding issues, ranging from no difficulties to severe difficulties and the commonly reported feeding challenges encompass food selectivity [4, 5], food neophobia [6], oral motor delays or difficulties [7, 8] and chewing difficulties. [4, 9]

Speech-Language Pathologists (SLPs) demonstrate a potential role in the assessment and management of pediatric feeding disorders (PFDs). Therefore, studies assessing the current knowledge base of SLPs on the PFDs are crucial for identifying gaps that may necessitate targeted professional development. Several existing studies have already highlighted gaps in the education and confidence of SLPs in managing pediatric feeding disorders (PFD). For instance, research conducted in the United States revealed that SLPs and Occupational Therapists (OTs) often feel underprepared upon entering clinical practice in PFDs, but were reported to gain competence through post-graduate training and experience. [10]. Similarly, studies by Neubauer & Singleton (2023) and Wilson et al. (2020) displayed low initial confidence among SLPs in addressing PFDs and a lack of structured coursework on pediatric dysphagia during graduate training. [11, 12] In a study conducted on Pakistan based SLPs, almost 60.51% reported insufficient clinical expertise in PFDs, and 92.4% expressed a need for more training [13]. In another study conducted on U.S. based SLPs, majority of them advocated for more focused education on feeding and swallowing disorders. [14]

One more study conducted specifically to understand perceived knowledge and skills related to sensory food aversions among school-based SLPs also emphasized the gaps in education and training. [15] Despite these insights, most research conducted till date has broadly focused on pediatric feeding disorders in general. Studies specifically on understanding knowledge and practices of SLPs related to the feeding challenges in the population on the autism spectrum were limited. Such tailored studies are needed, as SLPs generally encounter specific challenges when working with autistic children. These children often demonstrate unique feeding deficits due to sensory sensitivities, communication deficits, and behavioral challenges, which may require specialized intervention strategies.

Cultural factors across various population and regions exert a huge influence on the feeding practices and perceptions of feeding difficulties. In the context of culturally distinct country like India, complex landscapes of traditional feeding practices and beliefs can be witnessed. Such diversified feeding practices and limited availability of resources further challenges the Indian SLPs in the disseminating appropriate services in assessing and managing the feeding difficulties of the autistic population. This existing research gap on how Indian SLPs perceive and manage feeding challenges in the population on the autism spectrum signifies a demanding need for a targeted study on the domain. Such research not only provide valuable insights into the specific educational needs, but also leads to the development of culturally appropriate training programs and clinical guidelines. This ultimately ensures that the Indian SLPs are better equipped in delivering effective care to the children on the autism spectrum. Thus, the current study aimed to explore the knowledge, attitudes and practice patterns of Indian SLPs in the assessment and

management of feeding challenges in the children on the autism spectrum. The specific research questions include

1. What self-perceived knowledge, attitudes and practice patterns do Indian SLPs possess about the assessment and management of feeding challenges in the children on the autism spectrum?
2. Do factors such as years of experience, the percentage of autistic children experiencing feeding difficulties in their caseloads, the amount of training received related to feeding difficulties, and the perceived appropriateness of that training influence the confidence levels of Indian SLPs in assessing and managing feeding challenges in the children on the autism spectrum?

MATERIALS & METHODS

The present research adhered to the "Consensus-Based Checklist for Reporting of Survey Studies".^[16] The study utilized a cross-sectional research design with convenience sampling. The inclusion criteria encompassed (a) participants practicing as SLPs in India with at least a "bachelor's degree in Audiology and Speech-Language Pathology or B.Sc. Speech and Hearing" and RCI-CRE certification, and (b) participants who frequently provided services to the children on the autism spectrum.

A survey questionnaire was developed based on a thorough review of existing literature on feeding challenges of the children on the autism spectrum and PFDs.^[1,2,4-15] The survey consisted of 31 questions under five sections: (a) Demographic details (8 items) (b) Knowledge towards the assessment and management of feeding issues in the children on the autism spectrum (7 items) (c) Clinical Decisions and practical considerations related to assessment (7 items) (d) Clinical Decisions and practical considerations related to treatment (4 items) and (e) Attitude towards the assessment and management of feeding issues in the children on the autism spectrum (5 items). Questions were organized based on skip logic, which

avoided answering irrelevant items. The responses were obtained as "Yes, Maybe, No" formats, multiple-choice formats, and Likert rating scales.

This questionnaire was further refined through the content validation. Three SLPs, with a minimum of five years of experience in PFDs rated each item using a Likert scale of "1- not at all appropriate, 2- appropriate, and 3- very appropriate." Items with an average rating of 2 were considered for the updated questionnaire along with the incorporation of necessary suggestions from the experts. This updated questionnaire was entered into Google Forms, a web-based survey administration software. A pilot study was conducted with five participants to understand the feasibility of the study and clarity of the questions and instructions. Feedback from the pilot respondents was used to refine the questionnaire further.

The final questionnaire was circulated via Google Forms in several WhatsApp-based professional groups. The form contained information on the study's purpose, an informed consent section, and the survey questionnaire. Responses were stored online and could only be accessed by the authors. The average time to complete the questionnaire was 10-15 minutes. Data collection occurred over 10 weeks between January and March 2024.

Statistical Analysis

Descriptive Statistics were employed to depict the data obtained from the participants in terms of percentage of responses. The correlational analyses were performed by employing the Statistical Package for Social Sciences Version 26.0 (SPSS, Version 26, IBM Inc., Armonk, NY, USA). The Shapiro Wilk's test of normality indicated that the data followed non-normal distribution ($p < 0.05$). Hence, non-parametric test such as Spearman's rank correlation test was performed to examine the relationships of SLPs' perceived level of confidence with the years of experience, percentage of autistic children experiencing feeding issues in their caseloads, the amount

of training received related to these difficulties, and the perceived appropriateness of that training. In order to carry out the correlational analysis, the responses obtained from the participants were assigned numerical values. Responses to the questions on confidence in handling feeding challenges in the children with autism were numerically quantified as “0” for “Not at all confident”, “1” for “Somewhat confident”, “2” for “Neutral”, “3” for “Confident” and “4” for “Somewhat confident”. Similarly, numerical values for years of experience were assigned as “0” for “none”, “1” for “0 - 1 year”, “2” for “1-5 years”, “3” for “6 – 10 years”, “4” for “11-15 years”, “5” for “16-20” years”, “6” for “21-30 years” and “7” for “31 years and above”. For amount of caseload, “1” for “0-24%”, “2” for “25-50%”, “3” for “51-75%” and “4” for “76-100%”. For amount of training, “0” for “none”, “1” if one type of training was selected (e.g., undergraduate course, “2” if two types of training were

selected (e.g., undergraduate course and specific training courses). The total values for the amount of training ranged 0 to 5. For appropriateness of training received in handling feeding deficits in the children with autism, “0” for “No”, “1” for “Yes, to some extent” and “2” for “Yes”.

RESULTS

A total of 86 responses were obtained. After excluding four duplicated responses and six responses that unmet the study's eligibility criteria, a total of 76 valid responses were considered for analysis. The mean age of the participants was 28.7 years, with a standard deviation (SD) of 5.2 years. The participants' ages ranged from 21 to 45 years. Table 1 depicted the demographic details of the respondents of the study. Among the 76 respondents, 78.9% responded that they frequently handled the children on the autism spectrum and 21.1% responded that they sometimes handle these children.

Table 1. Demographic Details of the participants

Demographic Details	Characteristics	Frequency (n)	Percentage (%)
Gender	Male	11	14.47%
	Female	65	85.52%
Educational Qualification	BASLP/B.Sc Speech & Hearing	18	23.7%
	MASLP	10	13.2%
	M.Sc Speech-Language Pathology	41	53.9%
	M.Sc Audiology	1	1.3%
	Ph.D	6	7.9%
	Post-Doctoral degree	0	0%
Years of Experience	0-1 year	10	13.2%
	1-5 years	44	57.9%
	6-10 years	11	14.5%
	11-15 years	5	6.6%
	16-20 years	1	1.3%
	21-30 years	2	2.6%
	31 years and above	0	0%
	None	3	3.9%
Place of employment	Urban	63	82.9%
	Sub-urban	12	15.8%
	Rural	1	1.3%
Current Primary Employment settings	Hospital	21	27.6%
	Clinics	20	26.3%
	Private Practice	5	6.6%
	School	4	5.3%
	College or University	22	28.9%
	Rehabilitation Centres	1	1.3%
	Others	1	1.3%
	None	2	2.6%

Knowledge of SLPs Towards Feeding Issues in the Children on the Autism Spectrum

Among the respondents, 84.2% of SLPs reported being aware of feeding issues in the children with autism, while 13.2% were partially aware, and 2.6% were unaware.

Additionally, 86.8% of SLPs recognized the link between feeding difficulties and nutritional deficiencies, though 13.2% expressed uncertainty by responding "May be, not sure". Figure 1 illustrated the types of training SLPs had undertaken, related to feeding issues in the children with autism.

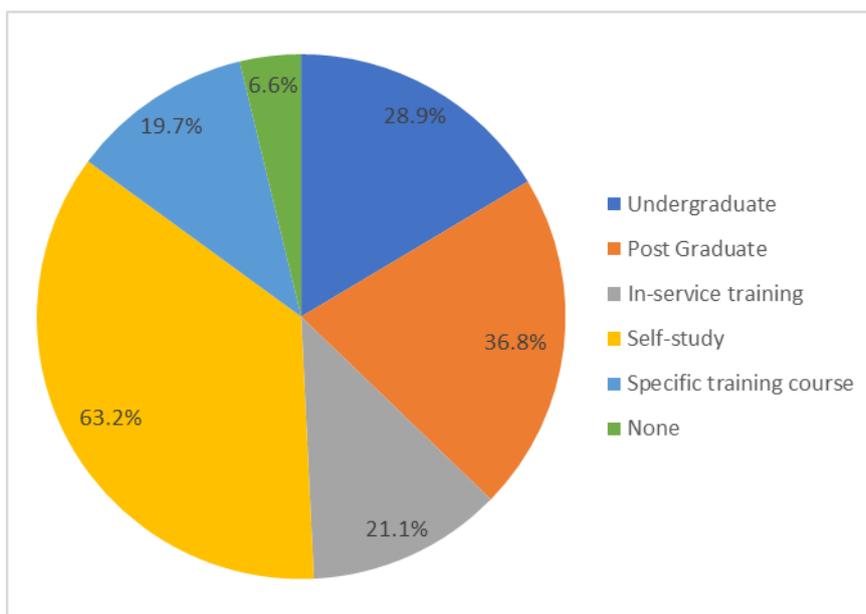


Figure 1. Type of training undergone by the SLPs related to feeding challenges in the Children on the Autism Spectrum

Regarding their caseloads, 72.4% of respondents reported that children with autism experiencing feeding difficulties were part of their clinical practice, while 18.4% were unsure, and 9.2% indicated not encountering such cases. The reported percentage of autistic children and feeding difficulties in SLPs' caseloads was distributed as follows: 0-24% (29.1%), 25-50% (36.4%), 51-75% (27.3%), and 76-100% (7.3%). The most commonly observed feeding difficulties in these children included food selectivity or restricted diets (98.2%), chewing difficulties (69.1%), maladaptive mealtime behaviors (65.5%), and oral motor delays or difficulties (54.5%).

Practices of SLPs Towards Feeding Issues in the Children on the Autism Spectrum

In response to whether they screen or assess the children with autism for feeding deficits,

57.9% SLPs responded "Yes," 32.9% responded "Sometimes," and 9.2% responded "No". Regarding the frequency of screening the feeding issues in autistic children, 50.7% screened every child with autism, 36.2% screened only children with reported feeding issues, and 13% screened only children with suspected oral motor difficulties. Most respondents (92.8%) used informal procedures to screen for feeding issues, while 7.2% used standardized procedures. Among those using standardized procedures, 57.1% used the "Brief Autism Mealtime Behavioural Inventory [17]," 14.3% used the "Montreal Children's Hospital Feeding Scale" [18] and 14.3% used the "Feeding Handicap Index for Children". [19]

In the questions related to the assessment of feeding challenges in the autistic children, 97.1% of respondents utilized case history as a tool, 94.2% employed both oral motor examination and oral sensory skills

assessment, 73.9% incorporated parent-child interaction assessments, and 69.6% conducted mealtime observations. Additionally, 44.9% used food charts, while 33.3% relied on clinical nutritive assessments. When asked about the collaboration with other professionals, 58% reported “Yes”, 36.2% reported “Sometimes” and 5.8% reported “No”. The most common collaborators were OTs (96.9%), pediatricians (64.6%) and nutritionist (53.8%), followed by clinical psychologists (33.8%), gastroenterologists (21.5%).

Out of 76 respondents, 48.7% indicated that they frequently provide feeding intervention for the children with autism; Meanwhile, 39.5%, stated that they sometimes provide feeding intervention. Lastly, 11.8% reported that they never provide feeding intervention. Figure 2 depicted the type of feeding intervention reported by the SLPs in

managing feeding challenges in the children on the autism spectrum. The typical goals targeted by SLPs in treating feeding challenges in the children on the autism spectrum include: enhancing oral sensory skills (86.6%), improving oral motor skills (76.1%), advancing diet texture progression (74.6%), fostering responsive parent-child interaction (71.6%), expanding the range of accepted foods (64.2%), encouraging positive mealtime behaviors (62.7%), and supporting communication during mealtimes (59.7%). The average session frequency recommended by SLPs for managing feeding challenges in the children on autism spectrum was most commonly two sessions per week (44.8%), followed by three sessions per week (32.8%), one session per week (10.4%), and five sessions per week (3%). SLPs reported that the recommended frequency is determined by the severity of the feeding difficulties.

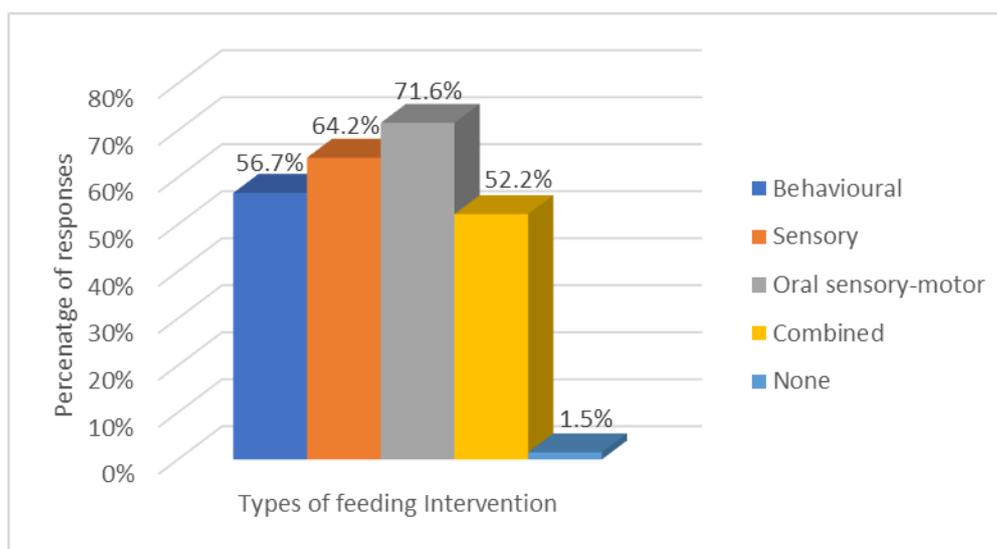


Figure 2. Types of feeding intervention provided by the SLPs to the children on the Autism Spectrum

Attitudes of SLPs Towards Feeding Issues in the Children on the Autism Spectrum

SLPs perceived feeding challenges in the children on the autism spectrum as a scope of their practice, with 89.5% strongly agreeing and 10.5% agreeing. Regarding the adequacy of training for providing feeding interventions to the children on the autism spectrum, 61.8% of respondents felt that the

training received was adequate only to some extent in providing feeding intervention to the autistic children, while, 13.2% felt the training was fully adequate and 25% indicated that the training was not adequate. SLPs expressed interest in seeking further training. The preferred modes of training were specialized training courses (76.3%), supervised clinical training (75%),

conferences/workshops (64.5%), and curriculum-based training (57.9%).

When asked about the confidence in handling feeding issues in the children on the autism spectrum, the SLPs' responses were "Not at all confident" (10%), "Somewhat confident" (24%), "Neutral" (28%), "Confident" (32%) and "Fully confident" (6.6%). The extent of confidence in their skills in providing various services related to the feeding challenges in the children on autism spectrum was depicted in the figure 3.

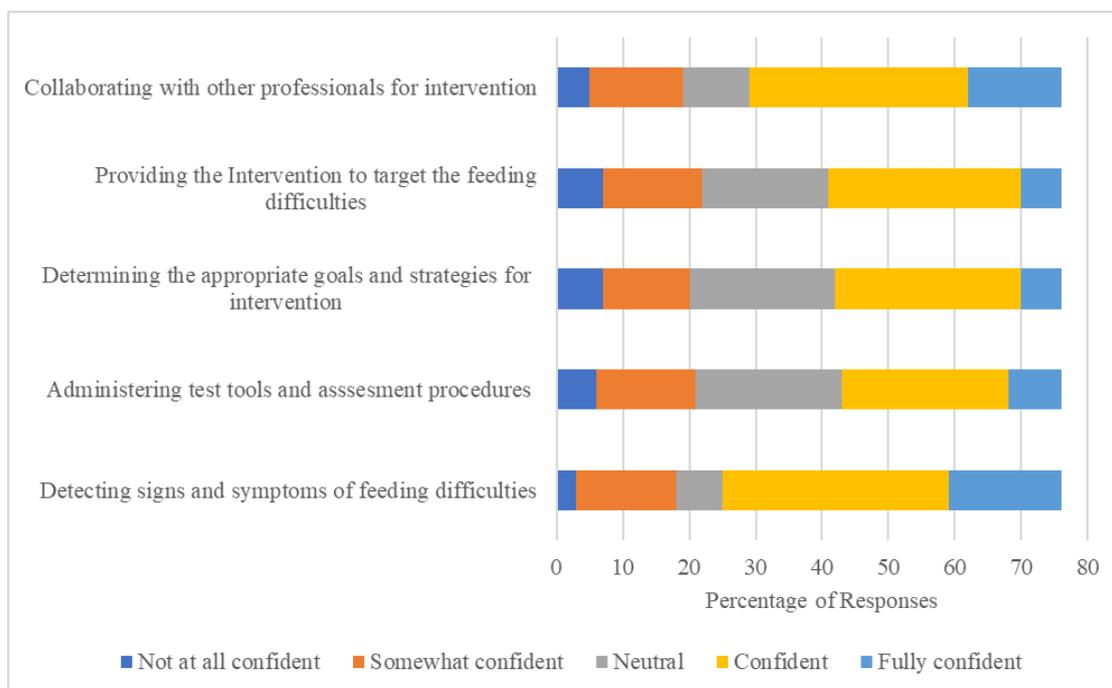


Figure 3. The extent of confidence in the skills of SLPs in the various service areas of feeding challenges in the children on the Autism Spectrum

Correlational analysis was carried out to determine the relationships of SLPs' perceived level of confidence with years of experience, amount of caseload of autistic children with associated feeding challenges, amount of training undergone related to feeding challenges in the children on the autism spectrum and appropriateness of the training. A statistically significant weak positive correlation was observed between perceived confidence of SLPs in handling feeding challenges in the children with autism and amount training undergone by

the SLPs related to the feeding challenges in the children on the autism spectrum ($r = 0.34$, $p = 0.002$) and appropriateness of these training ($r = 0.30$, $p = 0.008$). However, there were no significant association of perceived confidence of SLPs in handling feeding challenges in autistic children with years of experience and percentage of autistic children experiencing associated feeding challenges in their caseload. The results of this analysis were depicted in table 2.

Table 2. Association of the perceived confidence levels of SLPs in handling feeding difficulties in the children on the Autism Spectrum

Variables	Spearman's Correlation Co-efficient	p-value
Years of experience	0.21	0.06
Amount of caseload	0.18	0.18
Amount of training	0.34	0.002**
Appropriateness of the training	0.30	0.008**

** p-value < 0.01

DISCUSSION

The present study investigated to understand the knowledge, attitudes, and clinical practice patterns of Indian SLPs regarding the assessment and management of feeding challenges in the children on the autism spectrum. The majority of participants had acquired their Master's degree in Speech-Language Pathology and had 1-5 years of clinical experience. Most participants worked in urban regions, specifically in clinics, hospitals, and academic institutions.

Knowledge of SLPs Towards Feeding Issues in the Children on the Autism Spectrum

The study demonstrated that the majority of SLPs (84.2%) were aware of the presence of feeding challenges in the children on the autism spectrum and also had such children with feeding difficulties in their caseload. Most SLPs (86.8%) recognized the link between these feeding issues and nutritional deficiencies. The commonly reported feeding issues in autistic population include food selectivity, chewing challenges, maladaptive mealtime behaviors, and oral motor delays. These findings echoed with the existing literature demonstrating similar feeding challenges in autistic children due to sensory processing deficits and behavioral factors. [1,2,4-9] Although, most of the SLPs demonstrated awareness of feeding challenges in the autistic children, they relied predominantly on self-study (63.2%) and post-graduate training (36.8%) for acquiring their knowledge. Only a small proportion of SLPs reported to receive structured training during undergraduate education or specific training courses. These findings suggested that Indian SLPs mostly relied on self-acquisition of their knowledge related to the feeding issues of the autistic individuals than being systematically trained. This gap in formal education needs to be addressed, as self-study alone might not be sufficient enough to capture the comprehensive knowledge on the complex feeding challenges of the autistic population. This was also emphasized in the

previous studies suggesting the integration of PFD related concepts into the formal curriculum and training programs of SLPs [10 - 15] Such training programs should (i) address the specific needs of Indian SLPs, (ii) cover the theoretical and practical aspects on the assessment and intervention of feeding challenges in the autistic population and (iii) encompass online courses, workshops, conferences, and hands-on training sessions on regular basis.

Practices of SLPs Toward Feeding Issues in the Children on the Autism Spectrum

The SLPs demonstrated varied patterns related to the clinical practices on the assessment and management of feeding issues in the children with autism. Almost, 57.9% of SLPs reported that they consistently screen or assess autistic children for feeding issues. However, most of them reported to depend on informal assessment methods (92.8%). Standardized tools like the "Brief Autism Mealtime Behavioural Inventory" [17], "Montreal Children's Hospital Feeding Scale" [18] and "Feeding Handicap Index for Children" [19] were reported to be utilized only by a small group of SLPs. This reliance on non-standardized methods can lead to inconsistencies in diagnosis and planning for intervention. Thus, this gap must be addressed through the development of validated assessment protocols, specifically tailored to the Indian context.

With regard to feeding interventions, most SLPs reported to frequently provide feeding interventions to the children on the autism spectrum. The commonly reported intervention approaches included oral sensory-motor approaches (71.6%), followed by sensory strategies (64.2%), and behavioral interventions (56.7%). Although, these approaches were widely recognized in clinical practice, the evidence claiming their effectiveness specifically for the children on Autism Spectrum were limited, yet developing. This gap underlined the necessity for more research in this area. Evidence-based practices should be

encouraged among the professionals to warrant that the interventions are both effective and appropriate for the children on the autism spectrum.

Inter-professional collaborations with occupational therapists, paediatricians and nutritionists were also commonly cited by the SLPs. This interdisciplinary approach displayed prime role in addressing the multifaceted nature of feeding issues in the children on the autism spectrum. Further, development of more structured collaboration frameworks, policies and practices can also be facilitated through multidisciplinary team meetings, joint training sessions, and collaborative care models. This could enhance the effectiveness of the multidisciplinary interventions.

Attitudes of SLPs Toward Feeding Issues in the Children on the Autism Spectrum

The attitudes of SLPs towards their role in managing feeding issues in the autistic children were noted to be largely positive. Nearly 90% of the respondents strongly agreed that feeding issues fall within their scope professional practice. However, many SLPs reported only moderate level of confidence in managing these feeding challenges in the autistic population. Limited confidence in handling PFDs in general was evidenced in previous studies conducted. [10 - 15] This lack of confidence and perceived inadequacy in training points to the need for more comprehensive educational initiatives. Further, correlational analysis yielded a significant and weak positive correlation between the SLPs' perceived confidence and their amount of training undertaken ($r = 0.34$, $p = 0.002$), as well as the appropriateness of this training ($r = 0.30$, $p = 0.008$). These results endorsed the positive influence of training on the confidence of the professionals in delivering quality care to the targeted population. The findings further ascertained the scope for improvement in both the quality and quantity of training delivered to the SLPs. Most SLPs expressed a desire for further

training, particularly through specialized courses, supervised clinical training, and workshops. This enthusiasm for additional learning opportunities indicated a readiness among SLPs to enhance their skills and adapt to the evolving demands of feeding interventions for the children with autism.

The present study had several shortcomings to be stated. Firstly, the smaller sample size and geographical scope of the study limited its applicability to broader populations of SLPs from different healthcare systems, regions or cultural contexts across India. Additionally, the questionnaire relied on self-reported data from the SLPs. This could have introduced potential bias, as there was a higher probability for overestimation of the knowledge or provision of socially desirable responses. The cross-sectional design also restricted the ability to observe changes in knowledge or practices over time. Variability in SLP training and experience could have affected the responses. Future research can aim on including larger sample size with respondents from diverse geographical background to enhance the representativeness of the findings. Additionally, studies incorporating qualitative methods may provide deeper insights into the existing challenges and barriers of the SLPs. Further, there is also need for studies focused on developing standardized assessment tools for Indian context and exploring the effectiveness of various interventions through randomized controlled trials.

CONCLUSION

The findings of the present research indicated that Indian SLPs were generally knowledgeable about feeding issues in the children on the autism spectrum. However, there were gaps in their training and availability of resources. The reliance on informal procedures for screening and assessment highlighted the need for the development of standardized tools and training. The evidences supporting the effectiveness of the feeding interventional

strategies deployed by the SLPs seemed to be limited, pressing the need for more evidence-based research. The interest in further training among SLPs indicated their strong willingness in improving their knowledge and abilities. The study recommended the need for addressing the barriers and providing structured training opportunities for the Indian SLPs to competently manage the feeding challenges in the children on the autism spectrum.

Declaration by Authors

Ethical Approval: The study protocol was in accordance with “Ethical committee for Bio-Behavioural Research involving Human Subjects at the All-India Institute of Speech and Hearing, Mysuru, India”.

Acknowledgement: Nil

Source of Funding: Nil

Conflict of Interest: The authors declare no conflict of interest.

REFERENCES

1. Sharp WG, Jaquess DL, Lukens CT. Multi-method assessment of feeding problems among children with autism spectrum disorders. *Res Autism Spectr Disord*. 2013;7(1):56-65. <https://doi.org/10.1016/j.rasd.2012.07.001>
2. Ledford JR, Gast DL. Feeding problems in children with autism spectrum disorders. *Focus Autism Other Dev Disabil*. 2006;21(3):153-166. <https://doi.org/10.1177/10883576060210030401>
3. Barton C, Bickell M, Fucile S. Pediatric oral motor feeding assessments: A systematic review. *Phys Occup Ther Pediatr*. 2017;38(2):190-209. <https://doi.org/10.1080/01942638.2017.1290734>
4. Leader G, Tuohy E, Chen JL, Mannion A, Gilroy SP. Feeding problems, gastrointestinal symptoms, challenging behavior and sensory issues in children and adolescents with autism spectrum disorder. *J Autism Dev Disord*. 2020;50(4):1401-1410. <https://doi.org/10.1007/s10803-019-04357-7>
5. Seiverling L, Towle P, Hendy HM, Pantelides J. Prevalence of feeding problems in young children with and without autism spectrum disorder: A chart review study. *J Early Interv*. 2018;40(4):335-346. <https://doi.org/10.1177/1053815118789396>
6. Provost B, Crowe TK, Osbourn PL, McClain C, Skipper BJ. Mealtime behaviors of preschool children: Comparison of children with autism spectrum disorder and children with typical development. *Phys Occup Ther Pediatr*. 2010;30(3):220-233. <https://doi.org/10.3109/01942631003757669>
7. Field D, Garland M, Williams K. Correlates of specific childhood feeding problems. *J Paediatr Child Health*. 2003;39(4):299-304. <https://doi.org/10.1046/j.1440-1754.2003.00151.x>
8. Schreck K, Williams K. Food preferences and factors influencing food selectivity for children with autism spectrum disorders. *Res Dev Disabil*. 2006;27(4):353-363. <https://doi.org/10.1016/j.ridd.2005.03.005>
9. Şahan AK, Öztürk N, Demir N, Karaduman AA, Serel Arslan S. A comparative analysis of chewing function and feeding behaviors in children with autism. *Dysphagia*. 2021;36(6):993-998. <https://doi.org/10.1007/s00455-020-10228-6>
10. Thompson KL, Romeo C, Estrem HH, Pederson J, Peterson M, Delaney AL, et al. Preparedness of Speech Language Pathologists and Occupational Therapists to treat Pediatric Feeding Disorder: A cross-sectional survey. *Dysphagia*. 2024;40(1):187-199. <https://doi.org/10.1007/s00455-024-10718-x>
11. Neubauer NP, Singleton NC. What plays a role in perceived confidence for managing pediatric feeding disorders in the public school. *Lang Speech Hear Serv Sch*. 2023;54(3):856-872. https://doi.org/10.1044/2023_lshss-22-00074
12. Wilson JJ, Simmons AK, McCarthy JH. Pediatric dysphagia: Survey results describing speech-language pathologists' education and experience. *Perspect ASHA Spec Interest Groups*. 2020;5(1):236-245. https://doi.org/10.1044/2019_persp-19-00016
13. Ch M, Ashraf A, Mansoor M, Shaukat M. Awareness and knowledge of speech language pathologists regarding pediatric feeding disorders. *Therapist (J Therap*

- Rehabil Sci). 2023;18-22.
<https://doi.org/10.54393/tt.v4i03.159>
14. Caesar LG, Kitila M. Speech-language pathologists' perceptions of their preparation and confidence for providing dysphagia services. *Perspect ASHA Spec Interest Groups*. 2020;5(6):1666-1682.
https://doi.org/10.1044/2020_persp-20-00115
 15. Monroe E. School-Based Speech-Language Pathologist's Perceptions of Sensory Food Aversions in Children [Internet]. *Digital Commons @ East Tennessee State University*. 2020 [cited 2026 Feb 19]. Available from: <https://dc.etsu.edu/etd/3735>
 16. Sharma A, Duc NTM, Thang TLL, Nam NH, Ng SJ, Abbas KS, et al. A consensus-based checklist for reporting of survey studies (CROSS). *J Gen Intern Med*. 2021;36(10):3179-3187.
<https://doi.org/10.1007/s11606-021-06737-1>
 17. Lukens CT, Linscheid TR. Development and validation of an inventory to assess mealtime behavior problems in children with autism. *J Autism Dev Disord*. 2008;38(2):342-352.
<https://doi.org/10.1007/s10803-007-0401-5>
 18. Ramsay M, Martel C, Porporino M, Zygmontowicz C. The Montreal Children's Hospital Feeding Scale: A brief bilingual screening tool for identifying feeding problems. *Paediatr Child Health*. 2011; 16(3):147-e17.
<https://doi.org/10.1093/pch/16.3.147>
 19. Shabnam S, Swapna N. Clinical validation of Feeding Handicap Index for Children (FHI-C). *J Autism Dev Disord*. 2023;53(11):4412-4423.
<https://doi.org/10.1007/s10803-022-05699-5>
- How to cite this article: Shalini, M., Swapna, N. Exploring Indian speech-language pathologists' knowledge, attitudes, and practices in assessing and managing feeding difficulties in the children on the autism spectrum. *Int J Health Sci Res*. 2026; 16(3):36-46. DOI: <https://doi.org/10.52403/ijhsr.20260305>
