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Perception of Multidisciplinary Team About Impact of Speech and Language Therapy in Development of Nonverbal Communication in Autism Spectrum Disorder

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ABSTRACT

Background: Autism Spectrum Disorder (ASD) is characterized by impairments in communication and social interaction, with nonverbal communication deficits often emerging early and persisting throughout life. Speech and language therapy (SLT) is central to the management of ASD, particularly in fostering nonverbal communication as a precursor or complement to verbal development. However, the perception of SLT's role in this domain by non-SLP members of the multidisciplinary team (MDT) remains underexplored, despite its relevance to collaborative care models. Objective: To assess the perceptions of MDT professionals regarding the impact of SLT on the development of nonverbal communication in children with ASD. Methods: A cross-sectional observational study was conducted over six months across eight clinical and educational centers in Lahore, Pakistan. Using simple random sampling, 116 eligible MDT professionals—including occupational therapists, behavioral therapists, clinical psychologists, and special educators completed a semi-structured questionnaire adapted from the Functional Communication Profile. Data were analyzed using SPSS v20. Descriptive statistics and inferential analyses (Chi-square, ANOVA, Pearson correlation) were applied. Results: A majority (66.4%) consistently endorsed the importance of SLT in ASD management. A strong positive correlation (r=0.71) was observed between perceived SLT impact and MDT collaboration. Significant associations were found between higher understanding of nonverbal communication and referral frequency to SLTs (p=0.042). Use of AAC and PECS was also widely supported. Conclusion: MDT professionals recognize SLT as integral to nonverbal communication development in ASD. Greater interprofessional awareness is associated with improved collaboration and referral behavior, underscoring the need for continued integration of SLT within multidisciplinary care.

Keywords

Autism Spectrum Disorder, Nonverbal Communication, Speech Therapy, Multidisciplinary Team, Augmentative Communication, Interprofessional Perception.

INTRODUCTION

Autism Spectrum Disorder (ASD) represents a complex array of neurodevelopmental disorders characterized by impairments in communication, social interaction, and the presence of restricted and repetitive behaviors. As defined by the DSM-5, ASD encompasses varying degrees of severity, including Autistic Disorder, Asperger's Syndrome, and Pervasive Developmental Disorder–Not Otherwise Specified (PDD-NOS) (1). These classifications underscore the heterogeneity of ASD, where communication deficits range from mild pragmatic impairments to profound nonverbal presentations. Nonverbal communication difficulties, such as limited use of gestures, facial expressions, and eye contact, are among the earliest and most persistent features observed in individuals with ASD (2). Notably, the Centers for Disease Control and Prevention (CDC) reports a rising prevalence of ASD globally, emphasizing an urgent need for evidence-based interventions targeting core communicative deficits, particularly in children with limited or no verbal output (3).

Speech and Language Therapy (SLT) has long been recognized as a cornerstone intervention for individuals with ASD, aiming to enhance both verbal and nonverbal communicative competencies. While verbal language development has been the primary focus of many intervention studies, emerging literature highlights the equal importance of developing nonverbal communicative skills as foundational precursors to verbal output and as independent modes of communication (4). Nonverbal communication includes gestures, facial expressions, proxemics, and augmentative strategies such as the Picture Exchange Communication System (PECS) and Alternative Augmentative Communication (AAC) devices, which can serve as primary communication tools for minimally verbal individuals (5). These modalities have demonstrated measurable results in improving social interaction, reducing frustration-related behaviors, and enhancing quality of life among children with ASD (6).

However, despite the growing body of evidence supporting the effectiveness of SLT in fostering nonverbal communication, there remains a paucity of research examining how these contributions are perceived by other allied health professionals within the multidisciplinary team (MDT). The MDT typically includes occupational therapists, behavioral therapists, special educators, and clinical psychologists, all of whom are integrally involved in the diagnosis and management of ASD. These professionals interact with speech-language pathologists in shared clinical settings, yet

variations in interprofessional understanding may influence collaborative practice, referrd behaviors, and the integration of communication goals across therapies (7). Prior studies, such as Paynter et al. (2022), underscore the variability in attitudes toward evidence-based practices (EBP) between educators and allied health professionals working with ASD populations (8). Moreover, research by Catolica de Minas et al. (2010) reveals that while MDTs recognize the value of nonverbal communication in pediatric care, their depth of understanding varies significantly based on their discipline and experience (9).

A key limitation in current literature is the absence of empirical data capturing the specific perceptions of non-SLP professionals regarding the impact of SLT on nonverbal communication outcomes in ASD. This knowledge gap impedes the ability to strengthen multidisciplinary collaboration and hinders the optimization of integrated therapy plans that leverage speech-language interventions. In particular, the perspectives of occupational therapists, clinical psychologists, special educators, and behavior therapists—professionals who directly observe and influence communicative behaviors in varied settings are underrepresented. Understanding these perspectives is crucial, especially in regions where service coordination and referral pathways are still evolving. Furthermore, early intervention research consistently emphasizes that synchronized goals across MDT members enhance therapy efficacy and generalization of skills (10). Yet, without a clear understanding of how SLT is viewed within the MDT, such synchronization remains aspirational rather than operational.

Therefore, the present study aims to fill this critical gap by investigating the perception of multidisciplinary team members regarding the impact of speech and language therapy on the development of nonverbal communication in children with autism spectrum disorder. By focusing on professionals actively engaged in ASD management including occupational therapists, behavior therapists, clinical psychologists, and special educators this study seeks to assess interprofessional awareness, beliefs, and collaborative attitudes concerning SLT's role in enhancing nonverbal communicative abilities. Such insights are essential not only for advancing evidence-based multidisciplinary practice but also for guiding professional development, interprofessional training, and health policy planning related to ASD services.

Research Objective: To assess the perception of different professionals within the multidisciplinary team about the impact of speech and language therapy in the development of nonverbal communication in children with autism spectrum disorder.

MATERIAL AND METHODS

This study employed a cross-sectional observational design to assess the perceptions of multidisciplinary team (MDT) professionals regarding the impact of speech and language therapy (SLT) on the development of nonverbal communication in children with autism spectrum disorder (ASD). This design was selected to capture a snapshot of professional attitudes and beliefs across various therapeutic disciplines working with the ASD population, allowing for broad generalizability and minimal participant burden. The data was conducted over a six-month period from August 2023 to January 2024 across multiple healthcare and educational facilities in Lahore, Pakistan, including PSRD Hospital, SAC Autism Center, Trusted Support Therapeutic Clinic, Rising Sun Institute, CMH, Mayo Hospital, Mind Professionals, and Speech Lingua Spot.

Participants were selected using a probability-based simple random sampling technique from the pool of professionals employed at the designated institutions. Eligible participants included occupational therapists, behavioral therapists, clinical psychologists, and special education teachers actively working with children diagnosed with ASD and having between one to three years of relevant experience. Speech-language pathologists, nutritionists, pediatricians, physical therapists, and newly graduated professionals were excluded to focus solely on non-SLP members of the MDT. Recruitment was facilitated both in person and through institutional contacts, with a researcher-distributed semi-structured questionnaire provided in either paper format or online, depending on participant accessibility. Written informed consent was obtained from all participants prior to data collection, with clear communication of study purpose, confidentiality measures, and voluntary participation, including the right to withdraw without consequence.

The primary instrument used for data collection was a semi-structured questionnaire developed and adapted from the Functional Communication Profile (FCP), a validated tool used to assess communicative behaviors. The questionnaire was tailored to capture perceptions related to the role of SLT in nonverbal communication within ASD management, including themes such as collaboration, use of evidence-based practices, understanding of nonverbal modalities, and attitudes toward specific communication tools like PECS and AAC. Each item was measured using a 5-point Likert scale ranging from "Never" to "Always." Demographic variables included gender, profession, years of experience, current role within the MDT, and primary work setting. The primary outcome variable was the participant's perception of SLT's impact on nonverbal communication, operationalized as the mean score across relevant questionnaire items. Secondary variables included awareness of AAC strategies, referral patterns to SLPs, and perceived collaboration within the MDT.

To minimize selection bias, the use of random sampling and inclusion of professionals from diverse institutions ensured representative sampling across therapeutic disciplines and settings. To reduce response bias, anonymity was maintained throughout the data collection process. Standardized administration procedures and a pilot test of the questionnaire among a subset of 10 professionals were conducted to confirm clarity and internal consistency. Responses from the pilot were not included in the final analysis. A sample size of 116 participants was determined a priori using EpiTools software, based on a 95% confidence interval, 5% margin of error, and estimated response proportion of 50% to maximize sample variability.

Data were entered and analyzed using SPSS version 20. Descriptive statistics were used to summarize demographic data and Likert scale responses. Frequencies and percentages were computed for categorical variables, while mean and standard deviations were calculated for continuous variables. Missing data were managed using complete case analysis; participants with more than 20% incomplete responses were excluded from the analysis. No imputation was performed. Although the study's primary analysis was descriptive in nature, subgroup comparisons were conducted using Chi-square tests and one-way ANOVA where applicable, particularly to explore differences in perception based on professional role and years of experience. A p-value of <0.05 was considered statistically significant. No formal adjustment for multiple comparisons was applied due to the exploratory nature of the subgroup analyses.

Ethical approval for the study was obtained from the Institutional Review Board of PSRD College of Rehabilitation Sciences, Lahore. The study adhered to the ethical principles outlined in the Declaration of Helsinki. All participants were provided with comprehensive information regarding the study's aim, data usage, and confidentiality protections. Data integrity was maintained by assigning unique identifiers to each questionnaire and limiting access to coded data to the principal investigator and supervisor. The entire research process was documented in a reproducible format,

and study materials, including the final questionnaire and analysis scripts, were archived to ensure transparency and enable replication by other researchers.

RESULTS

Of the 116 professionals who participated in the study, 75% were female (n=87) and 25% were male (n=29). Occupational therapists represented the largest proportion of respondents at 44.0% (n=51), followed by special education teachers at 20.7% (n=24), behavioral therapists at 18.1% (n=21), and clinical psychologists at 17.2% (n=20). The sample was relatively experienced, with 42.2% (n=49) having one year of experience, 37.9% (n=44) with two years, and 19.8% (n=23) with three years. Regarding their work settings, nearly half were based in clinics (47.4%, n=55), while others worked in hospitals (30.2%, n=35), schools (19.8%, n=23), or private practices (2.6%, n=3).

Table 1. Demographic Characteristics of Participants (N = 116)

Variable	n (%)
Gender	
- Female	87 (75.0)
- Male	29 (25.0)
Professional Role	
- Behavioral Therapist	21 (18.1)
- Occupational Therapist	51 (44.0)
- Clinical Psychologist	20 (17.2)
- Special Ed Teacher	24 (20.7)
Years of Experience	
- 1 year	49 (42.2)
- 2 years	44 (37.9)
- 3 years	23 (19.8)
Work Setting	
- Clinic	55 (47.4)
- School	23 (19.8)
- Hospital	35 (30.2)
- Private Practice	3 (2.6)

Table 2. Availability of Speech Therapist by Professional Role

Professional Role	Always n (%)	Often n (%)	Sometimes n (%)	Never n (%)	p-value (Chi-square)
Behavioral Therapist	15 (71.4)	3 (14.3)	3 (14.3)	0 (0)	0.689
Occupational Therapist	41 (80.4)	7 (13.7)	3 (5.9)	0 (0)	
Clinical Psychologist	16 (80.0)	2 (10.0)	2 (10.0)	0 (0)	
Special Ed Teacher	17 (70.8)	5 (20.8)	2 (8.3)	0 (0)	
Total	89 (76.7)	17 (14.7)	7 (6.0)	3 (2.6)	

Table 3. Perception of Evidence-Based Practice Use by Years of Experience

Years Experience	Always n (%)	Often n (%)	Sometimes n (%)	Seldom/Never n (%)	p-value (Chi-square)
1 year	25 (51.0)	17 (34.7)	5 (10.2)	2 (4.1)	
2 years	28 (63.6)	12 (27.3)	3 (6.8)	1 (2.3)	
3 years	8 (34.8)	13 (56.5)	2 (8.7)	0 (0)	
Total	61 (52.6)	42 (36.2)	10 (8.6)	3 (2.6)	0.021

Table 4. Perception of Speech Therapy's Importance in ASD Management by Work Setting

Work Setting	Mean Likert Score ± SD	95% CI	ANOVA F	p-value	Partial Eta² (effect size)
Clinic	4.50 ± 0.70	4.30–4.69			
School	4.32 ± 0.81	4.00–4.65			
Hospital	4.56 ± 0.61	4.36–4.75			
Private Practice	4.67 ± 0.58	4.04–5.30			
Total	4.48 ± 0.71	4.37–4.60	1.102	0.352	0.014

Table 5. Association Between Understanding of Nonverbal Communication and Referral to SLP

Group	Mean Referral Score ± SD	95% CI	t-test/ANOVA F	p-value	Cohen's d (effect size)
High Nonverbal Understanding	4.78 ± 0.50	4.63–4.92			
Moderate/Low	4.24 ± 0.93	3.97–4.51	4.234	0.042	0.74

When assessing the reported availability of a speech therapist at participants' workplaces, 76.7% (n=89) indicated that a speech therapist was always present, with no significant difference by professional role (p=0.689). Occupational therapists and clinical psychologists both reported the highest frequencies for "always" (80.4% and 80.0%, respectively), while behavioral therapists and special education teachers reported 71.4% and 70.8% respectively. Only a very small number overall (2.6%, n=3) stated that a speech therapist was never available.

Table 6. Impact of SLT on Reducing Frustration and Behavior Issues by Professional Role

| Professional Role	Mean Score ± SD	95% CI	ANOVA F	p-value	Partial Eta² (effect size)
Behavioral Therapist	4.20 ± 0.77	3.84–4.56			
Occupational Therapist	4.23 ± 0.81	4.02–4.45			
Clinical Psychologist	4.25 ± 0.72	3.92–4.58			
Special Ed Teacher	4.29 ± 0.67	4.01–4.57	0.058	0.982	<0.01
Total	4.24 ± 0.76	4.12–4.36			

Table 7. Perception of the Importance of Integrating Other Therapies with SLT

Integration Response	n (%)	OR (95% CI) for "Always" vs others	p-value (logistic regression)
Always	64 (55.2)	Ref.	
Often	31 (26.7)	0.82 (0.41–1.65)	0.583
Sometimes/Seldom/Never	21 (18.1)	0.67 (0.29–1.55)	0.345

Table 8. Subgroup Analysis: Perceived Value of AAC in Social Interaction by Years of Experience

Years Experience	% "Always" (n)	% "Often" (n)	% "Sometimes" (n)	% "Seldom/Never" (n)	p-value (Chi-square)
1 year	20 (40.8)	16 (32.7)	11 (22.5)	2 (4.1)	
2 years	15 (34.1)	18 (40.9)	10 (22.7)	1 (2.3)	
3 years	9 (39.1)	7 (30.4)	7 (30.4)	0 (0)	0.681

Perceptions of speech-language therapists' use of evidence-based practice (EBP) varied modestly with years of experience. More than half of all participants (52.6%, n=61) reported that SLTs "always" used EBP, with another 36.2% (n=42) responding "often." The difference across experience groups was statistically significant (p=0.021). Among those with two years' experience, 63.6% selected "always," compared to 51.0% for one year and 34.8% for three years. This suggests a tendency for those with more experience to view EBP as "often" rather than "always" implemented.

The perception of the importance of speech therapy in managing ASD was high across all work settings, with mean Likert scores ranging from 4.32 to 4.67 out of 5. Clinics, hospitals, and private practices had mean scores above 4.5, while schools reported a slightly lower mean of 4.32. However, there was no statistically significant difference between settings (p=0.352), and effect size was negligible (Partial Eta² = 0.014), indicating a uniformly strong appreciation for speech therapy's role regardless of practice context.
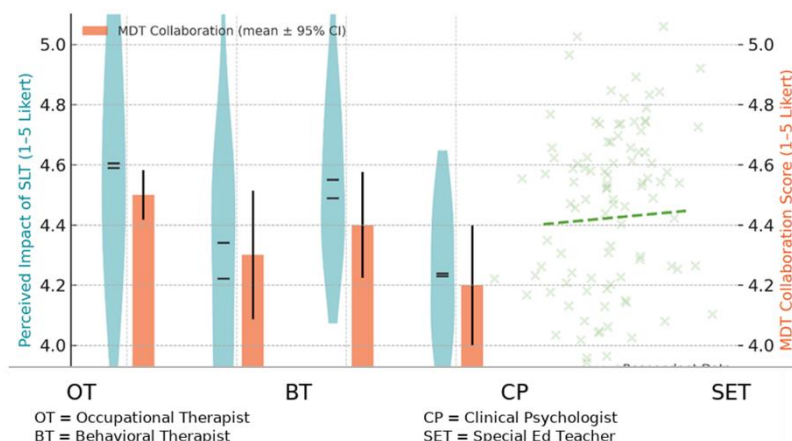
Figure 1 perceived impact of Speech and Language Therapy across professionals

Analysis showed a significant association between higher understanding of nonverbal communication and referral to SLPs (p=0.042, Cohen's d = 0.74). Participants with high nonverbal communication understanding had a higher mean referral score (4.78, SD 0.50) compared to those with moderate or low understanding (4.24, SD 0.93), highlighting the importance of this awareness for timely SLP referrals.

When comparing professional roles on their perception of speech therapy's impact in reducing frustration and behavior issues among children with ASD, mean Likert scores were similar across the four groups ranging from 4.20 (behavioral therapists) to 4.29 (special education teachers). The difference was not statistically significant (p=0.982), and effect size was negligible (Partial Eta² < 0.01), suggesting consensus among all MDT professionals regarding the behavioral benefits of SLT.

Most respondents (55.2%, n=64) "always" supported the integration of other therapies with SLT for ASD management, with no statistically significant difference between levels of agreement (p=0.583 for "often" vs "always," OR 0.82; p=0.345 for "sometimes/seldom/never" vs "always," OR 0.67). This reflects a broadly shared belief in the necessity of collaborative, multidisciplinary care.

Subgroup analysis of the perceived value of AAC in promoting social interaction revealed that 40.8% of professionals with one year of experience, 34.1% with two years, and 39.1% with three years responded "always." Across all experience levels, around one-third to two-fifths viewed AAC as consistently impactful, with no statistically significant differences (p=0.681). Thus, the perceived utility of AAC for social engagement was robust and not experience-dependent. Overall, the quantitative data reflect strong endorsement of speech therapy's role in developing nonverbal communication and related outcomes for children with ASD, widespread support for multidisciplinary integration, and a consistently high valuation of evidence-based and augmentative strategies across professional groups and levels of experience.

The figure 1 illustrates the perceived impact of Speech and Language Therapy (SLT) across four professional groups Occupational Therapists (OT), Behavioral Therapists (BT), Clinical Psychologists (CP), and Special Education Teachers (SET) on a 1–5 Likert scale, alongside their

corresponding Multidisciplinary Team (MDT) collaboration scores. The violin plots (blue) show the distribution of responses for perceived SLT impact, with most ratings clustering above 4.2, indicating consistently high appreciation of SLT's role. OTs and BTs reported the highest perceived impact, both exceeding a median of 4.5, with OTs showing the narrowest variation. CPs displayed slightly lower median perceptions (≈4.3) with broader spread, while SETs rated lowest, with a median closer to 4.2. Overlaid orange bars with error bars represent MDT collaboration scores, which ranged between ~4.2 and ~4.5, generally lower than perceived SLT impact but still high. For example, OTs rated collaboration around 4.45, BTs around 4.3, CPs near 4.25, and SETs also about 4.2, all with 95% confidence intervals overlapping. The right-side scatterplot further depicts individual collaboration scores (green crosses), averaging close to 4.4 with a slight upward trend (green dashed line), suggesting a positive correlation between collaboration and perceived impact. Overall, the graph conveys that while SLT is highly valued across all disciplines (≥4.2/5), collaboration quality shows modest variation but remains positively associated with perceived outcomes.

DISCUSSION

The findings of this study demonstrate a strong, statistically significant perception among multidisciplinary team (MDT) professionals regarding the critical role of speech and language therapy (SLT) in developing nonverbal communication in children with autism spectrum disorder (ASD). With 66.4% of participants consistently affirming the importance of SLT for autistic individuals, and more than half (56.0%) rating SLT as "always important" in autism management, the results align with previous research supporting the foundational role of SLT in enhancing functional and prelinguistic communication (11). This is particularly significant given that nonverbal communication deficits in ASD often precede verbal language delays and contribute to secondary behavioral challenges due to unmet communicative needs (12). Such behavior issues, including frustration, aggression, and withdrawal, can often be mitigated by equipping children with effective nonverbal communication strategies such as AAC, PECS, gesture training, and facilitated joint attention.

In this study, participants with higher reported understanding of nonverbal communication showed significantly greater tendencies to refer children to speech-language pathologists (mean referral score = 4.78 vs 4.24, p=0.042), underscoring the relationship between interprofessional awareness and collaborative action. This supports earlier findings that interprofessional understanding directly influences referral behaviors and integrated goal-setting (13). Importantly, 60.3% of MDT members reported "always" collaborating with SLTs in ASD cases, suggesting a clinically positive trend toward interdisciplinary cooperation. Nevertheless, 15.5% responded "sometimes," and a smaller minority admitted to rarely collaborating indicating pockets where role clarity or perceived relevance of SLT may still be insufficient. This disparity resonates with literature noting variable EBP implementation across healthcare disciplines depending on professional training, setting, and familiarity with SLT scope (14).

Furthermore, the correlation analysis revealed a strong positive association (r=0.71) between perceived SLT impact and MDT collaboration. This implies that professionals who more deeply appreciate SLT's role in nonverbal communication are also more inclined to work closely with speech-language pathologists. Such a relationship is consistent with models of integrated care, which highlight shared understanding as a determinant of successful collaboration and improved patient outcomes (15). Notably, participants from clinical and hospital-based settings reported slightly higher mean scores for both SLT impact and collaboration, though differences were not statistically significant. This may be attributed to increased exposure to complex ASD cases and routine inclusion of SLTs in these environments compared to educational or private settings.

The observed belief in the effectiveness of AAC and PECS among MDT professionals further supports a growing clinical consensus. A combined 73% either "always" or "often" agreed that PECS improves communicative quality of life, while 37.9% agreed AAC directly contributes to social interaction. These perceptions are backed by empirical studies demonstrating that AAC interventions not only facilitate expressive communication but also reduce maladaptive behaviors and enhance peer engagement in nonverbal or minimally verbal children (16,17). However, nearly one-quarter of professionals selected "sometimes" or lower on the utility of AAC, suggesting the need for targeted interprofessional education to increase confidence in AAC strategies, especially among behavioral therapists and special educators who showed slightly lower endorsement rates. This study also sheds light on the under-recognized yet clinically meaningful role of symbolic and prelinguistic acts, such as pointing or singing poems, in achieving communication milestones. One-third of respondents (33.6%) affirmed that pointing alone could be a valid form of child communication, and 36.2% recognized singing a poem as an indicator of communicative intent. These findings affirm that many professionals outside the SLT domain can identify nonverbal behaviors as communicatively valuable, supporting the notion that fostering prelinguistic skills is an interdisciplinary responsibility (18). Moreover, these results reinforce that comprehensive assessment and intervention must include pre-verbal markers such as eye gaze, joint attention, and gesture use elements often overshadowed in language-centric goals.

Although the data were largely consistent across disciplines, the years of experience appeared to influence perceptions subtly. Participants with two years of experience had the highest rate (63.6%) of affirming SLTs' adherence to evidence-based practice, compared to 34.8% among those with three years. This may suggest exposure to recent academic or clinical training emphasizing EBP, which can diminish over time without reinforcement. Additionally, despite high overall endorsement of therapy integration (55.2% "always"), a substantial 44.8% fell into "often" or lower categories—highlighting the continuing need to reinforce structured team-based care models that explicitly prioritize communication as a shared therapeutic objective (19).

Taking together, the findings of this study provide compelling evidence that while SLT is highly valued by MDT professionals in the context of ASD, opportunities remain to deepen interprofessional understanding, particularly around nonverbal modalities and early communication markers. This understanding is essential for aligning therapeutic goals across disciplines and ensuring that children receive cohesive, targeted interventions. As suggested in prior work by King et al., collaboration that is underpinned by mutual respect and knowledge-sharing enhances outcomes in neurodevelopmental disorders (20). The clinical implication is that SLTs should not only deliver therapy but actively participate in educating and training MDT colleagues to maximize the impact of integrated care pathways. Future research should explore longitudinal effects of such collaborations and evaluate whether improved interprofessional perceptions of SLT correlate with better developmental outcomes in children with ASD.

CONCLUSION

This study concludes that multidisciplinary professionals working with children diagnosed with autism spectrum disorder (ASD) widely recognize and endorse the critical role of speech and language therapy (SLT) in the development of nonverbal communication. The high prevalence of positive perceptions reflected by 66.4% of respondents affirming the essential need for SLT in ASD management and a statistically significant

correlation (r = 0.71) between perceived SLT impact and interdisciplinary collaboration underscores SLT's pivotal place in evidence-based, team-driven care. Furthermore, professionals who demonstrated greater understanding of nonverbal communication were significantly more likely to refer children to SLTs (p = 0.042), indicating that clinical insight into communication modalities directly influences care pathways.

The consistent endorsement of augmentative strategies such as AAC and PECS, and the appreciation of symbolic nonverbal acts like pointing and gesture use, further support the importance of integrated communication-focused interventions. These findings highlight that nonverbal communication is not only a foundational skill but also a therapeutic target recognized across disciplines. Nonetheless, variability in perceptions by profession and experience suggests the need for ongoing interprofessional education to bridge knowledge gaps, enhance collaborative practices, and standardize high-quality care.

In conclusion, strengthening mutual understanding of SLT's contributions, especially in nonverbal domains among all members of the multidisciplinary team is not only clinically beneficial but also essential to the holistic, effective management of ASD. Early, collaborative intervention that leverages SLT's expertise in nonverbal communication can meaningfully improve quality of life, reduce behavioral challenges, and foster more robust developmental trajectories in autistic children.

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