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Challenges in the Diagnosis of Autism Spectrum Disorder: Contributions from Speech-Language Pathology

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Abstract

Autism Spectrum Disorder (ASD) has experienced a notable rise in diagnoses in recent decades, prompting discussion regarding its etiological and clinical implications. This study aimed to investigate, from the perspective of speech-language pathologists, the factors contributing to this increase. A qualitative, descriptive design was employed between April and May 2024, involving 34 speech-language pathologists from public and private healthcare services. Participants, selected through purposive sampling, completed an online semi-structured questionnaire containing open- and closed-ended questions. Data were analyzed using descriptive statistics and thematic content analysis. All respondents reported perceiving an increase in ASD diagnoses or suspected cases. The most frequently cited contributing factors included increased access to information via digital media (20.2%), expansion of diagnostic criteria (13.5%), emphasis on early identification (13.5%), and diagnostic confusion (16.3%). Additional elements involved excessive screen exposure, medicalization of childhood, and deficiencies in professional training and interdisciplinary collaboration. The findings suggest that the observed increase is multifactorial, encompassing clinical, social, and cultural transformations. Within this scenario, speech-language pathology should adopt a critical, context-sensitive stance toward child development. Limitations include a geographically restricted sample and limited participant number. Future studies should employ mixed-method designs and broader samples to deepen the understanding of this phenomenon.

Keywords: Autism Spectrum Disorder; Speech-Language Pathology; Diagnosis, Differential

Lay Summary

Autism Spectrum Disorder (ASD) diagnoses have increased in recent years. This study explores possible reasons for this trend based on the views of Brazilian speech-language pathologists. The findings suggest that broader diagnostic criteria, early identification efforts, and greater access to information play important roles. The study emphasizes the need for critical and collaborative approaches to support healthy child development.

Introduction

This research aimed to understand the current causal processes for the increase in Autism Spectrum Disorder (ASD) diagnoses, from the perspective and practice of speech-language pathologists.

Data from the Center for Disease Control and Prevention¹ revealed an increase from 1 in 150 children with autism in 2000 to, more recently, 1 in 36 children with autism in 2023. In Brazil, 2.4 million people declared having received an ASD diagnosis in the 2022 Demographic Census, corresponding to 1.2% of the resident population in the country². This growth raises questions regarding the increase in diagnoses and whether this fact reflects changes in diagnostic processes.

The increase in ASD cases has been observed worldwide³, but the reasons for this increase are not clear. Studies have reported⁴ that this increase in diagnoses could be due to the increased dissemination of knowledge about autism among healthcare professionals, schools, and the general population. Other studies^{5,6} debate the increase in the number of diagnosed individuals focusing on the hyperspecialization and excessive interest of health professionals in diagnosing ASD, while other developmental disorders that compromise the same areas of language and communication are ignored, leading to diagnostic confusion.

Another factor discussed with equal importance is the difficulty in proving the growth of diagnoses through the increase in prevalence or incidence⁷ of ASD. The difficulties of research regarding the epidemiology of ASD are also intertwined with changes in the definition and classification of autism over time. In publications, it is possible to find definitions of autism that affirm it as a

manifestation similar to schizophrenia, i.e., an infantile psychosis, until its replacement by Pervasive Developmental Disorder and the conception of a spectrum, formalized in DSM-5⁸, which broadened the inclusion criteria for diagnosis⁶.

The increase in the number of diagnoses also finds cause in the expansion and revision of diagnostic criteria (DSM-IV to DSM-5)⁸, as well as greater awareness of ASD, the improvement of screening and diagnostic tools, and the expansion of intervention services^{9,10}. However, there is no clear and specific cause that can be related to the etiology of ASD to identify it as a primary factor for the increase in prevalence.

Although some etiological relationships of ASD can be cited, such as environmental, genetic, epigenetic; maternal and perinatal infections, parental age (especially the father's), gestational factors, air pollution, zinc deficiency, low birth weight, and perinatal anoxia¹¹, none of them is a direct cause of this neurodevelopmental disorder. Also described in the literature are smoking during pregnancy, antidepressant intake by women, gestational diabetes, and genetic and epigenetic factors such as DNA methylation, histone modification, and non-coding RNA.¹²⁻¹⁵ There are also indications that changes in diagnostic criteria and practices¹⁶, greater availability of services, and increased professional and public knowledge may be factors responsible for the growth in prevalence over time, but it is not yet possible to completely exclude an increase in the incidence of cases related to biological factors¹².

The inclusion of ASD in the International Classification of Diseases (ICD-11)¹⁷ as a single neurodevelopmental disorder that brings together many characteristics previously distributed and explained as other mental conditions reflects the current understanding of the complexity and diversity of its functioning. Neurodiversity, a concept that recognizes autism as a natural variation of human development, has influenced how ASD is perceived and approached by favoring, in early identification and interventions, respect for individual uniqueness. In this sense, health professionals, such as speech-language pathologists, play an important role in the early identification and intervention of the disorder, producing direct effects on the development and quality of life of people with ASD due to the multifaceted nature of their training.

Methods

The research, approved by the Unicamp Ethics Committee under CAAE 77227724.4.0000.5404, was conducted from a mixed-method perspective, i.e., under the aegis of exploratory qualitative-quantitative research. Data collection was carried out between May and April 2024 and involved 34 speech-language pathologists from private clinics and those working in primary and secondary healthcare, invited to participate via the Instagram digital social network. Participants accepted and signed the Free and Informed Consent Form and answered a questionnaire of 24 questions: 20 multiple-choice and 4 open-ended. Participants were previously anonymized and subsequently identified by sequential number.

The results were compiled and analyzed using descriptive and inferential statistics. For single-choice multiple-choice questions, proportions were calculated relative to the number of participants; for those that allowed more than one choice, proportions were calculated relative to the total number of alternatives chosen. Open-ended questions were analyzed using thematic content analysis. Quantitative variables had their mean and standard deviation estimated by point, while qualitative variables were summarized by point estimation of the proportions of their classes. Possible associations between variables were investigated using the Chi-square test at 10% significance. All analyses were performed using the R statistical software v.4.5.0¹⁸.

Results

Speech-language pathologists are essential in the diagnosis and follow-up of individuals with Autism Spectrum Disorder (ASD), working in interdisciplinary teams to assess communication, identify Augmentative and Alternative Communication (AAC) needs, address feeding issues, and guide families and professionals (ASHA, 2025).

The sample consisted of 34 speech-language pathologists equally distributed between public and private networks. The professionals were between 22 and 60 years old. Regarding practice settings (multiple responses): 42.5% work in health centers, 27.5% in inter/multiprofessional clinics, 17.5% in private practices, and the remainder in NGOs, CAPSij (Child and Adolescent Psychosocial Care Centers), educational centers, and school-clinics. (Table 1).

As for years since graduation: 41.2% graduated 1–5 years ago, 20.6% between 6–10 years, 14.7% between 11–15 years, 8.8% between 16–20 years, and 14.7% more than 20 years ago. Regarding qualification: 32.4% were only graduates, 29.4% specialists, 20.6% specialists by residency, 8.8% masters, and 8.8% doctors.

On the frequency of attendance for autistic individuals: 52.9% always attend, 35.3% regularly, 5.9% occasionally, 2.9% rarely, and 2.9% never (the latter works only with adults). Only 1 professional exclusively attends adults (20+), while 42.4% attend children aged 5 to 9 years and 54.5% aged 0 to 4 years — demonstrating a scarcity of care for adults with ASD.

The frequency of attendance did not vary significantly by location ($p = 0.878$). The majority regularly attend autistic individuals in all contexts: health centers (41%), clinics (64%), and private practices (57%). In NGOs, 100% reported regular attendance. Regarding the age group attended, there was also no significant association with the workplace ($p = 0.3667$). Health centers concentrate care for children aged 5 to 9 years (62%); clinics attend more adults (64%) and private practices maintain balance. NGOs exclusively attend children aged 5 to 9 years.

Regarding participation in ASD diagnosis, 29.4% of speech-language pathologists stated they always participate, 29.4% regularly, 17.6% occasionally, 14.7% rarely, and 8.8% never. Among the most frequent partners in diagnostic teams (multiple responses), the following stood out: psychologists (21.1%), occupational therapists (17.9%), pediatricians (11.4%), neurologists (10.6%), and psychiatrists (9.8%). Other professionals were also mentioned: physical therapists (6.5%), nurses and physical educators (5.7% each), in addition to psychopedagogists, music therapists, and pedagogues.

All participants reported perceiving an increase in ASD diagnoses or evaluations (Table 2) and attributed the current increase in diagnoses to a multiplicity of factors, with emphasis on informational, clinical, and environmental aspects. The most recurrent justification was the increased circulation of information about the topic on the internet (20.2%), followed by the perception of diagnostic confusion (16.3%) and the influence of environmental and epigenetic factors (16.3%). The expansion of diagnostic criteria with the publication of DSM-5 (13.5%) and greater investment in scientific research in the area (11.5%) were also mentioned. Genetic factors (9.6%) and professional training (5.8%) had a lower frequency in the responses. Other less cited elements, such as organic factors, difficulties in exercising

parental functions, market interests, dietary changes, seeking educational benefits, and excessive screen use — which could mimic level 1 ASD symptoms — appeared punctually (1.0% each). These data show that, although there is recognition of the disorder's etiological complexity, explanations related to the sociocultural context and transformations in diagnostic processes predominate among respondents.

Associated with the question about the perception of change and increase in diagnosis and the possible cause, participants included discursive responses where thematic convergence regarding the growth of demand and the valorization of early diagnosis was observed. (Chart 1).

Participant 4 stated that “Lately, I have observed that professionals, schools, and families often come with a preconceived diagnosis in mind, mentioning isolated aspects (e.g., “He walks on his tiptoes – he must be autistic”) without considering other factors”, while participant 9 stated that “the attention to delays is increasingly greater, and therefore children are arriving earlier for stimulation”. Participant 31 complemented: “the big change is the precocity in symptom detection and, consequently, in the start of intervention”. Such statements are representative of the regularity observed among participants, whose reports consistently indicated a perception of increase in early detection and referrals for evaluation.

Some professionals pointed out risks of hasty diagnoses. Representing the observed regularity, participant 21 exemplified: “ASD is being hypothesized earlier. It has advantages and disadvantages; it accelerates the diagnosis of those who truly have it, but delays other diagnoses like Childhood Apraxia of Speech (CAS) and other delays”. The influence of the internet and overdiagnosis were recurrent responses. Participant 10 considers autism “a 'trendy' diagnosis, used to justify current difficulties in children”. Participant 30 highlights that patients arrive “pre-diagnosed”, which hinders the evaluation by the competent team.

Excessive screen use was associated with diagnostic confusion. Participants 14 and 15 mentioned the “impact of excessive screen use on language delay”, and the irresponsibility of social media profiles and their negative effect on family understanding.

The superficiality of diagnostic approaches was also criticized. Participant 12 reported diagnoses made without considering contextual factors: “increasingly brief approaches [...] that do not take into account subjective processes” and family and school relationships. Participant 22 said that

doctors, without considering speech-language pathologists' opinions, label children based only on family reports already confused by the internet. Participant 29 warned about diagnoses made before multidisciplinary evaluations, and participant 4 observed: "professionals already come with the diagnosis in mind by isolated signs, such as 'he walks on tiptoes'".

Regarding the possible causes of the increase in diagnoses (multiple responses), the following were cited (Table 2): greater dissemination of information on the internet (20.2%), diagnostic confusion (16.3%), environmental and epigenetic factors (16.3%), expansion of criteria in DSM-V (13.5%), higher volume of research (11.5%), genetic factors (9.6%), and increased professional qualification (5.8%). Other factors cited with lower frequency included organic issues, commercialization, diet (pesticides), seeking reports for access to resources, and screen use. When asked about the internet's influence on families' understanding of ASD, 57.6% reported a positive influence and 42.4% negative. Regarding habits harmful to communication/socialization in patients (multiple responses), the most cited were: excessive screen use (25%), family non-adherence to guidelines (22.2%), reduced sleep time (14.8%), inadequate diet (11.1%), lack of school adherence (10.2%), and screen use itself as an aggravating factor (8.3%). Other points (0.9% each) included lack of family stimulation, little family time, limited socialization, late school entry, intensive therapies, and family resistance to participation in appointments.

The approach to ASD by influencers on social media generated diverse responses, but consistently pointed to some kind of problem in information dissemination (Chart 2). Participants affirmed that content on social media is decontextualized and subjective, which can generate controversies. Participant 5 highlighted that there is both quality content and "hunches," making it difficult for families to distinguish. Participants (4, 14, 27, 30) criticized the superficiality of posts, which present isolated characteristics of ASD without considering the clinical context. Participant 22 pointed out that the massification of information has transformed ASD into a justification for any behavior: "a child repeats the act of turning lights on and off, for example, and they take [this] as restricted behaviors and repetitive gestures". The lack of scientific basis by professionals, family members, and internet information was criticized by several professionals (7, 8, 10, 13, 15, 19), stating that there is much information without scientific basis causing confusion in family members and even

in the professionals themselves. Participant 13 highlighted that this hinders work with the family and creates stereotypes about ASD.

Another recurrent point in the responses obtained was the commercialization of ASD. Participants 17, 19, 31, and 32 pointed to the commercial exploitation of the disorder through the sale of courses, packages, and therapies without technical support. Participant 19 stated that "there is misleading advertising and exaggerations without scientific basis"; and participant 31 warned that many take advantage of the topic for self-promotion.

Despite the criticisms, some participants highlighted positive aspects of ASD's presence on social media, such as the visibility of the topic, support among families, and access to information. Participant 6 stated that "there are reliable sources that help in understanding diagnosis and interventions". Participant 29 valued real reports that "help other families in the same process".

Finally, the final responses showed a regularity regarding the difficulties faced in accessing diagnosis and therapeutic intervention for ASD. Participant 5 mentioned that "the diagnosis, when it occurs, takes a long time". Participant 4 reported that "many families need to pay for neuropsychological evaluation outside the SUS (Unified Health System) and then return with prescribed reports". The lack of professional training and qualified services was also highlighted. Participant 5 stated that this deficiency hinders families' access to diagnosis, while participant 2 summarized: "training is key". For participant 33, the increase in diagnoses is also related to the expansion of information and the media exposure of the topic.

Discussion

The significant increase in Autism Spectrum Disorder (ASD) diagnoses in recent decades has been widely documented in various regions of the world³. This trend is also confirmed by the data obtained in this research. All participants reported perceiving an increase in the number of diagnoses or cases under evaluation, which prompts a deeper analysis of the factors that have contributed to this growth. This phenomenon, while potentially reflecting increased access to services and social knowledge about the spectrum, also raises debates about possible diagnostic distortions, overdiagnosis, and the impacts of new technological and social mediations.

From the speech-language pathology perspective, understanding the causal processes leading to the increase in ASD diagnoses requires the articulation of clinical, social, epistemological, and interactional factors. The role of the speech-language pathologist, a professional often among the first sought for language and communication developmental delays, places them in a privileged position to identify patterns, inconsistencies, and transformations in diagnostic and therapeutic practices that may be more perceptible in one characteristic or another, such as difficulty understanding social functioning, as well as difficulty in social communication^{5,16}. Such observations corroborate the need to investigate the underlying factors contributing to the increase in diagnoses.

Among the factors frequently cited as causes for the increase in diagnoses is the expansion of diagnostic criteria present in DSM-5 (13.5%). The reclassification of autism as a spectrum — no longer subdivided into distinct clinical categories — contributed to including less severe profiles with more subtle manifestations, especially those falling into support level 1. This expansion makes the diagnosis more inclusive, and also more subject to subjectivity, especially in borderline cases with other neurodevelopmental conditions, such as Intellectual Disability (ID), Developmental Language Disorder (DLD), and Childhood Apraxia of Speech (CAS)^{19,20}.

Furthermore, participants highlighted the valorization of early diagnosis as a relevant advance. The identification of signs before three years of age has allowed for equally early interventions, improving the prognosis of communicative functions' development^{21,22}. However, diagnostic anticipation can also be problematized. The adoption of ASD as the first diagnostic hypothesis without proper exclusion of other conditions has led to delays and errors in subsequent evaluations. Such a scenario points to the need for rigorous and evidence-based interdisciplinary approaches, avoiding clinical reductionism and premature labeling without technical support. The complexity of ASD diagnosis, especially at early ages and in Level 1 support cases, which present more subtle manifestations, requires careful and differentiated evaluation to avoid incorrect diagnoses or the exclusion of other conditions that may mimic ASD symptoms, such as deafness and intellectual disability⁵.

Another widely mentioned factor was the increased access to information by means of the internet (20.2%), cited as a central factor in the expansion of diagnoses. Although access to information

can be positive — facilitating the search for help and contributing to the demystification of autism — speech-language pathologists warn about the risks of "pre-diagnoses" made by family members, influenced by simplified, imprecise, or sensationalist content disseminated by digital influencers and unqualified profiles.

This movement cited by participants reinforces the so-called "diagnosis culture," where isolated characteristics of child behavior — such as walking on tiptoes or avoiding eye contact — are interpreted as conclusive evidence of ASD. This perspective can trivialize the diagnosis, compromising its clinical and social function. According to the data obtained, families arrive at services already with formed diagnostic expectations, hindering objective evaluation and adherence to the therapeutic process, especially when there is a discrepancy between family perception and professional opinion. This issue points to the need for speech-language pathology intervention to also be educational, in the sense of promoting diagnostic literacy among families, building more refined and ethical understandings of child development, social life, and the autism spectrum.

In addition to family expectations, other elements of the contemporary environment in Brazil in the 2020s complicate the diagnostic scenario. The association between excessive screen use and language delays was another factor highlighted by several participants. Although the use of electronic devices does not cause autism, its excessive presence in children's daily lives has been related to the mimicking of symptoms compatible with the development of children with ASD, or to the worsening of developmental characteristics in already diagnosed children²⁰⁻²². Signs such as reduced social interaction, delayed oral language acquisition, and fragmented attention patterns are common in children with early and prolonged screen exposure, making clinical distinction from the autism spectrum difficult.

This phenomenon, already described in the literature as "virtual autism" or "screen-induced ASD-like behavior"²¹⁻²³, demands careful and critical evaluation from the speech-language pathologist, considering the environmental history and family practices. The identification of reversible effects of interactional deprivation should be part of the clinical scope, avoiding diagnostic attributions that disregard contextual factors.

Diagnostic confusion was another element pointed out as relevant (16.3%). Many speech-language pathologists reported that ASD has been erroneously used as an "umbrella" to encompass various conditions, such as simple language delays, learning disorders, or sensory and/or behavioral difficulties. This process may be related to an emptying of clinical listening, as well as institutional and family pressures for a quick diagnosis that provides access to specialized services or educational benefits.

The pathologization of childhood appears, in this context, as a phenomenon associated with the medicalization and commercialization of health services. The emergence of courses, therapies, and packages aimed at "autism treatment" without scientific basis — often driven by social media — was criticized by professionals. There is a growing perception that ASD has become a widely exploited "product," to the detriment of the complexity of care needed for autistic individuals.^{5,24}

Professionals also pointed out flaws in initial and continuing education, as well as in the structure of services, as factors compromising the quality of diagnoses. The lack of training (14.9%) and the absence of interdisciplinary work (2%) hinder the identification of signs and symptoms, in addition to limiting the possibilities of a comprehensive understanding of the individual. The ideal model for ASD evaluation, according to the speech-language pathologists themselves, should be interdisciplinary, contextualized, and longitudinal, taking into account environmental, family, school, and cultural aspects. When this does not occur — as in diagnoses based only on hasty observations — there is a risk of distortions, compromising the adequacy of interventions and family engagement.

Furthermore, difficulties regarding limited resources, physical spaces, and therapeutic time (mentioned by over 12% of professionals) impact directly the quality of the evaluative process and the construction of effective therapeutic plans. In overburdened environments, the possibility of diagnostic error or improper labeling affecting the prognosis and quality of life of children and their families is observed.

Despite the limitations of this study, such as the reduced number of participants which may hinder the generalization of findings, and the self-reported nature of the responses, which may also be subject to perception biases — suggesting future studies with expanded samples and mixed methods to deepen the understanding of the phenomena discussed here — the analysis of the results renews and

corroborates the finding that the increase in ASD diagnoses is a multifactorial phenomenon, in which clinical, social, cultural, technological, and institutional factors intertwine. From a speech-language pathology perspective, this process demands a critical, ethical, and technical outlook, capable of discerning between real clinical needs and contemporary sociocultural demands. This complexity imposes a series of responsibilities on professionals in the field.

Professionals working in diagnosis and rehabilitation, as agents of listening, welcoming, and intervention, need to be attentive to the signs of the spectrum, but also to the factors that modulate its interpretation, such as the use of technologies, the role of social media, the family's search for answers, and the structure of services. With this, they can contribute to careful diagnosis and the construction of more sensitive, contextualized, and coherent therapeutic practices that align with the rights of autistic individuals.

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Data Availability Statement: The raw data for the survey was collected through interviews and cannot be made available in order to guarantee the confidentiality of the survey participants.

Author Contributions: RB and IR conceived and designed the study. RB conducted the research. EF coordinated the statistical analyses; performed the statistical analysis. All authors interpreted the statistical results. RB and IR drafted the manuscript. EF was responsible for translating the manuscript. All authors have read and approved the final version submitted and take public responsibility for all aspects of the work.

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- 23.
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Attachment

Table 1 – Participants Characterization (n=34)		
Years	34,0 ± 11,9	
Years of Professional Experience	Absolute Frequency	Percentage (%)
1 a 5 years	14	41.2
6 a 10 years	7	20.6
11 a 15 years	5	14.7
16 a 20 years	3	8.8
Mais de 20 years	5	14.7
Workplace		
Health Center	17	42.5
Interdisciplinary or Multiprofessional Clinic	11	27.5
Private Practice / Office	7	17.5
Nonprofit Institution	2	5.0
CAPSij (Child and Youth Psychosocial Care Center)	1	2.5
Municipal Multidisciplinary Educational Center	1	2.5
University Teaching Clinic	1	2.5
How frequently do you provide services to individuals with autism in your professional practice?		
Never	1	2.9
Rarely	1	2.9
Occasionally	2	5.9
Regularly	12	35.3
Always	18	52.9
If yes, which age group do you primarily serve?		
Ages 0 to 4 years	18	54.5
Ages 5 to 9 years	14	42.4
Ages 20 years and older	1	3.0
Do you participate in the assessment or diagnosis of Autism Spectrum Disorder (ASD)?		

Never	3	8.8
Rarely	5	14.7
Occasionally	6	17.6
Regularly	10	29.4
Always	10	29.4
Which other professionals are part of the diagnostic team with you?		
Psychologist	26	21.1
Occupational Therapist	22	17.9
Pediatrician	14	11.4
Neurologist	13	10.6
Psychiatrist	12	9.8
Physical Therapist	8	6.5
Nurse	7	5.7
Physical Education Professional	7	5.7
Educational Psychologist	4	3.3
Psychomotor Therapist	3	2.4
Music Therapist	2	1.6
Phoniatrician (Speech and Voice Specialist Physician)	1	0.8
Neuropsychologist	1	0.8
Educator / Teacher	1	0.8
Special Education Teacher (AEE Teacher)	1	0.8
ABA Therapist	1	0.8

Source: Prepared by the authors

Table 2 – Multiple quantitative responses to questions regarding the increase in the number of diagnoses and attributed causes		
Do you perceive an increase in the number of autistic individuals or individuals undergoing diagnostic evaluation?	Absolute Frequency	Percentage (%)
No	0	0
Yes	34	100
To what do you attribute the current increase in Autism		

Spectrum Disorder (ASD) diagnoses?		
Increased availability of information on the topic via the Internet	21	20.2
Diagnostic confusion	17	16.3
Environmental and/or epigenetic factors	17	16.3
Broader diagnostic criteria in the DSM-5	14	13.5
Greater investment in research on the topic	12	11.5
Genetic factors	10	9.6
Greater investment in professional training	6	5.8
Organic/biological factors	2	1.9
Difficulties in exercising parental functions	1	1.0
Market-driven profit motives	1	1.0
Changes in diet (e.g., pesticide exposure)	1	1.0
Need for diagnostic reports to access educational or therapeutic support services and assistant teachers in schools	1	1.0
Excessive screen time that may mimic Level 1 ASD characteristics	1	1.0
Do you believe that the Internet (including social media) influences how your patients' families understand ASD?		
No	0	0
Yes, positively	19	57.6
Yes, negatively	14	42.4
Among the children you work with, do you notice any harmful habits that may compromise communication and/or socialization skills?		
Excessive screen time	27	25.0
Family does not adhere to professional recommendations	24	22.2
Reduced sleep time	16	14.8
Diet primarily composed of sweets and snacks	12	11.1
School does not follow professional recommendations	11	10.2
Screen use (general)	9	8.3
Social factors	1	0.9
Highly complex family dynamics	1	0.9
Late entry into elementary school	1	0.9

Lack of socialization in other environments	1	0.9
Family does not encourage communication, exchange, and interaction	1	0.9
Family members resistant to participating in therapy sessions with the child	1	0.9
Limited family time and minimal communication or stimulation at home	1	0.9
Excessive time spent in intensive therapy programs	1	0.9
Limited opportunities for free play and spontaneous experiences	1	0.9

Source: Prepared by the authors

Chart 1 – Qualitative responses regarding the most recently observed changes in Autism Spectrum Disorder (ASD) diagnosis.	
Participant	Responses
Participant 1	No answer
Participant 2	No answer
Participant 3	No answer
Participant 4	Lately, I have observed that professionals, schools, and families often come with a preconceived diagnosis in mind, mentioning isolated aspects (e.g., “He walks on his tiptoes – he must be autistic”) without considering other factors. Speech, language, and communication issues are evident to some degree, but the team frequently overlooks other parameters. There are also cases of families and professionals seeking to determine the therapeutic approach (most often ABA) and the number of sessions in advance. While there is an overgeneralization of symptoms (one sign immediately linked to the diagnosis), some professionals still minimize severe developmental delays (e.g., advising families to “wait until age 2½ or 3 to see if speech develops”). I recognize that discussions about diagnosis have advanced, but there is a tendency to overgeneralize and simplify diagnostic processes.
Participant 5	In general, I would highlight the inclusion of ASD as a Neurodevelopmental Disorder, early identification, and the expansion of diagnostic criteria within the concept of a spectrum. At [section omitted], as an institution, we are still VERY behind in our understanding of ASD, the quality of diagnostic assessment, and the pursuit of evidence-based best practices.
Participant 6	These cases have been arriving in a very significant volume. I have noticed that a key differentiating factor has been the role of early childhood education, which is usually the first to suspect a developmental difference and advise families to seek evaluation.

Chart 1 – Qualitative responses regarding the most recently observed changes in Autism Spectrum Disorder (ASD) diagnosis.	
Participant 7 -	I have observed a considerable increase in demand since I started working here, as well as greater attention to child development milestones. I believe that professionals, families, and schools are more aware of developmental benchmarks, leading to earlier observations. Regarding the operation of the care network, there have been changes in referral pathways and follow-up possibilities, which, in my view, create difficulties in accessing secondary care services and an overload of cases at the primary care level, limiting the scope of care.
Participant 8	I have noticed greater dissemination of information about screening tests and characteristics related to the spectrum.
Participant 9	The attention to delays is increasingly greater, and therefore children are arriving earlier for stimulation
Participant 10	In recent years, I have noticed a significant increase in the number of children being labeled as having ASD—whether by schools, families (who primarily seek information on Google), or other healthcare professionals. I see ASD as a diagnosis that has become “trendy,” often used to explain a variety of children’s difficulties, even when the diagnostic criteria are not actually met. I receive many children with language development disorder (DLD), behavioral difficulties related to lack of limits, or excessive screen exposure from an early age, who have little social interaction because they do not attend daycare—many of whom are incorrectly labeled as autistic. I share the view that an “industry” has formed around this diagnosis to sell therapies, medications, and other “solutions.” We are, in a way, “creating autistics” through our current lifestyle habits. On the other hand, we now have more resources, knowledge, and technology to identify conditions that were previously poorly understood, which also contributes to the increase in diagnoses.
Participant 11	No answer
Participant 12	"Increasingly brief and often misguided approaches, approaches that do not take into account subjective processes and the subject's relationship with the environment, ignoring family, school relationships, etc. Such a change was caused by the unbridled search for diagnoses."
Participant 13	Currently, due to long waiting lists, there have been frequent changes in referral procedures for specialized diagnostic assessments. As a result, primary care services face ongoing difficulties in identifying these new pathways, which hinders timely referrals and diagnostic investigations.
Participant 14	Families arrive at the clinic with an overload of information that delays understanding of the case. In addition, children often present ingrained habits because parents have also changed their lifestyle. The pervasive presence of screens in daily life—both for children and adults—is a reality, and “analog” activities such as outdoor play are no longer common in families’ routines.
Participant 15	Diagnostic confusion, the impact of excessive screen use on speech and language development, and the irresponsible spread of misinformation by social media profiles.

Chart 1 – Qualitative responses regarding the most recently observed changes in Autism Spectrum Disorder (ASD) diagnosis.	
Participant 16	In recent years, ASD cases have increased substantially across therapeutic approaches, assistive technology, education, school inclusion, and broader societal and labor-market contexts.
Participant 17	There is growing recognition of care models beyond ABA; the neurodiversity movement has become more visible; there is greater acknowledgment of AAC (Augmentative and Alternative Communication), positively impacting social inclusion; and autistic adults are increasingly active on social media and in various public spaces.
Participant 18	Greater attention to ASD cases.
Participant 19	Early diagnoses are being made without adequate investigation, especially in cases involving intellectual disability.
Participant 20	No answer
Participant 21	ASD is being hypothesized earlier. It has advantages and disadvantages; it accelerates the diagnosis of those who truly have it, but delays other diagnoses like Childhood Apraxia of Speech (CAS) and other delays
Participant 22	I believe that children with developmental language disorder are increasingly being included under the ASD label, due to physicians' difficulty in differentiating between mild cases and ASD Level 1. I have observed that some child neurologists focus on isolated signs (for example, a child turning lights on and off repeatedly) and interpret them as restricted or repetitive behaviors. Additionally, some parents read about traits online and report similar behaviors to physicians who, without interdisciplinary input or disregarding speech-language evaluations, assign an ASD diagnosis. Another concerning aspect is that some families benefit from government assistance (BPC), which adds complexity to the diagnostic process.
Participant 23	Validated test.
Participant 24	No response
Participant 25	Overdiagnosis.
Participant 26	No answer
Participant 27	I believe there has been an overdiagnosis recently, where a few isolated traits are enough for a child to be classified as autistic.
Participant 28	No answer

Chart 1 – Qualitative responses regarding the most recently observed changes in Autism Spectrum Disorder (ASD) diagnosis.	
Participant 29	In recent months, I have observed that diagnoses are often given even before multidisciplinary assessments, particularly in more agitated children.
Participant 30	Due to easier access to information through the Internet, parents, schools, and families often arrive “pre-diagnosed,” which can make it harder for the qualified team to conduct a proper evaluation and for caregivers to accept the findings.
Participant 31	The big change is the precocity in symptom detection and, consequently, in the start of intervention. Another issue is the more precise diagnosis of comorbidities, which positively interferes with treatment.
Participant 32	Recently, I have seen more cases presented as “ASD under investigation,” where diagnostic assessment is recommended before confirming the diagnosis. When I started working in 2019, nearly all cases already came with a confirmed diagnosis.
Participant 33	The DSM-5 update has somewhat changed the diagnostic criteria.
Participant 34	Increased use of standardized assessment protocols.

Source: Prepared by the authors

Chart 2 - Qualitative responses about the perception of how media and influencers on social media approach ASD.	
Participant 1	No answer
Participant 2	It depends a lot. There are two sides — positive and negative. However, most of the content has been presented in a decontextualized and subjective way, which can create various misunderstandings and challenges for families and patients' lives.
Participant 3	Reductionist content, limited information about the importance of professional evaluation, little clarity about diagnostic criteria, insufficient discussion of external factors that may cause symptoms similar to ASD, and lack of guidance on appropriate stimulation and the harmful effects of excessive screen use.
Participant 4	In my opinion, there are indeed some significant movements occurring; however, what predominates is a superficial dissemination of what ASD is, which tends to alarm families and spread shallow or fragmented information about how to identify it. I have noticed that families, schools, and even some professionals repeat and share this type of information.
Participant 5	"I believe that on social media we have everything: both quality information, evidence-based, and 'hunches' of all kinds. The problem is knowing how to identify what is quality information or not, especially thinking about the families who are the target audience of my services."
Participant 6	For children already diagnosed, I consider it positive that families can connect with other neurodivergent families and that awareness of rights and social inclusion has increased. However, I have also observed that the mass dissemination of information about ASD — which should help with early diagnosis — has instead become a “justification” for any behavioral differences. Families often cling to isolated criteria, for example: “He walks on tiptoe, so he’s autistic,” and therefore see no need for intervention or routine structure. Everything is labeled as autism, and nothing can be done beyond the diagnosis.
Participant 7	"I believe there are reliable sources that provide quality information, which helps families understand the diagnosis and interventions, but also a lot of information without scientific basis, which generates confusion in family members and even in the professionals themselves – many do not seek serious information and end up propagating this incorrect information to patients!!!"
Participant 8	Although autism is being discussed more frequently, many presentations are sensationalized and lack scientific grounding.
Participant 9	Among the people I follow on social media, I find this greater dissemination valuable. Neurodiversity needs more visibility in the media to promote early diagnosis and effective rehabilitation.
Participant 10	I try to be critical about the information I find and hope families do the same. The media has greatly helped to spread information, which can guide families in seeking diagnoses, understanding their rights, and supporting their children. However, I also see influencers sharing misleading information or, intentionally or not, encouraging families of typically developing children to pursue or even purchase unnecessary diagnoses. It all depends on how we use information and the intentions behind it. In my experience (eight years working in a Child and Youth Psychosocial Care Center, one year in primary care, and postgraduate training in speech therapy for autism), most cases I've seen suspected of ASD did not meet diagnostic criteria.
Participant 11	No answer
Participant 12	Negative
Participant 13	It is common to see digital influencers romanticizing ASD, suggesting that simply having the diagnosis — even without intervention — will ensure the child's development. Moreover, misinformation without scientific basis is frequently shared,

	which complicates our work with families and reinforces stereotypes about autistic behavior. On the other hand, we cannot deny that discussions about autism on social media, especially by influencers, can help raise awareness and gradually reduce stigma.
Participant 14	Most information is sensationalized, often suggesting that abilities or challenges common to all people are specific to ASD.
Participant 15	Many address the topic irresponsibly, with ableist undertones or by promoting only the therapeutic approaches that serve their own interests.
Participant 16	There has been an increase in awareness and community support, as well as dissemination of scientific advances, inclusion efforts, and representation.
Participant 17	In my view, this dissemination has been largely commercial in nature.
Participant 18	No answer
Participant 19	I see two types of professionals: those who seek profit at any cost, promoting exaggerated and misleading claims without proper scientific grounding; and those who use online platforms to share scientific knowledge and healthy professional experiences.
Participant 20	Sensationalized.
Participant 21	There has been more dissemination, but many people speak as if their personal experience were universal, without acknowledging the diversity among cases.
Participant 22	I don't follow many influencers, but I believe that some promote therapies with the goal of selling services, leading parents to suspect autism unnecessarily.
Participant 23	Improving every day.
Participant 24	I perceive that many influencers fail to respect individual differences. They spread inaccurate information about how diagnoses and treatments are conducted and often lack the training needed to advise parents on language stimulation or early detection.
Participant 25	Romanticization and lack of scientifically validated information.
Participant 26	Often distorted.
Participant 27	ASD is frequently discussed in overly general terms, which can create — and often does create — anxiety among families. Situations that stem from lack of stimulation are sometimes mistaken for autism. Moreover, genetic syndromes and psychiatric disorders can also cause confusion when these conditions are not properly investigated.
Participant 28	I believe that the dissemination of information does have a positive impact, as it helps parents become more aware of typical ASD signs and behaviors. However, the generalization and pathologizing of such behaviors without proper investigation are extremely harmful, especially when promoted by influencers without adequate expertise.
Participant 29	When it comes to major influencers, few discuss the topic at all. However, those who have autistic family members (such as children or siblings) tend to share more careful, accurate, and context-specific content that helps other families in similar situations.
Participant 30	They tend to generalize and create unrealistic expectations, especially regarding ABA therapy, portraying it as miraculous and the only effective approach.
Participant 31	While the democratization of information is positive, there is also excess, misinformation, and exploitation. Many individuals use the topic for self-promotion.
Participant 32	Overall, there are few media outlets and influencers addressing the topic, though there is a specific niche that focuses exclusively on it. I perceive the subject has become very commercialized — while there is good information available, the commercialization of ASD-related courses and content has become problematic, with indiscriminate sales practices.
Participant 33	The topic is just beginning to gain attention in the media. Families often refer to what

	autistic individuals themselves say publicly as a way to better understand ASD. The media has featured people sharing their personal experiences and perspectives on the subject.
Participant 34	Presented in an idealized manner, without showing the deep personal and family challenges faced by autistic individuals.

Source: Prepared by the authors

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