



INTERDISCIPLINARY PERSPECTIVES ON AUTISM: CHALLENGES AND EDUCATIONAL STRATEGIES IN MULTI-PROFESSIONAL APPROACHES

Perspectivas Interdisciplinares No Autismo: Desafios E Estratégias Educacionais Em Abordagens Multiprofissionais

ABSTRACT

This study aimed to analyze the effects of interdisciplinary and multiprofessional educational strategies on the development of children and adolescents with Autism Spectrum Disorder. This is an integrative literature review carried out on the MEDLINE, LILACS, IBECs, BDEF and Index Psicologia databases between April and May 2025. Articles published between 2020 and 2025 were selected, with well-defined inclusion and exclusion criteria. The results show that interventions such as the DHACA Method, the CI-RIT model, the use of assistive technologies and collaborative training with robots promote significant improvements in communication, social inclusion and the behavioral repertoire of participants. Joint action between health, education and family professionals proved to be effective in enhancing cognitive, social and emotional development. It can be concluded that interdisciplinary and multi-professional approaches offer concrete benefits in promoting equity and inclusion for individuals with ASD, although challenges remain regarding the standardization of practices and their dissemination in public health and education systems.

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KEYWORDS: Interdisciplinary Approach; Child Development; Inclusive Education; Multiprofessional Team; Autism Spectrum Disorder.



RESUMO

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Este estudo objetivou analisar os efeitos das estratégias educacionais interdisciplinares e multiprofissionais sobre o desenvolvimento de crianças e adolescentes com Transtorno do Espectro Autista. Trata-se de uma revisão integrativa da literatura, realizada nas bases MEDLINE, LILACS, IBECs, BDENF e Index Psicologia, entre abril e maio de 2025. Foram selecionados artigos publicados entre 2020 e 2025, com critérios bem definidos de inclusão e exclusão. Os resultados apontam que intervenções como o Método DHACA, o modelo CI-RIT, o uso de tecnologias assistivas e o treinamento colaborativo com robôs promovem melhorias significativas na comunicação, na inclusão social e no repertório comportamental dos participantes. A atuação conjunta entre profissionais da saúde, educação e familiares mostrou-se eficaz para potencializar o desenvolvimento cognitivo, social e emocional. Conclui-se que as abordagens interdisciplinares e multiprofissionais oferecem benefícios concretos na promoção da equidade e inclusão de indivíduos com TEA, embora persistam desafios quanto à padronização das práticas e sua disseminação nos sistemas públicos de saúde e educação.

PALAVRAS-CHAVES: Abordagem Interdisciplinar; Desenvolvimento Infantil; Educação Inclusiva; Equipe Multiprofissional; Transtorno do Espectro Autista.



INTRODUCTION

Autism Spectrum Disorder (ASD) is a neurodevelopmental condition characterized by challenges in social communication, repetitive behaviors and restricted interests, with manifestations that vary in intensity and form throughout life. The increase in the prevalence of the diagnosis, coupled with the growing understanding of neurocognitive diversity, has spurred debates on more inclusive and effective educational practices, especially in childhood and adolescence. The current scenario highlights the need for strategies that go beyond one-dimensional models, promoting interdisciplinary and multi-professional approaches aimed at the uniqueness of each individual with ASD ¹.

The complexity of ASD requires coordinated actions between education, health and social care professionals, with an emphasis on the role of the family in the continuity of care. These strategies not only favor the development of children's cognitive, emotional and social skills, but also expand opportunities for school and social inclusion. However, there are still challenges related to professional training, coordination between sectors and a lack of effective public policies, which justifies a critical analysis of existing models and their potential for improvement².

With this in mind, the main objective of this article is to analyze the effects of interdisciplinary and multiprofessional educational strategies on the development of children and adolescents with Autism Spectrum Disorder, highlighting the advances, challenges and contributions of these approaches to inclusion and progress in the cognitive, communicative, social and behavioral areas.

MATERIAL AND METHODS

This study is characterized as an integrative literature review, descriptive and bibliographical in nature. The process was structured in six methodological stages: (1) definition of the theme and formulation of the guiding question; (2) establishment of the inclusion and exclusion criteria for the studies, as well as the search strategy in the databases; (3) selection and categorization of the information extracted from the included publications; (4) critical analysis of the selected material; (5) interpretation of the findings; and (6) presentation of the synthesis of the knowledge produced ^{3,4}.



To develop the guiding question, the acronym PICO was used, where: P (Population): transfeminine people; I (Intervention): primary health care; C (Comparison): not applicable; and O (Outcomes): nursing care. This led to the following guiding question: *"What are the effects of interdisciplinary and multiprofessional educational strategies on the development of children and adolescents with Autism Spectrum Disorder?"*

Table 1. PICO strategy

Element	Description
P (Patient/Population)	Children and adolescents with Autism Spectrum Disorder
I (Intervention)	Interdisciplinary and multi-professional educational strategies
C (Comparison)	Traditional/uniprofessional educational approaches or lack of integrated intervention
O (Outcome)	Improved educational, behavioral and social development

Source: authors, 2024

As for the inclusion criteria, we selected complete articles available in Portuguese, English or Spanish, published between 2020 and 2025. The studies should address educational strategies aimed at Autism Spectrum Disorder, with a focus on interdisciplinary practices and multi-professional action. In addition, priority was given to publications that presented evidence of impacts on child development. Duplicate papers, incomplete papers or papers outside the thematic scope were excluded.

A double-blind search was carried out through the Federated Academic Community (CAFe), accessing the CAPES Periodicals Portal. The search was conducted in various scientific databases, with the following results: MEDLINE, LILACS, IBECS, Index Psicologia - Periódicos and BDENF - Enfermagem.

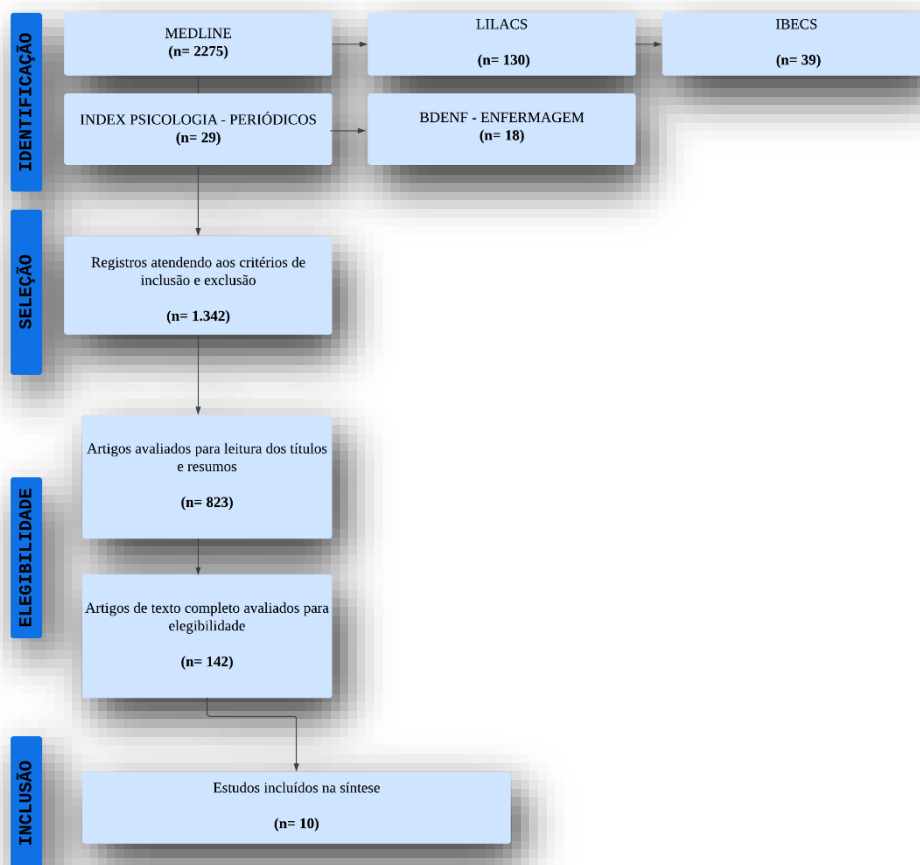
Controlled and non-controlled descriptors were used to identify the articles. Among the controlled descriptors, we used terms from the Descriptors in Health Sciences (DeCS) vocabulary and their English correspondents in the Medical Subject Headings (MeSH), namely: ("Autism Spectrum Disorder" OR "Autism Spectrum Disorder") AND ("interdisciplinary approach" OR "multiprofessional team" OR "educational strategies" OR "inclusive education") AND ("educational outcomes" OR "social development" OR "behavioral improvement").

To organize the data collection stage, an advanced search was applied, respecting the specificities and particularities of each database consulted. The descriptors used were grouped according to the elements of the PICO strategy, and combined with the boolean operator "OR" within each group. Subsequently, the groups were interrelated using the "AND" operator to refine the results.

The data collection stage was conducted based on a previously adapted script, including information such as authors/year, strategy/intervention, main results and impact on development. This process was carried out between April and May 2025, with two independent reviewers working together.

After the initial collection, the studies were organized in the Zotero reference manager, removing duplicates. Two researchers then independently (double-blind) screened the titles, abstracts and keywords using the Rayyan QCRI application, including in the sample only the papers that answered the research question. To ensure eligibility, the selected articles were read in full and those that did not meet the study's objective were excluded. In cases of disagreement between the reviewers, a third reviewer acted to reach consensus and avoid selection bias.

Figure 1. Flowchart of the selected studies, adapted from the PRISMArs-2020 model



Source: authors, 2024



RESULTS AND DISCUSSION

The following table systematizes the main findings of recent studies investigating the effects of interdisciplinary and multi-professional educational strategies for children with Autism Spectrum Disorder. The interventions analyzed range from the use of assistive technologies to the training of caregivers and education and health professionals. There was a positive impact on communication, inclusion and the social and academic development of the participants. Joint action between different areas enhances therapeutic and pedagogical results, promoting equity and participation.

Table 2. Presentation of results

Authors/Year	Strategy/Intervention	Main results	Development Impact
Jaramillo & Vincos (2019)	DHACA method	Improved expressive communication; evolution from non-verbal to verbal patterns; effectiveness of speech therapy support	Broadening the communicative repertoire and inclusion
Jaramillo & Vincos (2019)	CI-RIT model	Improved social communication, joint attention and motor imitation; more responsive caregivers	Effective implementation in public systems; strengthening the self-efficacy of caregivers
Mohanan et al. (2025)	Video instruction with additional support	Increased conversational skills; effective in structured contexts	Combination of techniques promotes progress; gaps on intensity and cultural adaptation
Savaldi-Harussi et al. (2025)	Assistive technology (Smart-Glove)	Accelerated learning; more communicative initiatives; positive acceptance	Visual and tactile stimulation promotes engagement and functional communication
Watanabe, Nishida & Kumazaki (2025)	Collaborative training with robots	Increased interaction and communication; verbal and non-verbal improvement	Encourages autonomy and social inclusion
Wang et al. (2025a)	Structured parental support with Social Communication Scale (SCS)	Identification of subtle changes; greater precision in monitoring	Joint action strengthens intervention and promotes inclusion
Biggs et al. (2025)	Training classmates	Improved social interactions and school engagement	Expands opportunities for development and coexistence at school
Wang et al. (2025b)	Collaboration between school, health and peers	More effective learning; expanded communicative repertoire	Integral development and active participation in the school environment



Tsegaye et al. (2025)	Teacher training for inclusion	More positive attitudes; reduction of attitudinal barriers	Improved engagement and academic/social progress
Cashin et al. (2025)	Nurse training (continuing education and reasonable adjustments)	Increased awareness; reduced ambivalence	Improving care, supporting development and promoting equity

Source: authors, 2024

Interdisciplinary and multi-professional educational strategies have proven to be fundamental in advancing the development of children and adolescents with Autism Spectrum Disorder, especially with regard to communication, social inclusion and emotional support. Methods such as DHACA show significant progress in the evolution from non-verbal to verbal patterns and in the development of linguistic and social skills, and individualized speech therapy is an effective practice in this process ⁵.

Active family participation in multi-professional interventions has also been associated with better therapeutic results. Collaboration between caregivers and professionals strengthens bonds, enhances cognitive and behavioral progress and ensures continuity of care in the home environment ⁶. The CI-RIT model, for example, has shown improvements in social communication, joint attention and motor imitation, strengthening caregivers' responsiveness and self-efficacy ⁵.

Integrated action between different areas of knowledge provides a more complete and personalized approach. Strategies such as the use of video instruction and assistive technologies like the Smart-Glove accelerate learning, increase engagement and promote greater communicative functionality in minimally verbal children ^{7,8}. Innovative approaches, such as collaborative training with robots, have also shown a positive impact on the development of verbal and non-verbal skills ⁹.

In the hospital setting, specialized multi-professional teams offer comprehensive support for sensory and behavioral challenges, contributing to better clinical outcomes and the well-being of patients with ASD ¹⁰. In the school environment, teacher training and continuing training for health professionals, such as nurses, reinforce inclusive attitudes and the creation of more welcoming environments ^{6,11}.

The inclusion of strategies such as training classmates has also proved effective. Teaching responsive practices increases social interaction and engagement school, promoting richer and more participatory learning experiences ¹². Similarly, structured parental support,



combined with the use of culturally adapted instruments, such as the Social Communication Scale, favors more precise monitoring of progress ¹³.

In addition, interventions based on a comprehensive diagnosis, using methods such as ABA and neuropsychological tests, have allowed for greater individualization of programs, contributing to significant advances in communication, cognition and social skills ¹⁴. This collaborative approach breaks with the professional-centrist model, valuing the diversity of knowledge and strengthening the child's overall development ⁶.

Finally, interdisciplinary strategies not only promote school inclusion, but also contribute to training more qualified professionals who are sensitive to the needs of neurodiversity. The integration of studies on disability and inclusion broadens the understanding of pedagogical practices and results in more humane and effective interventions ¹⁵. Thus, coordinated and personalized actions between health, education and the family represent a promising way to transform limitations into potential and guarantee the well-being of children with ASD in various social contexts ^{16,17}.

CONCLUSION

This integrative review provided an answer to the research question, showing that interdisciplinary and multi-professional educational strategies have significant positive effects on the development of children and adolescents with Autism Spectrum Disorder. The studies analyzed showed improvements in communicative, cognitive, social and behavioral skills, especially when there is coordinated action between health, education, family and social care professionals. Personalizing interventions and valuing neurocognitive diversity were decisive factors in the success of the approaches.

As a contribution to society and academia, this study reinforces the relevance of inclusive educational practices and the continuous training of professionals prepared to deal with the demands of neurodiverse audiences. However, limitations such as the scarcity of longitudinal studies, the lack of standardization of interventions and the lack of consistent public policies were identified. It is recommended that future research deepens the analysis of the effectiveness of these strategies in different contexts, considering sociocultural, structural and regional variables, with a view to increasing equity and inclusion in educational and social environments.

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