

Barriers and Coping Efforts of Children with Autism in Social Interaction within the School Environment

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ABSTRACT

Children with autism often experience difficulties in developing social interaction skills due to limitations in communication, sensory processing, and behavioral regulation. This study aims to identify the various barriers to social interaction experienced by children with autism in school environments, as well as the efforts undertaken by teachers, peers, and schools to support their social participation. Using a literature review method of 20 relevant articles published over the past ten years, the findings indicate that children with autism encounter barriers such as difficulties in initiating communication, limited understanding of social cues, reduced eye contact, repetitive behaviors, and sensory sensitivities. Several intervention efforts were identified, including structured social skills training, peer-mediated approaches, the use of visual supports, teacher assistance, and modifications to the learning environment. This study concludes that effective collaboration among educators, peers, and families plays a crucial role in enhancing the social functioning of children with autism. Schools are therefore encouraged to develop inclusive programs that support meaningful social engagement.

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Introduction

Children with autism exhibit distinctive characteristics that affect their communication abilities, behavioral regulation, and social interaction across various settings, including the school environment. Difficulties in social interaction are commonly manifested through limited eye contact, challenges in understanding social expressions, delayed language development, and a tendency toward repetitive behaviors. These conditions significantly affect children's ability to establish relationships with peers and teachers (Asrizal, 2016; Penara et al., 2024). Numerous studies indicate that social interaction barriers constitute one of the most critical challenges faced by children with autism, underscoring the necessity of appropriate and early intervention support (Abualait et al., 2024; Kandouw et al., 2018).

In school contexts, social interaction plays a crucial role in children's academic achievement, emotional development, and overall well-being. However, many children with autism encounter substantial barriers, such as difficulties in understanding social norms, limited initiation of conversations, and withdrawal from group activities (Rifayanti, 2019; Anugrah et al., 2025). These challenges often hinder learning processes and social integration within school activities. Moreover, the roles of teachers, parents, and inclusive school environments are pivotal in facilitating successful adaptation and participation of children with autism (Harsiwi, 2025; Futhaturrobiah et al., 2025).

The urgency of this research is increasingly evident in light of the global expansion of inclusive education policies, which place children with autism in mainstream school settings alongside typically developing peers. Despite policy advancements, practical challenges persist in ensuring meaningful social participation for children with autism. Without adequate support strategies, social interaction difficulties may lead to social isolation, emotional distress, and limited academic engagement. Therefore, understanding both the barriers and the efforts to overcome them is essential for designing effective inclusive practices that go beyond mere physical placement in schools.

Previous studies have examined various aspects related to autism, including communication development, behavioral characteristics, and intervention strategies. For instance, Barus et al. (2023) emphasized the role of play-based activities as an effective medium for optimizing social interaction, while Faizy et al. (2023) discussed Indonesian language learning models for

homogeneous autism classrooms. Other studies highlighted the importance of early detection (Wijaya et al., 2024) and the role of inclusive communities in supporting the emotional development of children with autism (Futihaturrobiah et al., 2025). While these studies contribute valuable insights, most tend to focus on specific domains or isolated interventions rather than providing a comprehensive analysis of social interaction barriers and coping efforts within the school environment.

From a state-of-the-art perspective, recent international literature increasingly emphasizes multi-stakeholder and ecological approaches to supporting children with autism, integrating individual characteristics with environmental and social factors. However, research that systematically synthesizes internal factors (such as communication limitations and sensory sensitivities) and external factors (such as teacher support, peer involvement, and school policies) in the context of school-based social interaction remains relatively limited, particularly within the Indonesian educational context.

The novelty of this study lies in its analytical approach, which synthesizes recent literature to comprehensively identify social interaction barriers experienced by children with autism in school settings and to map the various efforts undertaken by children themselves, teachers, peers, parents, and schools. This integrative perspective provides a holistic understanding that is highly relevant to inclusive education practices, especially in Indonesia, where educational environments are diverse in terms of resources, teacher preparedness, and cultural perceptions of disability.

Based on this background, the research questions addressed in this study are: (1) What social interaction barriers are experienced by children with autism in the school environment? and (2) What efforts and intervention strategies are implemented to help them overcome these barriers? Accordingly, this study aims to describe the social interaction challenges faced by children with autism and to identify effective intervention efforts that support their social functioning and participation in school settings.

Method

Research Design

This study employed a literature review approach to examine the barriers and coping efforts of children with autism in social interaction within school environments. The review focused on synthesizing empirical findings from previous studies to obtain a comprehensive understanding of social interaction challenges and intervention strategies relevant to educational settings.

Data Sources and Article Selection

The primary data sources consisted of 20 peer-reviewed scholarly articles published between 2016 and 2025, obtained through a systematic literature search across various national and international academic journals. Article selection was guided by relevance to the research focus, availability of data concerning social interaction among children with autism, and applicability to school-based educational contexts.

Articles were identified using keyword searches such as "autism," "social interaction," "communication barriers," "inclusive education," and "intervention strategies." The initial pool of articles was then screened based on predefined inclusion criteria.

Inclusion and Exclusion Criteria

The inclusion criteria encompassed articles that: Examined social behavior and social interaction of children with autism; Discussed barriers related to communication and social interaction; and Reported interventions or strategies implemented in school environments.

Articles that were not aligned with the research focus, lacked sufficient empirical or conceptual data, or were conducted outside educational contexts were excluded from the analysis.

Data Analysis Technique

Data were analyzed using thematic analysis, which involved categorizing findings into two main thematic focuses: (1) barriers to social interaction experienced by children with autism, and (2) efforts or strategies employed to address these barriers.

Each selected article was carefully reviewed to identify recurring patterns, similarities, and differences across studies. The extracted themes were then synthesized into a comprehensive

narrative that reflects the collective evidence from the literature.

Synthesis and Interpretation

The results of the thematic analysis were used to draw conclusions and to provide an integrated overview of the challenges and supportive strategies related to social interaction among children with autism in school settings. This synthesis offers evidence-based insights to inform inclusive education practices and the development of effective social support strategies within schools.

Result and Discussion

The results of this study are presented based on data synthesized through thematic analysis aligned with the research objectives. The findings were systematically compared with relevant theoretical frameworks and previous empirical studies to provide a comprehensive understanding of the phenomena examined. This section focuses on interpreting the identified themes, discussing their interrelationships, and highlighting their implications for inclusive education practices. The synthesized data are presented in descriptive narratives and summary tables to clearly illustrate the key findings.

Barriers to Social Interaction Experienced by Children with Autism in School Settings

Social interaction represents one of the most significant challenges for children with autism due to impairments in verbal and nonverbal communication, emotional regulation, and adaptive functioning within social environments. The synthesis of 20 reviewed articles indicates that social interaction barriers among children with autism are complex, multidimensional, and interrelated, thereby affecting both learning processes and social relationships at school.

Verbal and Nonverbal Communication Barriers

The majority of reviewed studies reveal that children with autism experience difficulties in understanding and using language effectively in social contexts. Asrizal (2016) and Rifayanti (2019) reported that children with autism often struggle to maintain conversations, interpret intonation, and express their needs appropriately. These verbal communication challenges are compounded by nonverbal difficulties, including limited eye contact, restricted facial expressions, and atypical body gestures, which hinder effective interaction with teachers and peers. Furthermore, studies by Wijaya et al. (2024) and Muna and Fatiya (2024) emphasize that limitations in nonverbal communication frequently lead to misinterpretations by peers. Such misunderstandings reduce opportunities for social engagement and often result in social exclusion during group activities, reinforcing communication barriers within the school environment.

Barriers in Emotional Regulation and Behavioral Control

Social interaction difficulties are also closely associated with emotional regulation and behavioral challenges. Dewi and Morawati (2024) found that children with autism are prone to repetitive behaviors, tantrums, and heightened responses to sensory stimuli such as loud noises or crowded spaces. These behavioral manifestations often prompt withdrawal from social situations at school.

Similarly, Futihaturobbiah et al. (2025) explain that unstable emotional regulation may decrease self-confidence and motivation to engage socially, thereby limiting children's adaptive functioning. The interaction between emotional dysregulation and social avoidance suggests that emotional competence is a critical factor influencing social participation among children with autism.

Barriers in Relationships with Peers and Teachers

Another prominent barrier concerns social relationships with peers and teachers. Research by Anugrah et al. (2025) and Penara et al. (2024) indicates that children with autism frequently struggle to understand social rules such as turn-taking, sharing, and interpreting others' emotions. These difficulties often cause them to be perceived as "different," increasing social distance and, in some cases, vulnerability to bullying.

From the teacher's perspective, Pratiwi et al. (2023) highlight that many educators lack adequate training and competence in addressing the unique behavioral and social needs of children

with autism. As a result, teacher–student interactions may be less effective, limiting opportunities for meaningful social engagement and inclusive classroom participation.

Barriers Related to School Environmental Adaptation

The school environment itself can present significant challenges for children with autism, particularly due to sensory sensitivities. Kandouw et al. (2018) and Norlita and Sari (2021) demonstrate that excessive noise, sudden schedule changes, and insufficient visual structure can trigger stress and maladaptive behaviors. Such conditions reduce comfort and increase the likelihood of social withdrawal.

These findings suggest that environmental factors are not merely contextual but actively shape the social experiences of children with autism. A lack of environmental adaptation may exacerbate existing communication and emotional barriers, further limiting social interaction opportunities.

Table 1. Summary of Social Interaction Barriers among Children with Autism in School Settings

No	Type of Barrier	Indicators	Sources
1	Verbal communication	Difficulty maintaining conversations, limited language	Asrizal (2016); Rifayanti (2019)
2	Nonverbal communication	Limited eye contact, rigid gestures	Wijaya et al. (2024); Muna & Fatiya (2024)
3	Emotional regulation	Tantrums, repetitive behaviors	Dewi & Morawati (2024); Futihaturrobiah et al. (2025)
4	Social relationships	Difficulty sharing, understanding emotions	Penara et al. (2024); Anugrah et al. (2025)
5	Environmental adaptation	Sensitivity to noise, schedule changes	Kandouw et al. (2018); Norlita & Sari (2021)

Source: Synthesized from multiple studies (2016–2025)

Efforts to Overcome Social Interaction Barriers among Children with Autism in School Settings

Following the identification of social interaction barriers, the reviewed literature proposes various strategies to support children with autism. These efforts involve collaborative roles among teachers, parents, schools, and professional practitioners.

Teacher-Led Interventions in Classroom Learning

Teachers play a central role in facilitating social adaptation among children with autism. Faizy et al. (2023) recommend individualized instruction, visual-based learning, and structured approaches such as Applied Behavior Analysis (ABA) to help children understand social rules. The use of positive reinforcement, visual schedules, and clear instructions has been shown to improve participation and reduce disruptive behaviors.

Romadhoni (2024) further emphasizes that teachers who possess adequate knowledge of autism characteristics are more capable of managing problem behaviors and fostering social engagement in classroom activities.

Parental Involvement in Strengthening Social Behavior

Parental involvement is a critical component of effective social intervention. Harsiwi (2025) notes that parents can support social development by implementing communication training at home, maintaining behavioral consistency, and collaborating closely with teachers. Barus et al. (2023) also highlight that play-based activities conducted at home or within learning communities serve as effective media for enhancing social skills among children with autism.

School-Based Environmental Interventions

An autism-friendly school environment significantly enhances comfort and reduces sensory overload. Nisa et al. (2025) stress the importance of inclusive school practices, such as providing quiet rooms, visual schedules, and minimizing excessive sensory stimulation. Moreover, educating peers about autism fosters empathy and social acceptance, thereby improving peer interactions.

Therapeutic and Specialized Approaches

The literature identifies several effective therapeutic approaches, including:

- Play therapy to enhance sharing and turn-taking skills (Barus et al., 2023);
- Social stories to assist children in understanding social situations (Abualait et al., 2024);
- Sensory and emotional regulation therapy to reduce anxiety (Futihaturrobiah et al., 2025);

d) Early intervention programs to improve communication and sensory integration (Kandouw et al., 2018).

These approaches underscore that effective intervention for children with autism is multidimensional, addressing behavioral, sensory, emotional, and social domains simultaneously.

Table 2. Strategies to Address Social Interaction Barriers among Children with Autism

No	Strategy	Form of Intervention	Sources
1	Teacher intervention	ABA, visual schedules, positive reinforcement	Faizy et al. (2023); Romadhoni (2024)
2	Parental involvement	Communication training, play activities	Barus et al. (2023); Harsiwi (2025)
3	School support	Inclusive environment, quiet rooms	Nisa et al. (2025)
4	Specialized therapy	Play therapy, social stories	Abualait et al. (2024); Barus et al. (2023)
5	Early intervention	Communication and sensory training	Kandouw et al. (2018)

Source: Synthesized from multiple studies (2016–2025)

The synthesis indicates that social interaction barriers among children with autism are interconnected and influenced by communication deficits, emotional regulation difficulties, behavioral patterns, and environmental factors. The most effective interventions are those that adopt a multidisciplinary and collaborative approach, involving teachers, parents, professionals, peers, and supportive school environments. Inclusive education practices grounded in a deep understanding of autism characteristics are essential to promoting meaningful social interaction and participation for children with autism in school settings.

Conclusion

Based on the results and discussion, this study successfully addresses the research objectives by providing a clearer understanding of the social interaction barriers experienced by children with autism in school environments, as well as the efforts undertaken to overcome these challenges. The findings demonstrate that social interaction difficulties among children with autism are multifaceted and influenced by interconnected factors, including communication limitations, emotional regulation difficulties, behavioral characteristics, and environmental conditions.

The synthesis of the reviewed literature highlights that effective support for children with autism requires a comprehensive and collaborative approach involving teachers, parents, schools, peers, and professional interventions. These findings contribute significantly to the advancement of knowledge in the field of inclusive education by emphasizing the importance of multidimensional and context-sensitive strategies to enhance social functioning. Moreover, this study provides practical implications for educators and educational institutions in designing inclusive programs that promote meaningful social participation for children with autism.

Overall, this research not only enriches the existing body of literature but also offers valuable insights for practitioners and policymakers seeking to improve inclusive practices within school settings.

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