

Exploring the Characteristics and Learning Needs of Students with Autism Spectrum Disorder: A Qualitative Study of Special Needs Schools in Makassar

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ABSTRACT

Children with Autism Spectrum Disorder (ASD) experience difficulties in social interaction, communication, behavior, and emotional regulation, requiring educational services tailored to their individual needs. This condition presents a challenge for teachers in creating effective and adaptive learning in the school environment. This study aims to describe the social, communication, behavioral, and emotional characteristics of students with ASD and to identify appropriate learning needs in the educational process. The study used a qualitative descriptive approach with one student with ASD as the subject. Data collection techniques were carried out through interviews with one class teacher and observations of the research subjects. Data analysis used an interactive model through data reduction, data presentation, and drawing conclusions. The results of the study indicate that students with ASD experience difficulties in maintaining social interaction, pragmatic communication, emotional regulation, and adaptation to changes in learning activities. In addition, students require an individual, concrete, visual, and repetitive learning approach. Support from teachers, parents, and the school environment is also an important factor in supporting the academic, social, and emotional development of students with ASD.

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Introduction

The prevalence of Autism Spectrum Disorder (ASD) has continued to increase over the years. In Indonesia, the growing number of children diagnosed with autism has become a significant concern in the field of education, particularly in the implementation of inclusive and special education. Children with Autism Spectrum Disorder (ASD) are individuals with special educational needs who experience challenges in communication, social interaction, and adaptive behavior (Yunita & Kurniawan, 2025). These characteristics necessitate educational services that are tailored to their individual profiles and specific learning needs (Sari et al., 2021; Subarji & Mulyoto, 2024). In school settings, students with ASD often encounter difficulties in understanding instructions, establishing social relationships with peers, and regulating their behavior and emotions within the learning environment (Bactiar et al., 2024; Pramesti & Wulandari, 2023).

A review of the existing literature conducted by the researchers revealed that students with ASD frequently experience difficulties in maintaining social interactions, demonstrating pragmatic communication skills, and regulating their emotions when confronted with changes in learning situations (Isma et al., 2023; New York State Office of Mental Health, 2023). Furthermore, effective learning for students with ASD often requires individualized instructional approaches, the use of visual supports, and repeated instructions to facilitate optimal comprehension of learning materials (Sutarman, 2024). These challenges place considerable demands on teachers in designing learning environments that are effective, adaptive, and responsive to students' needs (Bertha & Purwanti, 2022; Pramesti & Wulandari, 2023). Therefore, a comprehensive understanding of the characteristics and learning needs of students with ASD is essential for supporting their educational success (Alim et al., 2025; Andriani, 2025; Kurnia et al., 2024).

Several previous studies have examined the characteristics and learning needs of students with ASD in school settings. Lubis (2026) reported that the implementation of inclusive education for students with autism requires flexible instructional strategies that are centered on individual student needs. However, most existing studies have focused primarily on inclusive education practices in general and have not specifically explored the relationship between the behavioral characteristics of

students with ASD and their learning needs within educational settings (Lazar, 2020; Martha & Suryana, 2019; Sakti, 2020). In addition, previous research has been limited in capturing teachers' firsthand experiences in supporting students with ASD through in-depth qualitative inquiry.

Given these circumstances, further investigation into the characteristics of students with Autism Spectrum Disorder (ASD) and their relationship to learning needs remains necessary. Research on students with ASD should extend beyond merely describing learning difficulties and should also examine how students' social, communicative, behavioral, and emotional characteristics influence the instructional strategies employed by teachers (Andriani, 2025; Dermawan, 2013). Moreover, relatively few studies have integrated interview and observational data to provide a comprehensive and evidence-based understanding of the everyday learning experiences of students with ASD.

The novelty of the present study lies in its holistic exploration of the characteristics of students with Autism Spectrum Disorder through the integration of in-depth interviews and direct classroom observations. Rather than focusing solely on academic aspects, this study examines social interaction, communication, behavior, emotional regulation, and learning needs in an integrated manner. Consequently, the study is expected to provide a more comprehensive understanding of the educational needs of students with ASD and to serve as a foundation for the development of adaptive educational services that are responsive to individual student needs.

Specifically, this study aims to describe the social, communicative, behavioral, and emotional characteristics of students with ASD; identify their specific learning needs; and analyze the instructional strategies employed by teachers to support their learning processes (Pramesti & Wulandari, 2023; Subarji & Mulyoto, 2024; Shalehah et al., 2023). The findings are expected to provide valuable insights for teachers, schools, and educational practitioners in developing more effective educational services and instructional practices for students with Autism Spectrum Disorder (Subarji & Mulyoto, 2024; Bertha & Purwanti, 2022; Solichah & Hidayah, 2021).

Method

Research Design

This study employed a qualitative descriptive research design to explore the characteristics and learning needs of students with Autism Spectrum Disorder (ASD). A qualitative approach was considered appropriate because it enables researchers to gain an in-depth understanding of participants' experiences, behaviors, and educational needs within their natural learning environments. The study focused on examining students' social interaction, communication, behavior and emotional regulation, academic learning, and support needs in school settings. Data collection was conducted in April 2026 at SLB Alaq Makassar, Indonesia.

Participants and Data Sources

The study utilized both primary and secondary data sources. Primary data were obtained directly from a student diagnosed with Autism Spectrum Disorder and a classroom teacher who had extensive experience in supporting the student's learning process. The student served as the primary focus of classroom observations, while the teacher provided detailed information regarding the student's characteristics, learning needs, and educational experiences.

Secondary data were derived from relevant school documents and supporting records that contributed to a more comprehensive understanding of the student's learning context. The selection of participants was based on purposive sampling, with participants chosen because they were considered capable of providing rich and relevant information related to the objectives of the study.

Data Collection Procedures

Data were collected through semi-structured interviews, non-participant observations, and documentation. The interview protocol focused on key domains identified in the framework proposed by the New York State Office of Mental Health (2023), including social interaction, communication, behavior and emotions, academic learning, and educational support needs. Semi-structured interviews allowed participants to provide detailed explanations while enabling the researcher to explore emerging issues relevant to the study objectives.

Non-participant observations were conducted during regular classroom activities to capture the student's natural behaviors, interactions, and responses within the learning environment. In

addition, documentation was collected to complement and verify findings obtained through interviews and observations. The use of multiple data collection methods facilitated a comprehensive understanding of the student's characteristics and educational needs.

Data Analysis

The data were analyzed using the interactive model of qualitative data analysis, which consists of three interconnected processes: data reduction, data display, and conclusion drawing. During the data reduction stage, relevant information was selected, organized, coded, and categorized according to the research objectives and thematic focus of the study. Subsequently, the data were displayed in descriptive narrative form to facilitate the identification of patterns, relationships, and recurring themes across the data sources.

The final stage involved drawing and verifying conclusions through an iterative process of interpreting interview, observation, and documentation data. This analytical process enabled the researcher to develop a comprehensive understanding of the characteristics and learning needs of the student with ASD.

Ethical Considerations

Prior to data collection, informed consent was obtained from the participant's parents and the classroom teacher. Participation was voluntary, and confidentiality was maintained throughout the study by anonymizing all identifying information. The study adhered to ethical principles for research involving human participants.

Result and Discussion

Results

1. Social Interaction

Based on the interview findings, the classroom teacher reported that the student with Autism Spectrum Disorder (ASD) experienced difficulties in establishing and maintaining social interactions with peers. The teacher explained that "children with autism generally experience challenges in interacting with their peers. They tend to remain within their own world and demonstrate limited social interaction skills." The teacher further noted that the student often preferred to be alone, had difficulty adapting to social environments, and showed limited interest in sharing with others. In addition, the student's response to being called by name was described as inconsistent. As the teacher stated, "sometimes they respond, but only briefly. After that, they often turn their face away and lose focus."

Observational findings revealed that the student demonstrated relatively adequate basic social responsiveness, such as responding when called by name and showing enthusiasm when invited to interact. However, the ability to sustain social interactions remained limited. The student appeared to experience difficulties in maintaining eye contact, sharing with peers, engaging in cooperative play, and consistently demonstrating simple forms of empathy. Furthermore, the student was occasionally observed competing with peers for objects, indicating a need for guidance and support during social activities.

The integration of interview and observational findings suggests that the student demonstrated an interest in participating in social interactions but encountered challenges in maintaining stable and cooperative social relationships. These difficulties were reflected in limited sharing behaviors, challenges in sustaining social attention, and difficulties understanding the dynamics of peer interactions. Therefore, the student requires systematic social skills training and consistent support within the school environment to enhance social participation and interpersonal functioning.

2. Communication

Based on the interview findings, the classroom teacher explained that the communication abilities of the student with Autism Spectrum Disorder (ASD) differed considerably from those of students with other special educational needs. The teacher reported that the student required a longer period of time to process and comprehend instructional directions. As the teacher stated, "they are actually able to understand instructions, but they need more time to do so." The teacher further noted that "they can answer questions, but they often do not fully understand the content of the conversation because their processing and thinking take longer."

Observational findings indicated that the student demonstrated relatively strong receptive communication skills. The student was able to understand both simple and complex instructions and respond appropriately to questions within the context of a conversation. The student's articulation was generally clear, with accurate pronunciation of both vowel and consonant sounds. However, the ability to initiate conversations independently remained limited. In addition, the use of nonverbal communication, variation in vocal intonation, and pragmatic communication skills had not yet developed optimally.

The findings suggest that the communication profile of the student with ASD was characterized by stronger receptive abilities than expressive and pragmatic communication skills. Although the student was able to understand instructions and respond to questions, difficulties remained in interpreting the deeper meaning of conversations and initiating communication independently. These findings highlight the importance of incorporating visual supports, simplified language, and ongoing opportunities for social communication practice within instructional settings. Such strategies may facilitate communication development and enhance the student's participation in classroom interactions

3. Behavior and Emotion

Based on the interview findings, the classroom teacher reported that the student with Autism Spectrum Disorder (ASD) exhibited repetitive behaviors and difficulties with emotional regulation. The teacher explained that "the student repeatedly performs certain actions, such as erasing written work multiple times even when it is already correct and has been assessed." In addition, the teacher noted that tantrums typically occurred when the student encountered situations perceived as unpleasant or undesirable. As the teacher stated, "tantrums usually occur when they are confronted with something they do not like, such as being asked to share." To address these situations, the teacher adopted a non-confrontational approach by allowing the student time to calm down before gradually providing guidance and explanations.

Observational findings revealed that the student occasionally displayed repetitive behaviors, including repeatedly arranging objects and engaging in certain movements in a consistent manner. Furthermore, the student appeared to experience difficulties regulating emotions during conflicts with peers, particularly when competing for toys or other preferred objects. The student also demonstrated challenges in transitioning from one activity to another and was not yet able to independently regulate emotional distress when upset.

The findings indicate that the student with ASD experienced difficulties in emotional regulation and social behavioral control. Repetitive behaviors and episodes of tantrum-like responses emerged as prominent characteristics in the student's daily school activities. These findings suggest that students with ASD benefit from structured, consistent, and supportive learning environments that promote self-regulation, emotional management, and adaptive functioning. Therefore, instructional approaches should emphasize predictable routines, positive behavioral support, and gradual assistance to facilitate students' adjustment to learning environments and social expectations.

4. Academic Learning and Instruction

Based on the interview findings, the classroom teacher confirmed that the academic development of the student with Autism Spectrum Disorder (ASD) progressed at a slower pace than that of typically developing students. The teacher explained that "the student requires a considerable amount of time to understand learning materials and may need as long as four to five years to achieve certain levels of understanding." Regarding instructional practices, the teacher emphasized that the use of concrete learning materials was more effective than lecture-based instruction. As the teacher stated, "methods that utilize real and tangible materials are highly effective, such as concrete objects, videos, or educational games like Lego." Furthermore, the teacher noted that instruction was delivered in a simple and repetitive manner to facilitate the student's understanding of learning content.

Observational findings indicated that the student was generally able to follow classroom instructions but required a high level of concentration and support to remain engaged in learning activities. The student also demonstrated relatively strong independent living skills, including organizing school supplies, following visual schedules, eating independently, and carrying out daily routines without assistance. Nevertheless, the student was easily distracted and showed inconsistent ability to remain seated and attentive throughout the learning process.

The findings suggest that students with ASD require individualized instructional approaches

that are flexible, concrete, and repetitive in nature. The use of visual supports and tangible learning materials appeared to facilitate a better understanding of academic content. In addition, direct guidance and repeated instructions emerged as essential strategies for maintaining students' attention, engagement, and participation during classroom activities. These findings highlight the importance of adapting instructional practices to accommodate the unique learning characteristics of students with ASD and to maximize their academic development and classroom involvement.

5. Support and Educational Needs

Based on the interview findings, the classroom teacher emphasized that parental support and a supportive school environment play a crucial role in promoting the development of students with Autism Spectrum Disorder (ASD). The teacher stated that "support from parents and collaboration among teachers are essential in fostering students' motivation to learn and attend school." Furthermore, the teacher explained that the wide variation in students' abilities necessitates curriculum adaptations to accommodate individual learning needs. As the teacher noted, "the curriculum remains a challenge because students' abilities vary considerably, making it necessary to adjust instructional content and expectations according to each student's capabilities." The teacher also highlighted that praise and positive reinforcement can significantly enhance the learning motivation of students with ASD.

Observational findings indicated that the student was more likely to engage successfully in learning activities when provided with clear instructions, a structured learning environment, and consistent positive reinforcement from the teacher. In addition, the student demonstrated greater sustained engagement in classroom activities when receiving individualized support tailored to their specific needs.

The findings suggest that the educational needs of students with ASD extend beyond classroom instructional strategies and encompass broader environmental and social support systems. Effective educational services require collaboration among teachers, parents, and schools to ensure that students receive consistent and individualized support across settings. Such collaboration contributes to the development of adaptive, inclusive, and responsive educational practices that address the diverse needs of students with ASD and promote their academic, social, and emotional development.

Discussion

The findings of this study indicate that students with Autism Spectrum Disorder (ASD) exhibit complex characteristics across multiple domains, including social interaction, communication, behavior and emotional regulation, as well as learning needs. The student demonstrated difficulties in maintaining social interactions, interpreting communication beyond its literal meaning, regulating emotions, and adapting to changes in learning activities. In addition, the findings revealed that effective learning for students with ASD requires individualized, concrete, and repetitive instructional approaches to facilitate optimal understanding of academic content. The study also highlights the critical role of support from teachers, parents, and the broader school environment in fostering the development of students with ASD.

These findings suggest that the primary challenges experienced by students with ASD extend beyond academic performance and encompass social communication and behavioral regulation difficulties (Gunadi & Matulesy, 2026; Halimatussakdiah et al., 2026; Riadi et al., 2026). Difficulties in sustaining social attention, limited sharing behaviors, and the presence of repetitive behaviors indicate the need for structured and predictable learning environments that can support students' social and behavioral development (Rohmah et al., 2025). Furthermore, the findings demonstrate that the use of visual supports and simplified instructional directions can significantly enhance students' comprehension of learning materials (Rahmah et al., 2026; Rohmah et al., 2025). This reinforces the notion that the educational needs of students with ASD are highly individualized and that instructional practices should be adapted to each student's unique characteristics and learning profile.

The findings are consistent with the theoretical framework of Autism Spectrum Disorder, which emphasizes deficits in social communication and the presence of restricted and repetitive patterns of behavior as core characteristics of the condition (Yohana & Kurniawaty, 2025). From a behaviorist perspective, the use of positive reinforcement, repeated instructions, and structured learning experiences can strengthen desired learning behaviors and improve students' engagement in educational activities (Corey, 2017). In addition, visual learning theory suggests that students

with ASD tend to process and understand concrete information more effectively than abstract concepts. Consequently, teachers should consider incorporating visual supports and tangible learning materials into instructional practices. Innovative approaches such as Personal Photograph Learning Media based on Personalized Visual Learning may serve as effective tools for enhancing learning experiences among students with ASD (Yohana & Kurniawaty, 2025).

The findings of this study are also consistent with those reported by Alim et al. (2025), who identified social communication difficulties and behavioral regulation challenges as major barriers to effective learning among students with autism. However, the present study extends previous research by providing a more detailed understanding of how students' social, communicative, behavioral, and emotional characteristics are interconnected with their educational needs within the school environment. This study contributes to the literature by offering a holistic perspective on the relationship between student characteristics and instructional requirements in everyday classroom contexts.

Unlike many previous studies that have primarily focused on inclusive education practices or general instructional strategies, this study integrates teacher interview data and direct classroom observations to provide a more comprehensive examination of students' characteristics and learning needs. This methodological integration enables a deeper understanding of the real-life experiences of students with ASD and the educational challenges they encounter within school settings.

The findings have several practical implications. First, teachers should adopt adaptive, individualized, and visually supported instructional approaches to enhance students' engagement and learning outcomes. Second, schools should establish structured and supportive learning environments that promote the development of social skills, communication abilities, and emotional regulation. Third, effective collaboration among teachers, parents, and schools is essential for ensuring consistency in educational support and maximizing students' developmental outcomes. Therefore, the findings of this study may serve as a foundation for the development of more effective instructional strategies and special education services for students with ASD.

Despite its contributions, this study has several limitations. The findings are based on a single participant, which limits the generalizability of the results to broader populations of students with ASD. In addition, the study was conducted within a single school setting and over a relatively short observation period. Another limitation is that the study primarily relied on the perspectives of the classroom teacher and observational data, without incorporating in-depth perspectives from parents or other relevant stakeholders. Future research should involve a larger and more diverse sample, extend the duration of observations, and employ multidisciplinary approaches to obtain a more comprehensive understanding of the educational needs of students with ASD.

Conclusion

This study concludes that students with Autism Spectrum Disorder (ASD) exhibit complex characteristics across multiple domains, including social interaction, communication, behavior and emotional regulation, as well as learning needs. In terms of social interaction, students with ASD experience difficulties in maintaining social relationships, sharing with peers, and consistently understanding the dynamics of social interactions. Regarding communication, receptive communication skills appear to be more developed than expressive and pragmatic communication abilities. In addition, repetitive behaviors and difficulties with emotional regulation emerged as prominent characteristics, particularly when students encountered undesirable situations or transitions between activities.

The findings further indicate that students with ASD benefit from individualized, concrete, visual, and repetitive instructional approaches that support their understanding of learning materials. The use of visual supports, tangible learning materials, and direct guidance was found to enhance students' attention, engagement, and participation in learning activities. Moreover, support from teachers, parents, and the broader school environment plays a critical role in promoting students' academic, social, and emotional development.

Overall, the findings highlight the importance of adaptive instructional practices, structured learning environments, and collaborative partnerships between schools and families in addressing the diverse educational needs of students with ASD. These elements are essential for fostering meaningful learning experiences and supporting the holistic development of students with Autism Spectrum Disorder.

References

- Alim, U. N., Hamidah, N. F., & Sahabuddin, E. S. (2025). Strategi Guru Dalam Efektifitas Pembelajaran Siswa Autis (Studi Kasus Di Slb Arnadya Makassar). *Jurnal Pendidikan Inklusi Citra Bakti*, 3(1), 13–21.
- Andriani, O. (2025). Pentingnya Mengenal Karakteristik dan Klasifikasi Anak Berkebutuhan Khusus di Sekolah Dasar. *Jurnal Pendidikan Vokasi Dan Seni*, 3(2), 10–20.
- Bactiar, F. A. P., Aenika, U., Putri, J. N. A., Masfia, I., & Fahmi, Z. (2024). Keterampilan Bersosialisasi Siswa Autis Di Sekolah Inklusi Sd Suryo Bimo Kresno Kota Semarang. *Jkip Jurnal Kajian Ilmu Pendidikan*, 4(2), 589–600. <https://doi.org/10.55583/jkip.v4i2.890>
- Bertha, B., & Purwanti, M. (2022). Pengetahuan Mengenai Disabilitas Sebagai Prediktor Sikap Dalam Menangani SBK Pada Guru SD Inklusi X. *Jurnal Ilmu Perilaku*, 6(2), 151–169. <https://doi.org/10.25077/jip.6.2.151-169.2022>
- Corey, G. (2017). *Theory and Practice of Counseling and Psychotherapy (10th ed.) Cengage Learning*.
- Dermawan, O. (2013). Strategi pembelajaran bagi anak berkebutuhan khusus di slb. *Psymphatic: Jurnal Ilmiah Psikologi*, 6(2), 886–897.
- Gunadi, T., & Matulesy, A. (2026). Membongkar Spektrum Kebutuhan Khusus di Kelas Reguler: Analisis Fungsional ADHD dan Autisme dalam Konteks Pendidikan Inklusif. *Miftahul Ulum*, 4(1), 1–17.
- Halimatussakdiah, H., Nurmayani, N., Khairunisa, K., Winara, W., Manurung, I. F. U., & Maulida, S. N. (2026). Pembelajaran Bagi Anak Autistic Spectrum Disorder. *Jurnal Gramaswara: Jurnal Pengabdian Kepada Masyarakat*, 6(1).
- Isma, S. N., Tayo, Y., & Teguh, M. P. (2023). Pola Komunikasi Guru Dan Murid Dengan Autisme Di SDIT Mutiara Hati Tambun Selatan: Studi Deskriptif Tentang Komunikasi Interpersonal Antara Guru Dan Murid Dengan Autisme Di SDIT Mutiara Hati Tambun Selatan. *Da Watuna Journal of Communication and Islamic Broadcasting*, 4(2), 717–725. <https://doi.org/10.47467/dawatuna.v4i2.4954>
- Kurnia, I. R., Setiawan, A. A., Wandira, P. A., & Darmawan, A. S. (2024). Strategi Guru dalam Mendukung Anak Autisme dengan Pendekatan Efektif di SLB Ananda Mandiri. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 10(04), 298–311.
- Lazar, F. L. (2020). Pentingnya pendidikan inklusif bagi anak berkebutuhan khusus. *Jurnal Pendidikan Dan Kebudayaan Missio*, 12(2), 99–115.
- Lubis, N. (2026). Pentingnya Pendidikan Inklusif Bagi Anak Autisme Di Slb Swasta Panti Karya Hephata Laguboti. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 11(01), 340–356.
- Martha, D., & Suryana, D. (2019). Manajemen Sarana dan Prasarana Pendidikan Inklusif Anak Usia Dini. *Academia. Edu*.
- New York State Office of Mental Health. (2023). *Autism spectrum disorder*.
- Pramesti, A. I., & Wulandari, M. D. (2023). Strategi Pembelajaran Peserta Didik Penyandang Autis Dalam Berinteraksi Sosial Di MI Muhammadiyah PK Kartasura. *Pakar Pendidikan*, 21(2), 150–159. <https://doi.org/10.24036/pakar.v21i2.381>
- Rahmah, A. F., Salsabila, K., Amaliawati, E., Jannah, U., & Hardi, N. F. (2026). Penerapan Media Visual untuk Mengembangkan Kemampuan Komunikasi Interpersonal Siswa Autis di SLB Autis Bina Anggita. *Bima Abdi: Jurnal Pengabdian Masyarakat*, 6(1), 69–82.
- Riadi, A., Halimah, Z., Fitriani, M., Delsalsa, S., Badali, M. A., & Oktaviani, L. (2026). Strategi Guru dan Transformasi Pembelajaran Siswa Autis di Kelas Inklusi. *Jurnal Gramaswara: Jurnal Pengabdian Kepada Masyarakat*, 6(1), 77–85.
- Rohmah, F., Fadliansyah, F., & Oktaviani, A. M. (2025). Strategi Pembelajaran Anak Autisme Spectrum Disorder (ASD) di SD Negeri. *Arus Jurnal Pendidikan*, 5(2), 226–231.

- Sakti, S. A. (2020). Implementasi Pendidikan Inklusif pada lembaga pendidikan anak usia dini di Indonesia. *Jurnal Golden Age*, 4(02), 238–249.
- Sari, A. N., Budiman, B., & Hadinata, E. O. (2021). Interaksi Sosial Anak Autis Di Sekolah Inklusi SD Harapan Mandiri Palembang. *Indonesian Journal of Behavioral Studies*, 1(1). <https://doi.org/10.19109/ijobs.v1i1.9266>
- Subarji, S., & Mulyoto, M. (2024). Manajemen Pembelajaran Siswa Dengan Autism Spectrum Disorder (ASD) Di SLB Samara Bunda Yogyakarta. *Literal*, 2(01), 35–43. <https://doi.org/10.62385/literal.v2i01.119>
- Sutarman, S. (2024). Metode Pengajaran Matematika Pada Anak Berkebutuhan Khusus Tuna Grahita Dan Autis Di SLB YKK Pacitan. *Jurnal Edumatic Jurnal Pendidikan Matematika*, 5(1), 50–63. <https://doi.org/10.21137/edumatic.v5i1.904>
- Yohana, A. A., & Kurniawaty, Y. (2025). Pemahaman Spektrum Autisme: Tinjauan Psikopatologi Perkembangan, Deteksi Dini, dan Intervensi Integratif pada Anak Usia Dini. *Socius: Jurnal Penelitian Ilmu-Ilmu Sosial*, 2(12).
- Yunita, M., & Kurniawan, A. (2025). Pendekatan Sistematis Dengan Dukungan Visual Untuk Meningkatkan Keterampilan Toilet Training Pada Anak Dengan Gangguan Spektrum Autisme. *Jiip - Jurnal Ilmiah Ilmu Pendidikan*, 8(1), 868–874. <https://doi.org/10.54371/jiip.v8i1.6753>