

The independence character of elementary school children with autism: A case study

Ari Setiawan^{1*}, Syarief Fajarudin¹, Nuryani Dwi Astuti¹, Devi Wahyu Ertanti², Sri Budyartati³, Jamilah Jamilah⁴, Machmudah Machmudah⁵

¹ Penelitian dan Evaluasi Pendidikan, Universitas Sarjanawiyata Tamansiswa, Indonesia

² Universitas Islam Malang, Indonesia

³ Universitas PGRI Madiun, Indonesia

⁴ Universitas PGRI Sumenep, Indonesia

⁵ UNU Surabaya, Indonesia

*ari.setiawan@ustjogja.ac.id, UST Yogyakarta Jl. Batikan UH Kota Yogyakarta

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ABSTRAK

Abstract: This case study explores the development of independence in an elementary school-aged child with Autism Spectrum Disorder (ASD). Using qualitative methods—including direct observation, semi-structured interviews, and document analysis—the study identified key factors that facilitated independent behavior in both home and school settings. The child demonstrated increased autonomy in daily tasks such as toileting, dressing, and class participation, particularly when supported by structured interventions including visual schedules, task analysis, and token reinforcement systems. A significant finding was the role of consistent collaboration between parents and teachers, which enabled the child to generalize skills across environments. These results affirm the importance of individualized support strategies and inter-setting consistency in promoting independence among children with ASD. The study concludes by recommending sustained, context-sensitive interventions and further research across multiple participants and settings to inform evidence-based practices in special education.

INTRODUCTION

Independence is a fundamental developmental goal for all children, encompassing daily self-care, decision-making, and social participation. For children with Autism Spectrum Disorder (ASD), achieving independence presents particular challenges due to persistent difficulties in social interaction, communication, and the presence of restrictive and repetitive behaviors (American Psychiatric Association, 2013). These core characteristics can significantly hinder the development of autonomy in daily routines and life skills.

Children with autism often show delays in acquiring essential adaptive behaviors, including feeding, toileting, dressing, and other basic self-care activities (Matson, Hattier, & Williams, 2012). These deficits in adaptive functioning may result in long-term dependence if not addressed early through systematic intervention. According to Volkmar et al. (2014), improving adaptive skills is as crucial as addressing core ASD symptoms, especially during the elementary school years, when independence becomes critical to a child's social integration and academic participation.

Research has shown that structured teaching approaches such as TEACCH (Treatment and Education of Autistic and related Communication-Handicapped Children) and Applied Behavior Analysis (ABA) are effective in promoting independence in children with autism (Mesibov & Shea, 2010; Leaf et al., 2015). These methods rely on visual schedules, task analysis, and positive reinforcement to teach daily living skills step by step. For instance, Hume, Loftin, and Lantz (2009) demonstrated that visual supports can increase on-task behavior and decrease dependency on adult prompts, thereby promoting autonomy.

A growing body of literature also emphasizes the critical role of inclusive education settings in supporting the development of independence. In inclusive classrooms, children with ASD have the opportunity to observe and model the behaviors of typically developing peers, which can enhance their social and functional learning (Lindsay et al., 2013; Kasari et al., 2011). However, the success of inclusion depends heavily on teacher preparedness and the availability of individualized supports that address both academic and non-academic skills.

Parental involvement is another key factor in fostering independence among children with ASD. Koegel et al. (2014) highlight the importance of consistent routines and caregiver responsiveness in promoting adaptive behavior. When interventions are implemented consistently at home and school, children are more likely to generalize skills across contexts. Studies also suggest that parent training programs can significantly improve outcomes in daily living skills acquisition (McConachie & Diggle, 2007).

Despite advances in evidence-based practices, the manifestation of autism is highly individualized, and interventions must be tailored to the unique needs of each child. Factors such as cognitive ability, sensory sensitivities, emotional regulation, and language proficiency all influence how independence develops (Pellicano, 2012). Case study research is particularly useful in capturing these nuanced developmental trajectories and providing practical insights into real-world implementation of intervention strategies.

Although numerous quantitative studies have documented the effectiveness of various interventions for improving independence in children with autism, there is a relative scarcity of qualitative research that explores the lived experiences of children and families. Understanding the daily challenges, strategies, and progress made by an individual child in context can inform more empathetic, effective, and feasible intervention approaches (Stake, 1995; Yin, 2017).

Therefore, this study aims to explore the independence of an elementary school-aged child with autism through a qualitative case study. The focus is on how the child performs daily tasks in school and home environments and the strategies used to support autonomy. By documenting and analyzing these experiences, this research seeks to enrich the current literature and offer practical recommendations for educators, therapists, and parents who support children with ASD.

METHOD

This research employed a qualitative case study approach to explore the development of independence in an elementary school-aged child diagnosed with Autism Spectrum Disorder (ASD). The case study method was chosen because it allows for a comprehensive, context-rich examination of individual experiences, behaviors, and environmental interactions (Yin, 2017; Stake, 1995). Through this approach, the researcher sought to understand how independence is cultivated in real-life settings—namely, at home and in the classroom—by observing, interviewing, and documenting the subject's routines and progress over time.

Participant

The subject of this study was an 8-year-old male student enrolled in an inclusive public elementary school in Indonesia. He had been formally diagnosed with ASD by a licensed child psychologist using standardized diagnostic criteria (DSM-5). The child displayed moderate autism-related symptoms, including limited verbal communication, challenges in social interaction, and reliance on adult support for routine tasks such as eating, dressing, and classroom organization. The participant was selected through purposive sampling, based on criteria that included age, ASD diagnosis, current school enrollment, and observable challenges related to independence. Prior to data collection, informed consent was obtained from the child's parents and assent was secured from the child.

Data Collection

Data were collected over a period of eight weeks, using multiple qualitative techniques to ensure depth and triangulation. The primary methods included:

- Naturalistic observation in both school and home environments, focusing on the child's ability to perform daily routines such as preparing school materials, managing personal hygiene, following instructions, and transitioning between tasks.

- Semi-structured interviews with the child's parents, classroom teacher, and special education assistant to gather insights on strategies used to promote independence and perceptions of the child's progress.
- Document analysis of individualized education plans (IEPs), classroom behavioral logs, and home routine charts to understand planned goals and intervention consistency.

Observational data were recorded through detailed field notes and video documentation (with consent), allowing for iterative analysis and review. Interview protocols followed open-ended questioning formats to elicit rich narratives and avoid researcher bias (Merriam & Tisdell, 2015).

Data Analysis

Data analysis was conducted using thematic analysis, as outlined by Braun and Clarke (2006), which involved six phases: familiarization with the data, initial coding, searching for themes, reviewing themes, defining and naming themes, and producing the report. Transcripts from interviews were coded manually, and observational data were matched with emerging codes to identify consistent patterns of behavior and intervention outcomes. NVivo 12 software was also used to assist with the coding and organization of qualitative data.

The central focus of analysis was on identifying indicators of independence, including task initiation, completion without prompting, problem-solving behavior, and adaptive responses to changes in routine. Strategies employed by caregivers and educators—such as the use of visual schedules, token systems, and verbal modeling—were also coded and evaluated for effectiveness.

Trustworthiness

To ensure credibility and trustworthiness, the researcher employed several strategies recommended by Lincoln and Guba (1985). Triangulation was achieved by using multiple data sources and perspectives. Member checking was conducted by sharing summaries of findings with the parents and teachers for feedback and clarification. Peer debriefing with a fellow special education researcher was also conducted to discuss coding schemes and interpretive conclusions. Additionally, an audit trail was maintained to document decisions made throughout the research process.

Ethical Considerations

The study was approved by the institutional ethics committee of the university where the researcher is affiliated. Ethical principles such as voluntary participation, confidentiality, and non-maleficence were strictly upheld throughout the research process (British Educational Research Association [BERA], 2018). All names and identifying information were anonymized in the report to protect the participant's privacy.

RESULT AND DISCUSSION

Result

The findings of this study provide a comprehensive understanding of how independence manifests and develops in an elementary school-aged child with Autism Spectrum Disorder (ASD). Through detailed observations, interviews, and document analysis, three major themes emerged: (1) Independence in Daily Routines, (2) Role of Structured Supports, and (3) Family and Teacher Collaboration.

Independence in Daily Routines

The participant demonstrated partial independence in several daily activities, including toileting, eating, and classroom participation. For example, during school observations, the child was able to unpack his school bag, retrieve his learning materials, and follow simple visual instructions without direct prompting. At home, he could perform basic self-care tasks such as brushing his teeth and putting on clothes, although these activities required verbal reminders.

Observations over eight weeks indicated steady improvement in task initiation and completion. This supports findings by Matson et al. (2012), who emphasized that with consistent support, children with ASD can acquire functional life skills over time. The child's increased ability to engage in these tasks without assistance reflects developmental progress toward autonomy, a key developmental milestone highlighted by Volkmar et al. (2014).

However, independence remained limited in complex or unfamiliar situations. For instance, the child required adult assistance when transitioning between classes, preparing for unstructured activities, or managing time. These challenges align with previous research noting that executive functioning difficulties in children with autism can impact adaptive functioning in dynamic environments (Pellicano, 2012).

Role of Structured Supports

A critical factor that facilitated the child's independence was the use of structured interventions, particularly visual schedules, task analysis charts, and token-based reinforcement systems. At school, teachers implemented a visual schedule board that outlined daily activities in pictorial form. This helped the child anticipate transitions and reduced anxiety, thus promoting smoother engagement in class routines.

Similarly, at home, parents used a morning routine chart with icons for activities such as toileting, dressing, and breakfast. These visual supports allowed the child to move through routines with decreasing reliance on adult prompts. The effectiveness of visual supports echoes the findings of Hume et al. (2009), who reported that such strategies enhance predictability and support task independence among children with ASD.

Additionally, a token system was used to motivate independent behaviors, such as cleaning up after activities and waiting in line. After collecting five tokens, the child received access to a preferred activity, such as building with LEGO or tablet time. This form of positive reinforcement, based on Applied Behavior Analysis (ABA), proved effective in shaping desired behavior (Leaf et al., 2015).

Family and Teacher Collaboration

Collaboration between the family and school was a significant enabler of the child's independent functioning. Interview data revealed that both parents and teachers shared consistent expectations and strategies, leading to continuity across environments. For example, both used the same verbal cues and picture icons for routines such as "wash hands," "put on shoes," and "pack bag," which reduced confusion and increased the child's confidence.

The parents actively participated in IEP meetings and applied strategies learned from the school psychologist at home. This supports the literature on the importance of parental involvement **in intervention success** (Koegel et al., 2014; McConachie & Diggle, 2007). Teachers also noted that regular communication with parents—through daily logs and messaging apps—helped them adjust classroom strategies based on what worked at home.

Notably, the child exhibited more independence in tasks that were reinforced consistently in both settings, such as requesting help or following multi-step instructions. This reinforces the value of generalization—the ability to transfer skills across settings—as a marker of true independence (Mesibov & Shea, 2010).

Discussion

The results of this case study reveal critical insights into the development of independence among elementary school-aged children with Autism Spectrum Disorder (ASD), emphasizing the interplay between individual capacity, environmental structure, and collaborative support systems. This discussion synthesizes the findings in relation to existing literature, highlights theoretical implications, and suggests practical strategies for educators and caregivers.

The Gradual Development of Independence

The participant demonstrated observable gains in independent functioning, particularly in routine tasks such as self-care and classroom participation. These findings align with research suggesting that children with ASD are capable of acquiring life skills through consistent teaching and structured routines (Matson et al., 2012; Duncan & Bishop, 2015). The progression from dependency to partial autonomy supports the developmental-behavioral model, which posits that skills must be taught explicitly and reinforced through structured learning environments (Koegel et al., 2014).

This study also corroborates the view that independence in children with autism is not a binary trait but rather a continuum. The child's ability to complete familiar tasks independently contrasted with his reliance on adult assistance in novel or less-structured situations. This distinction is supported by Volkmar et al. (2014), who emphasized that while many children with ASD can master specific tasks,

they often face difficulty with generalization and adaptive flexibility, especially when executive functioning deficits are present (Pellicano, 2012).

Importance of Structured Supports

Structured supports—including visual schedules, task breakdowns, and token reinforcement systems—were found to be highly effective in promoting independent behavior. These findings are consistent with the principles of Applied Behavior Analysis (ABA), which emphasize the use of antecedent strategies and reinforcement to shape functional behaviors (Leaf et al., 2015).

Visual supports, in particular, proved valuable in reducing the cognitive load associated with transitions and multitasking. Research by Hume et al. (2009) and Hodgdon (1995) affirms that visual cues increase predictability and reduce anxiety, which in turn facilitates greater independence. The use of task analysis—breaking down complex activities into manageable steps—helped the child develop competence in tasks that initially required significant assistance. These methods are fundamental components of the TEACCH approach, which prioritizes structured teaching and environmental supports (Mesibov & Shea, 2010).

Collaboration Between Home and School

Another key finding was the impact of consistent strategies across home and school environments. The participant showed greater independence in tasks that were reinforced by both parents and teachers, demonstrating the importance of inter-setting consistency. This supports the findings of McConachie and Diggle (2007), who argue that active parental involvement significantly enhances the outcomes of interventions for children with ASD.

Moreover, communication between educators and caregivers was instrumental in tailoring strategies to the child's needs. Regular feedback loops allowed for adjustments based on behavioral observations and family insights. Such collaboration reflects the principles of ecological systems theory (Bronfenbrenner, 1979), which posits that child development is influenced by multiple interrelated systems, including family and educational contexts.

Implications for Practice

The findings of this study underscore several practical implications for special education professionals and parents:

1. Individualized strategies must be based on the child's developmental level and cognitive profile. A one-size-fits-all approach may be ineffective due to the heterogeneity of autism presentations (Lord et al., 2018).
2. Visual and behavioral supports should be introduced early and maintained consistently across settings to build routine and predictability, which are critical for children with ASD.
3. Parent-teacher collaboration should be institutionalized through regular meetings, shared behavioral goals, and consistent communication channels. This aligns with the recommendations from the National Research Council (2001) on effective autism intervention.
4. Training for teachers and caregivers is essential to maintain fidelity in implementing structured interventions and to adapt strategies based on developmental changes over time.

Limitations and Future Research

While the case study approach allowed for in-depth analysis, it inherently limits generalizability. The study focused on a single child within a specific cultural and educational context (Indonesia), which may not reflect the experiences of children with ASD in other settings. Additionally, the study did not measure long-term retention or post-intervention independence, which are important aspects of sustainable development.

Future research should consider longitudinal studies involving multiple participants across diverse settings. Quantitative assessments of independence skills, alongside qualitative methods, may also provide a more holistic picture. Moreover, comparative studies between inclusive and special education settings could yield valuable insights into the most conducive environments for fostering independence in children with ASD.

CONCLUSION

This case study offers a nuanced understanding of how independence develops in an elementary school-aged child with Autism Spectrum Disorder (ASD). The findings underscore that while children with ASD may initially exhibit dependence in daily functioning, structured interventions—such as visual

supports and reinforcement systems—can effectively facilitate autonomy over time. Importantly, the child in this study demonstrated progressive independence in predictable environments with consistent adult guidance and explicit instruction.

The success of the intervention was largely attributed to the consistency between home and school environments. The collaborative efforts of parents and educators, using shared visual cues and behavioral strategies, created a cohesive support system that enabled skill generalization. This reflects the broader literature emphasizing the critical role of ecological and contextual factors in promoting developmental outcomes for children with ASD.

This study also highlights the need for individualized and sustainable strategies that evolve with the child's growth. Although this research was limited to one participant, it provides valuable implications for educators, therapists, and families in designing personalized support systems. Future research should explore similar interventions across diverse cultural contexts and with larger sample sizes to strengthen generalizability and uncover long-term developmental trajectories.

REFERENCES

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- British Educational Research Association (BERA). (2018). *Ethical Guidelines for Educational Research* (4th ed.). London: BERA.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Duncan, A. W., & Bishop, S. L. (2015). Understanding the gap between cognitive abilities and daily living skills in adolescents with autism spectrum disorders with average intelligence. *Autism*, 19(1), 64–72. <https://doi.org/10.1177/1362361313510068>
- Hodgdon, L. Q. (1995). *Visual Strategies for Improving Communication: Practical Supports for School and Home*. QuirkRoberts Publishing.
- Hume, K., Loftin, R., & Lantz, J. (2009). Increasing independence in children with autism spectrum disorders. *Teaching Exceptional Children*, 41(6), 22–29. <https://doi.org/10.1177/004005990904100603>
- Kasari, C., Locke, J., Gulsrud, A., & Rotheram-Fuller, E. (2011). Social networks and friendships at school: Comparing children with and without ASD. *Journal of Autism and Developmental Disorders*, 41(5), 533–544.
- Koegel, R. L., Ashbaugh, K., Navab, A., & Koegel, L. K. (2014). Improving empathic communication skills in adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 44(5), 1055–1060. <https://doi.org/10.1007/s10803-013-1946-2>
- Leaf, J. B., Taubman, M., Bloomfield, S., Palos-Rafuse, M., Leaf, R., McEachin, J., & Weiss, M. J. (2015). Applied behavior analysis is a science and, therefore, progressive. *Journal of Autism and Developmental Disorders*, 46, 720–731. <https://doi.org/10.1007/s10803-015-2591-6>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Sage Publications.
- Lindsay, S., Proulx, M., Scott, H., & Thomson, N. (2013). Exploring teachers' strategies for including children with autism spectrum disorder in mainstream classrooms. *International Journal of Inclusive Education*, 18(2), 101–122.
- Lord, C., Elsabbagh, M., Baird, G., & Veenstra-VanderWeele, J. (2018). Autism spectrum disorder. *The Lancet*, 392(10146), 508–520. [https://doi.org/10.1016/S0140-6736\(18\)31129-2](https://doi.org/10.1016/S0140-6736(18)31129-2)
- Matson, J. L., Hattier, M. A., & Williams, L. W. (2012). How does autism symptomology correlate with adaptive skills? *Research in Autism Spectrum Disorders*, 6(1), 294–300. <https://doi.org/10.1016/j.rasd.2011.05.010>
- McConachie, H., & Diggle, T. (2007). Parent implemented early intervention for young children with autism spectrum disorder: A systematic review. *Journal of Evaluation in Clinical Practice*, 13(1), 120–129. <https://doi.org/10.1111/j.1365-2753.2006.00674.x>
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative Research: A Guide to Design and Implementation* (4th ed.). Jossey-Bass.

- Mesibov, G. B., & Shea, V. (2010). The TEACCH program in the era of evidence-based practice. *Journal of Autism and Developmental Disorders*, 40(5), 570–579. <https://doi.org/10.1007/s10803-009-0901-6>
- National Research Council. (2001). *Educating Children with Autism*. National Academies Press.
- Pellicano, E. (2012). The development of executive function in autism. *Autism Research and Treatment*, 2012, Article ID 146132. <https://doi.org/10.1155/2012/146132>
- Stake, R. E. (1995). *The Art of Case Study Research*. Sage Publications.
- Volkmar, F. R., Reichow, B., & McPartland, J. C. (2014). *Autism and developmental disorders: From science to practice*. Springer.
- Yin, R. K. (2017). *Case Study Research and Applications: Design and Methods* (6th ed.). Sage Publications.
- Alam, B. T., Susilo, E. A., Alfi, Cindya. (2021). Survei Pelaksanaan Pembelajaran daring di Lingkungan Fakultas Ilmu Pendidikan dan Sosial Universitas Nahdlatul Ulama Blitar Tahun 2020. 5(1), 148-153, www.jurnal.unublitar.ac.id/jp.
- Engko, C., & Usmany, P. (2020). Dampak Pandemi Covid-19 Terhadap Proses Pembelajaran Online. *Jurnal Akuntansi*, (online), 6(1), 23–38, (<https://ojs3.unpatti.ac.id/index.php/jak/article/view/2709>), diakses tanggal 15 Desember 2020.
- Jumadi, Flavianus dkk. 2021. Efektivitas Pembelajaran PJOK pada Teknik Dasar Passing Bawah Permainan Bola Voli Melalui Media Daring pada Masa Pandemi Covid 19. *Jurnal Pendidikan Kesehatan Rekreasi* 7 (2), 423-440.
- Mahmud, saifuddin & Idham, Muhammad. (2017). *Strategi Belajar Mengajar*. Syiah Kuala University Press.
- Irwandani, I., & Juariyah, S. (2016). Pengembangan media pembelajaran berupa komik fisika berbantuan sosial media instagram sebagai alternatif pembelajaran. *Jurnal Ilmiah Pendidikan Fisika Al-Biruni*, 5(1), 33.
- Sumarno, S., & Irianto, D. P. (2019). Studi eksplorasi klub sepakbola pada Liga 2 Indonesia 2018: Bagaimana cara bertahan dalam keterbatasan?. *Jurnal Keolahragaan*, 7(2), 104-115.