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Fostering Toilet Training Independence in Among Student with Mild Intellectual Disabilities

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Abstract

This study aims to improve toilet training independence in a 4th-grade student with mild intellectual disabilities in grade 6 of a special needs elementary school through self-skills learning. The study used the Classroom Action Research (CAR) method with a descriptive qualitative approach. The results showed a significant increase in the child abilities. In the initial condition, the child was only able to perform 2 of the 6 steps of toileting activities correctly (33%) and still often held her urine until she wet herself. After the Cycle I action, the ability increased to 4 steps (67%) and the frequency of bedwetting decreased. In Cycle II, the child was able to perform all steps (6 steps, 100%) with minimal guidance and was brave enough to go to the toilet alone without fear. Self-skills learning with repeated practice and visual support effectively increases toilet training independence in children with mild intellectual disabilities. In conclusion, this intervention has proven to be effective, realistic, and applicable for implementation in special schools, especially in self-skills learning programs that focus on student' personal independence.

Keywords

Classroom Action Research; Mild Intellectual Disability; Self-Help Skills; Toilet Training

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1. INTRODUCTION

Independence in performing daily activities is an important aspect in the learning process of children with mild intellectual disabilities (TGR) (Kelly et al., 2026; Wiggins et al., 2023). One of the basic skills that often poses a challenge is toilet training, namely the ability to urinate independently. Observations at SLB Al Fahmi Subang found a 9-year-old TGR student who often held her urine because she was afraid to go to the bathroom alone and will be the subject of the research to be conducted. As a result, the child often wet herself during class and was unable to flush the toilet properly, leaving urine stains in the toilet bowl. This behavior leads a lack of understanding of bodily signals as well as a lack of courage and stable independent habits, which affect personal hygiene, learning comfort, and social interaction (Dahlia et al. 2024; Hastuti, 2021).

The research question is how self-skills learning can improve toilet training independence in a 4th grade TGR SLB Al Fahmi Subang. The objective is to improve toilet training independence through structured learning methods that emphasize practical skills. The benefits of this research are felt by student in developing courage and independence, teachers as models of practical learning, parents as guides for practice at home, and schools as references for independence training programs at special needs schools (Diyanti, 2023; Agusniatih, 2022).

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Theoretical foundations state that mild intellectual disability is a condition characterized by below-average intellectual ability (IQ 50–70) and difficulties in adaptive functioning (Sundari and Syamsiyah, 2024; Adzkiya et al. 2024). Children with mild intellectual disabilities can learn basic academic and functional skills through concrete, repetitive practice. While they often possess good social interaction skills, they require additional guidance in developing daily living habits, such as eating, dressing, and using the toilet (Dahlia et al. 2024; Agusniatih, 2022). Toilet training for children with special needs often takes longer due to challenges in recognizing bodily signals, motor coordination, and communication (Sener et al., 2019). Behavioral approaches incorporating repetitive practice and positive reinforcement—have proven effective in this process (Harahap & Hidayati, 2026)

Self-care skills refer to the ability to meet personal needs without the assistance of others. A functional learning approach, centered on daily activities, helps children understand and perform these skills independently (Juliana & Barida, 202; Amstad & Müller, 2020). For children with mild intellectual disabilities, consistent practice fosters self-confidence and facilitates social adjustment both at school and at home (Octavia et al., 2025; Wiggins et al., 2023). Effective instructional methods include demonstration, repetitive practice, positive reinforcement, and the use of visual aids to help children understand the sequence of activities. Research indicates that these strategies are effective in enhancing the independence of children with mild intellectual disabilities (Hawa, 2024; Fatimatuzzahra et al., 2022).

Based on a review of previous research, there are still research gaps that require attention. Most studies focus on implementing toilet training in early childhood and autistic children through drill, demonstration, or habituation methods. Meanwhile, research specifically examining increasing toilet training independence in student with mild intellectual disabilities through self-skills learning using a Classroom Action Research (CAR) approach is still very limited. In addition to focusing on learning outcomes, this study also describes the process of gradual change in student behavior in each action cycle, thus providing a more comprehensive picture of the process of developing independence.

2. METHODS

This study employs a descriptive qualitative approach using the classroom action research (CAR) method. This method was selected to enhance the independence of a student with a mild intellectual disability in toilet training activities through the gradual and repetitive teaching of self-care skills. The CAR was conducted following the Kemmis and McTaggart (1988) model, which encompasses the stages of planning, action, observation, and reflection across two cycles. This approach is grounded in a behaviorist paradigm, which posits that behavior is shaped through stimuli and responses reinforced through repetition (Gebhardt et al., 2019). The study was carried out at SLB Al-Fahmi Subang, involving a nine-year-old female student with a mild intellectual disability who is enrolled in the fourth grade of primary-level special education (SDLB). The subject was selected through purposive sampling because she demonstrated difficulties with independent toileting—such as a fear of going to the restroom alone, a tendency to hold in urine, and an inability to flush the toilet properly after use (Jebril & Chen, 2021).

The research procedure consisted of two action cycles. The planning stage involved the development of an Individualized Education Program (IEP), visual aids, and observation sheets. During the action phase, the teacher demonstrated the steps for using the toilet, provided explanations using visual media, guided the student in imitating these actions, and offered positive reinforcement for every successful attempt. The student's behavior was monitored using a self-care skills observation sheet. The results were then evaluated during the reflection stage to determine necessary improvements for the subsequent cycle (Net et al., 2023).

Research instruments included observation sheets, field notes, photo/video documentation, and interviews with the teacher and the student's parents. Data were collected through direct observation,

semi-structured interviews, and documentation, and were subsequently validated using source and method triangulation (Ng & Ling, 2021). Data analysis was conducted using a descriptive qualitative approach, involving data reduction, data presentation, and conclusion drawing (Chang et al., 2025). The success of the intervention was measured by the child improved ability to use the toilet independently, flush it thoroughly, and demonstrate initiative in going to the toilet. The intervention is considered successful if at least 80% of the indicators are met for three consecutive days (Wynkoop, 2016; Kac, 2026).

3. FINDINGS AND DISCUSSIONS

Findings

Initial Conditions (Pre-Intervention) and Problem Identification

This study began with five days of observation to determine the initial abilities of student in toilet training skills. The research subject was a nine-year-old female student with mild intellectual disability in the fourth grade of a special needs elementary school, who showed several problems with independence, namely (1) fear of going to the toilet alone, (2) often holding her urine until she wet her pants, and (3) not yet able to flush the toilet properly.

The observation was conducted through direct observation by the classroom teacher and researcher using an observation sheet that covered four indicators of independence: courage to go to the toilet alone, ability to flush urine, ability to follow the toilet training steps, and frequency of holding urine until wetting herself. Pre-Intervention observation results are show in Table 1.

Table 1. Pre-Intervention Observation Results

Independence Indicators	Observation Results	Percentage
Daring to go to the toilet alone	Never	0%
Flushing after urinating	Not done	0%
Following the sequence of steps	2 out of 6 steps	33%
Holding urine until wetting	Often (4–5 times/week)	80%

Based on the Table 1 above, shows that the child independence skills are still very low. The child shows fear and reluctance to go to the toilet without being accompanied by a teacher. In addition, he does not yet understand the sequence of toilet activities such as lowering his pants, urinating, flushing, washing his hands, and putting his clothes back on properly. The behavior of holding urine until wetting himself also shows a low awareness of body signals.

These results illustrate that children have obstacles in the area of self-care skills, especially in the aspect of personal hygiene. According to Schlundt & Satterfield (2016), children with intellectual disabilities tend to have difficulty understanding procedural steps and show high dependence on adults in self-care activities (Hasibuan et al. 2020; Rahayu, 2023). Low conceptual understanding and short-term memory skills hinder the process of internalizing hygiene behaviors.

In addition, emotional factors also influence children's behavior. Fear of the toilet environment and previous habits of always being accompanied by adults reinforce dependence. In line with Mangunsong's (2009) opinion, children with intellectual disabilities need a safe, structured, and emotionally supportive learning environment in order to display new adaptive behaviors (Adzkiya et al. 2024; Sundari and Syamsiyah, 2024). Based on these initial findings, the intervention focused on toilet skills training through concrete and repetitive methods, with the support of visual media and positive reinforcement. This approach was expected to gradually increase the children's independence through the habit formation of new behaviors that were enjoyable and easy to remember.

Increasing Independence through Cycle I and Cycle II

Cycle I

In the first cycle, researchers and teachers provided self-care skills training using the following strategies: direct demonstration of the sequence of activities for using the toilet, daily drills, visual media in the form of pictures illustrating the steps of toilet training, and ositive reinforcement in the form of praise and stickers every time a child successfully completed an activity. In addition, the results of the observations in cycle I can be seen in Table 4:

Table 2. Cycle I Observation Results

Independence Indicators	Observation Results	Percentage
Dares to go to the toilet alone	Sometimes accompanied	50%
Flushes after urinating	Sometimes assisted	50%
Follows the sequence of steps	4 out of 6 steps	67%
Holds urine until wetting	Reduced to 2–3 times/week	50%

Based on Table 2 above, there has been a significant improvement compared to the initial condition. The child has begun to show courage to go to the toilet, although still requiring assistance. The use of visual media helps the child remember the steps to be taken. The frequency of bedwetting has decreased by half, indicating an improvement in recognizing bodily signals. These findings are in line with (Rozi et al. 2022; Khairiyah and Kurniawan, 2024) opinion that repeated practice with positive reinforcement can build confidence and motivate children with special needs to perform independent activities. However, reflection on the results of Cycle I shows that children still tend to seek security from their companions. Therefore, in Cycle II, the strategy was modified so that children could be more independent without assistance.

Cycle II

Cycle II focuses on developing complete independence through: independent practice without teacher assistance, use of more detailed visual aids posted in the toilet area, consistent positive reinforcement given each time the child succeeds. The results of the second cycle of observations can be seen in Table 5.

Table 3. Cycle II Observation Results

Independence Indicators	Observation Results	Percentage
Daring to go to the toilet alone	Always alone	100%
Flushing after urinating	Independent without assistance	100%
Following the steps	6 out of 6 steps	100%
Holding urine until wetting oneself	Rarely occurs (0–1 times/week)	10–20%

Based on Table 3, after five days of intervention, the child was able to perform all toilet training activities independently. He no longer showed fear and was able to follow all the steps correctly. Pictorial schedule-based learning is effective for children with intellectual disabilities because it facilitates the processing of concrete information. Through pictures, children can understand the sequence of actions without having to rely on verbal instructions from the teacher. The improvement in student' abilities in cycle II demonstrated that the gradual self-skills instruction fostered new, more independent habits. Initially, student still needed teacher guidance at almost every stage of the toilet training activity. However, after repeated and consistent practice, student began to understand the sequence of activities and were able to carry them out with greater confidence. These changes

demonstrate that the hands-on, experiential learning process provides student with the opportunity to gradually develop adaptive skills in accordance with their learning characteristics. Inter-cycle data analysis shows progressive improvement in all indicators, as illustrated in the graph shown in Figure 1:

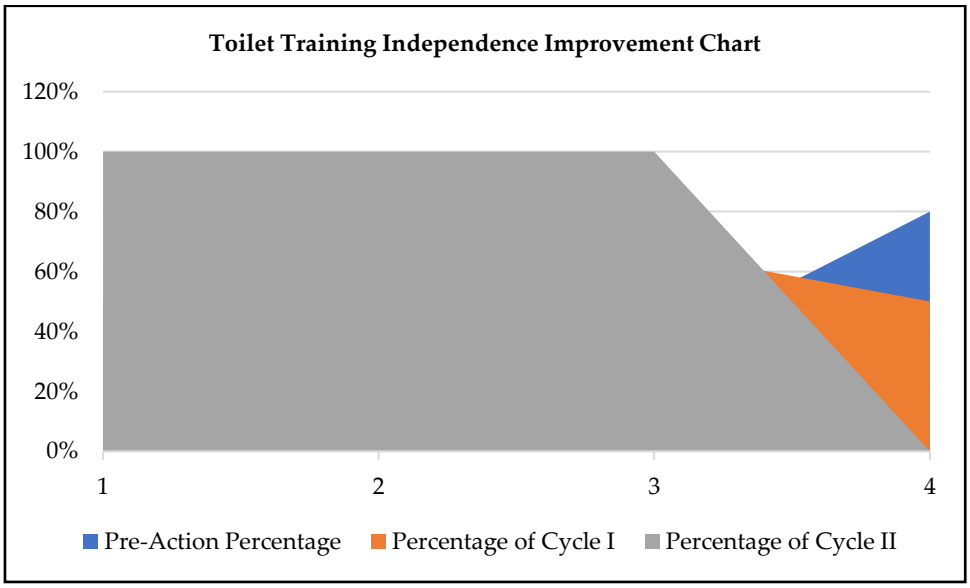


Figure 1. Graph of Toilet Training Independence Improvement from Pre-Intervention to Cycle II

Based on Figure 1, the graph shows the development of children's independence in toilet training from the pre-action stage, cycle I, to cycle II. The graph shows a progressive and significant increase in all toilet training skill indicators after the pictorial schedule-based intervention. In the pre-action stage, the percentage of children's independence was still very low. Children were unable to follow the sequence of activities correctly, still showed fear, and often wet themselves because they were unable to hold their urine.

Entering cycle I, there was an increase in several indicators. Children began to dare to enter the toilet with guidance, were able to perform some steps such as lowering their pants and sitting on the toilet, but still needed the teacher's help at several stages, for example when flushing urine or cleaning themselves. The percentage of independence increased but was not yet optimal.

In cycle II, the graph shows a significant jump to nearly 100% across all indicators. Children were able to perform the entire series of toilet training activities independently, from recognizing the urge to urinate, going to the toilet without fear, performing all steps in the correct sequence, to flushing and washing their hands afterwards. The child also rarely wets the bed (0–1 times per week).

Overall, this graph illustrates the success of pictorial schedule-based learning in increasing children's toilet training independence. The improvement is consistent and progressive, showing that the visual approach effectively helps children understand the sequence of activities without relying on verbal instructions from the teacher. Overall, the results of each cycle showed consistent improvement across all indicators of toilet training independence. Not only did the ability to perform the sequence of activities improve, but so did the student' confidence in using the toilet independently and their urinary retention. These findings demonstrate that the success of the intervention is measured not only by the final outcome but also by the behavioral changes that develop gradually throughout the learning process.

Discussion

The most notable change was the children's courage to go to the toilet by themselves. Initially, the children refused and felt afraid, but through gradual guidance and direct examples, their fear diminished. This supports behaviorist theory, which states that new behaviors can be formed through habituation and positive reinforcement (Diviney & Jaswon, 2021; Rahayu, 2023).

In this context, verbal praise such as "Good job, you can go to the toilet by yourself!" acts as a positive stimulus that reinforces courageous behavior. Children then associate independent actions with feelings of joy and appreciation, so that the behavior is repeated consistently. The ability to follow a sequence of steps increased from 33% to 100%. These results indicate that visual media plays a crucial role in helping student with mild intellectual disabilities understand the sequence of procedural activities. The characteristic of student with mild intellectual disabilities, who understand concrete information more easily than abstract concepts, makes the use of images an effective learning strategy. Through images, student receive clear instructions on the steps to be taken, thus reducing their reliance on verbal instructions from the teacher. Thus, visual media serves not only as a learning aid but also as a reminder that student can use independently during toilet training activities. This shows that visual schedules help children organize procedural information. According to (Rozi et al., 2022; Dahlia et al., 2024), sequential images are effective for children with intellectual disabilities because they reduce cognitive load and clarify the context of actions. By looking at the pictures, children know the next step without waiting for instructions, which indicates improved cognition and behavioral autonomy.

Bedwetting behavior decreased sharply from 80% to only 10–20% at the end of the intervention. A decrease in bedwetting frequency indicates that student are beginning to recognize body signals and make decisions to go to the restroom immediately without waiting for teacher direction. This ability is a form of adaptive behavioral development that is crucial for student with mild intellectual disabilities because it directly relates to independence in daily life. The better a student's ability to recognize their own needs, the less dependent they will be on the assistance of others (Özdemir, 2023; Aggelpoel et al., 2021). This decrease indicates the child success in recognizing bodily signals and adjusting their behavior in a timely manner. This is in line with (Özdemir, 2023; Aggelpoel et al., 2021), who emphasize the importance of routine practice in toilet training for children with special needs, as routines build self-regulation (Sclar, 2022; Cagliani et al., 2021).

The application of positive reinforcement has proven to be a key factor in success. In addition to positive reinforcement, consistent teacher support during the learning process is also a contributing factor to successful learning. Teachers gradually reduce the amount of assistance provided as student' abilities improve, giving them the opportunity to try each step independently. This strategy helps student build self-confidence because each success they achieve is rewarded with positive feedback and appreciation. Therefore, self-skills learning is not only oriented toward achieving results but also toward the ongoing process of habit formation (Johnson et al., 2021; Little et al., 2023). Simple rewards such as star stickers every time the child successfully completes a toilet step without assistance increase the child motivation to maintain positive behavior. That reinforcement given immediately and consistently fosters intrinsic motivation, not just a response to rewards. Thus, children begin to perform the behavior because they feel capable and confident, not because they expect rewards (Saefullah and Wijayati, 2024; Khairiyah and Kurniawan, 2024). The results of this study also indicate that the self-skills learning process not only improves student' toilet training abilities but also forms positive habits that are repeated. The habituation carried out in each cycle provides student with the opportunity to recall the sequence of activities they have learned, allowing behaviors that initially required teacher assistance to gradually become independently performed. This condition indicates that learning success is determined not only by the method used, but also by the consistency of the implementation of exercises provided continuously according to the student' abilities (Wachter, 2022; Bacotti et al., 2023).

This study provides practical implications for special education teachers. The results of this study

also indicate that the success of self-learning skills is influenced not only by the use of appropriate methods, but also by the teacher's active involvement throughout the learning process. Teachers not only provide examples and guidance but also continuously observe the development of student' abilities in each activity. Through this process, teachers can determine what forms of assistance are still needed and what assistance should be reduced so that student have the opportunity to learn independently. This gradual approach provides a learning experience that is appropriate to the characteristics of student with mild intellectual disabilities, enabling them to build confidence in completing each stage of toilet training without complete dependence on the teacher (Paquet et al., 2022; Wulandari et al., 2025).

Self-skill learning must be designed to be: structured and concrete, starting with direct demonstrations, repetitive and routine, in order to form habits, equipped with visual media, to strengthen procedural memory, using positive reinforcement, in order to maintain children's motivation. The application of these four principles can be used not only in toilet training, but also for other adaptive skills such as eating, dressing, or maintaining personal hygiene. Conceptually, these results reinforce the Applied Behavior Analysis (ABA) approach in special education, which emphasizes behavioral change through habituation, concrete stimuli, and gradual reinforcement. In addition to improving toilet training skills, the self-help skills implemented in this study also impacted the development of student' adaptive behavior in general. Student began to show initiative in carrying out daily activities more independently, were brave in making simple decisions, and were more responsible for their personal hygiene (Mrad & Eduarda, 2021; Okanlami et al., 2024). These changes indicate that self-help skills not only serve to meet basic needs but also serve as a means of developing independent, disciplined, and responsible character. Therefore, self-help skills learning should be provided continuously as part of an adaptive behavior development program in special schools. This study still has limitations because it only involved one student and the implementation time was relatively short (Jennings et al., 2022). Nevertheless, the results show that structured self-help skills learning can gradually increase toilet training independence. Future research is expected to involve more student with diverse characteristics so that the program's effectiveness can be studied more broadly and make a greater contribution to the development of self-help learning in special schools (Zulita et al., 2024).

The findings of this study also indicate that the success of self-help skills learning is not only measured by achieving toilet training ability indicators, but also by changes in student behavior during the learning process. At the beginning of the intervention, student still showed fear, lack of confidence, and dependence on teacher assistance. However, after participating in gradual learning through two cycles of action, student began to demonstrate the courage to take initiative, follow each stage of the activity independently, and maintain the positive habits they had learned. These changes indicate that consistent self-skills learning can shape more persistent adaptive behavior in student with mild intellectual disabilities. In addition to providing benefits in improving student abilities, the results of this study also illustrate that implementing Classroom Action Research can be a means for teachers to continuously improve the quality of learning. Through planning, implementing actions, observing, and reflecting in each cycle, teachers can identify obstacles experienced by student and determine learning strategies that are more appropriate to individual needs. Thus, self-skills learning is not only oriented towards achieving learning outcomes, but also on the process of developing independence that is carried out systematically, gradually, and continuously (Salido & Breviescas, 2024).

This research provides practical implications for special needs teachers. Self-skills learning should be designed: Structured and concrete, starting with direct demonstrations; Repeated and routine, to form habits; Included with visual media, to strengthen procedural memory; Use positive reinforcement, to maintain the child motivation (Jaleha et al., 2024). These four principles can be applied not only to toilet training, but also to other adaptive skills such as eating, dressing, or maintaining personal hygiene. Conceptually, these results reinforce the Applied Behavior Analysis (ABA) approach in special

education, which emphasizes behavior change through habituation, concrete stimuli, and gradual reinforcement.

Limitations of the Study

This study has several limitations. First, the intervention involved only one fourth-grade student with mild intellectual disabilities; therefore, the findings cannot be generalized to student with different characteristics or educational settings. Second, the intervention was conducted over two classroom action research cycles within a relatively short period, limiting the evaluation of the long-term sustainability of the student's toilet training independence. Third, the study focused exclusively on toilet training skills and did not investigate whether improvements were transferred to other adaptive behaviors. Future research is recommended to involve a larger number of participants, longer intervention periods, and follow-up observations to evaluate the long-term effectiveness of structured self-skills learning across various adaptive behavior domains.

4. CONCLUSION

A classroom action research study, conducted over two cycles, successfully improved toilet training independence in children with mild intellectual disabilities. Starting from a state of complete dependence, the children achieved full independence following the implementation of a combination of demonstration, repetitive practice, visual aids, and positive reinforcement. This intervention has proven to be effective, realistic, and practical for application in special education schools, particularly within self-care skills programs that focus on fostering student' personal independence.

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