



IMPROVING EARLY CHILDHOOD INDEPENDENCE THROUGH TOOTHBRUSHING ACTIVITIES AT KB BINTANG, WEST JAVA PROVINCE

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ABSTRACT

This research was conducted to improve children's independence at KB Bintang, West Java Province. The study examines how the independence of early childhood can be enhanced through the activity of tooth brushing, as brushing teeth is a daily human routine. The research employed the Kemmis and Taggart model, and data were collected through two cycles consisting of planning, action, observation, and reflection. The subjects were 19 children aged 5–6 years in class B at KB Bintang, who exhibited issues related to independence. Data were gathered through observation, field notes, documentation, and an assessment rubric. The percentage of improvement in children's independence increased from 39.12% in the pre-cycle, to 59.82% in cycle I, and 86.05% in cycle II, based on indicators of independence such as Physical Ability, Self-Confidence, Responsibility, Discipline, Sociability, and Emotional Control. Thus, it can be concluded that children's independence improved through the use of tooth brushing activities.

ARTICLE INFO

Article History:

Submitted/Received 07 Oct 2025

First Revised 13 Oct 2025

Accepted 27 Oct 2025

First Available online 10 Nov 2025

Publication Date 01 Dec 2025

Keywords:

Independence; early childhood; toothbrush usage.

1. INTRODUCTION

Early Childhood Education (PAUD) refers to the educational guidance provided to children from birth to six years of age. Throughout this developmental period, children require encouragement and stimulation that support their physical, cognitive, and emotional growth. One of the crucial aspects that must be developed is social-emotional competence, through which children learn to understand and recognize their own feelings and emotions. This process serves as an effort to help children make appropriate decisions when interacting with others, both socially and emotionally.

The researcher conducted an observation at KB Bintang, West Java Province, and identified several notable findings indicating the need for improvement in the area of social-emotional development, particularly in terms of children's independence. It was observed that many children still required parental assistance during classroom activities, which hindered the optimal implementation of the learning process. The children's focus tended to decrease as they frequently looked toward the window, worried that their parents might leave. This condition suggests that the children's social-emotional development, especially in the aspect of independence, has not yet been fully established. As a result, they are not yet able to make decisions independently in social and emotional contexts.

The earlier children are trained to develop independence in carrying out their developmental tasks, the more easily they will acquire the skills and values associated with independence. These traits will, in turn, become firmly rooted and integrated into their personality (Nawangasasi & Kurniawati, 2022). In this study, the researcher seeks to provide stimulation to foster children's independence through the implementation of toothbrushing activities. This approach is designed to encourage children to develop a sense of autonomy in their daily routines. The intervention focuses on promoting early childhood independence by engaging children in the practice of toothbrushing as a form of self-reliance training.

Therefore, the researcher seeks to enhance early childhood independence. One of the dimensions of children's social-emotional development is self-help skills, which refer to the ability to take care of oneself. In this regard, the researcher employs toothbrushing activities as a medium to improve children's independence. Furthermore, the level of children's independence is assessed based on the framework proposed by Martinis (2013) in (Dafiq, 2019). Therefore, the researcher seeks to enhance early childhood independence. One of the dimensions of children's social-emotional development is self-help skills, which refer to the ability to care for oneself. In this context, the researcher employs toothbrushing activities as a means to foster children's independence. Moreover, the measurement of children's independence is based on the framework proposed by Martinis (2013), which consists of six indicators: physical ability, self-confidence, responsibility, discipline, sociability, and emotional control. These indicators are used to assess the level of independence among young children.

In line with this perspective, early childhood represents a crucial period during which a child experiences significant influences that shape their growth and development. This stage is often referred to as the sensitive and golden period of life, encompassing various aspects such as intelligence, interests, emotional maturity, independence, talents,

personality, creativity, social abilities, and physical development. Naturally, each child exhibits unique patterns of development. Therefore, it is essential that children receive appropriate stimulation from an early age to optimize and cultivate their inherent potential (Dhiu & Fono, 2022).

A child can be considered independent when they are able to make decisions regarding their own actions, demonstrate a sense of responsibility, and refrain from depending on others. Such autonomy fosters the development of self-confidence and strengthens the child's belief in their own abilities (Simatupang dkk., 2021) Independence is one of the most essential aspects of a child's development, as it plays a vital role in helping individuals achieve their aspirations and life goals. Conversely, the absence of independence in a child may lead to difficulties in attaining desired outcomes or accomplishing personal objectives.

2. LITERATURE REVIEW

Children's independence is cultivated from an early age, beginning with the trust that parents place in their children to perform certain activities on their own. In line with this perspective (Sari & Rasyidah, 2020) which states that parents play a crucial role in shaping children's independence. The greater the trust parents place in their children, the more skilled and confident the children become in developing their abilities. The following are indicators adopted from Martinis' (2013) theory, which serve as tools to assess children's independence through the implementation of toothbrushing activities, namely:

1. Physical ability

Physical ability refers to skills related to a child's physical development, encompassing growth and observable progressive changes in the body that enable the child to perform movements effectively (Nurwahidah dkk., 2021) Therefore, educators must be able to develop both gross and fine motor skills, support healthy physical growth, prepare children for the learning process, and coordinate body balance and agility. In the context of toothbrushing activities, a child's physical ability is reflected in their capacity to control hand movements while holding and manipulating the toothbrush accurately, coordinate hand and mouth movements, and maintain a balanced posture. Through the routine practice of toothbrushing, children gradually develop hand-eye coordination, enhance fine motor skills, and strengthen both their independence and overall physical development.

2. Self-confidence

Self-confidence refers to a child's belief in their own abilities. A child's self-confidence must be nurtured and stimulated to optimize future success, as it influences the child's fear of failure even though, from another perspective, experiencing failure is a natural and essential part of learning. In line with this view, according to (Amelya dkk., 2024) Every child is born with a sense of self-confidence; however, this trait requires appropriate stimulation, which can be provided by both parents and educators. Therefore, the role of parents and educators is crucial in fostering and developing a

child's self-confidence (Fitriani dkk., 2023) This, in turn, enhances a child's confidence in their own potential. In toothbrushing activities, a child's self-confidence is evident when they are willing and able to perform the task independently, without adult assistance. Successfully holding and maneuvering the toothbrush correctly instills a sense of pride and belief in their abilities. Such simple achievements serve as positive experiences that strengthen the child's self-assurance, foster a sense of responsibility for personal hygiene, and cultivate independent habits in daily routines.

3. Responsibility

Responsibility refers to a child's capacity to understand and carry out their duties while being willing to accept the outcomes of their actions. It serves as a key element in developing early childhood character, as it supports children's social interactions, strengthens the foundation of moral integrity, and encourages the growth of positive behaviors in later stages of life (Saragih dkk., 2024). Efforts that educators can make to foster a sense of responsibility include encouraging children to take care of their personal belongings, return items to their proper place after use, complete assigned tasks independently without assistance, finish tasks thoroughly, and develop an attitude of valuing time. In the activity of brushing teeth, a child's sense of responsibility is reflected when they can consistently perform the routine daily without being reminded. A child who understands that maintaining dental hygiene is a personal obligation demonstrates awareness of the consequences of their actions—for instance, realizing that failing to brush their teeth may result in dirty or painful teeth. Through such habituation, children not only learn self-care but also develop discipline and a sense of responsibility for their own health.

4. Discipline

Discipline is the ability to control oneself, obey rules, and act in accordance with prevailing norms, whether at school, at home, or in social environments. The development of discipline is not solely the responsibility of parents; educators must also take part in the process. Building a child's sense of discipline cannot be achieved instantly it requires a gradual and continuous process involving introduction, attitude development, and guidance toward orderly, obedient, and rule-abiding behavior (Munaamah dkk., 2021). In relation to this, it can be stated that parenting plays a crucial role in developing children's discipline, both at home and at school. Therefore, educators also serve as key supporters in fostering children's discipline. In the activity of brushing teeth, a child's discipline is reflected in their ability to perform the routine consistently at the designated times, such as every morning after breakfast and at night before bed. A child who regularly follows this schedule demonstrates an understanding of the importance of following rules and maintaining personal hygiene. Through simple habits like brushing their teeth regularly, children learn self-control, value time, and cultivate positive routines that form the foundation of discipline in everyday life.

5. Sociability

Sociability is the ability to interact effectively at home, in school, and in play environments. Therefore, educators need to pay close attention to children's social

development and their ability to build positive relationships with others. According to (Nurhayati dkk., 2020) If a child experiences delays in social development from an early age, they may face difficulties in developing themselves later in life. This responsibility is a shared one not only for parents but also for educators, who play an essential role in fostering social values that encourage children's independence. In the activity of brushing teeth, a child's sociability can be observed when they are able to cooperate and interact positively with their peers, such as waiting for their turn, reminding each other to brush properly, or imitating a friend's actions during the activity. Through this routine, children learn to communicate, show empathy, and respect others. In addition to strengthening social relationships, group activities like toothbrushing help children develop a sense of togetherness and social responsibility, which are integral to their independence and social growth.

6. Emotional control

Emotion is a feeling (affection) that arises when a person is in a situation or condition that they perceive as significant (Mahmud & Fajri, 2021). Young children still need to develop self-control, commonly referred to as emotional regulation. The role of educators is to help children manage their emotions during learning activities, both inside and outside the classroom. Early childhood is a period of adaptation in which children learn to act independently. A child's independence is closely related to their ability to regulate emotions, as at this stage they are more vulnerable in understanding situations, conditions, and appropriate ways to behave. The success of children is largely the result of educators' efforts and guidance. In the activity of brushing teeth, emotional regulation can be observed when a child is able to wait patiently for their turn, refrain from getting upset when toothpaste or water spills on their clothes, and persist in completing the task even when facing difficulties. Through this simple activity, children learn to control negative emotional impulses, manage frustration, and stay focused on their tasks. Thus, brushing teeth not only promotes personal hygiene but also serves as an effective medium for developing emotional control as part of a child's growing independence.

3. METHOD

The research method used in this study is Classroom Action Research (CAR). CAR is a reflective study conducted by practitioners to achieve a rational understanding of their actions in performing tasks and to improve the learning practices within the educational setting (Dwi Suharti, 2021).

The research conducted by the researcher is a type of participatory Classroom Action Research (CAR), in which the researcher is directly involved in the research process from the beginning to the completion of the report. The study also involves an educator as a participant to help improve their own teaching practices. The subjects of this research were Class B students at KB Bintang, aged 5–6 years, consisting of 19 children. The researcher carried out two cycles of action, following the CAR steps in each cycle, namely planning, action, observation, and reflection.

The data collection technique employed in this study was an independence assessment rubric using a Likert scale and based on Martinis' (2013) theory, which was adapted to the indicators of children's independence through toothbrushing activities. This independence assessment rubric was used as a quantitative data analysis tool, with the results presented in percentage form.

Table 1. Indicators of Children's Independence

No	Indicator	Sub-indicator
1	Physical Ability	The child is able to hold the toothbrush independently
		The child is able to open the toothpaste independently
2	Self-Confidence	The child is confident to brush their teeth in front of others
		The child is able to brush their teeth independently
3	Responsibility	The child is able to tidy up after brushing their teeth independently
		The child is able to tidy up their toothbrushing equipment independently
4	Discipline	The child arrives at school on time
		The child is able to place the toothbrushing equipment in the designated area
5	Sociability	The child does not disturb their peers during toothbrushing activities
		The child enjoys helping their friends
6	Emotional Control	The child does not cry while participating in toothbrushing activities
		The child is able to wait in line when filling a small cup with water

Meanwhile, qualitative data were obtained from the results of observational analysis (direct observation) to support the quantitative data. Both types of data served as references to demonstrate the improvement of children's independence through toothbrushing activities.

4. RESULTS AND DISCUSSION

Based on the quantitative data obtained through written records, analysis of direct observations, and interview notes, the following percentages were recorded:

Table 2. Data on the Independence of Children Aged 5–6 Years at KB Bintang, West Java Province, Based on the Following Indicators: (1) Physical Ability, (2) Self-Confidence, (3) Responsibility, (4) Discipline, (5) Sociability, and (6) Emotional Control

No	Pre-Research		Cycle I		Cycle II		Description
	Score	Percentage (%)	Score	Percentage (%)	Score	Percentage (%)	
1	1,78	44,5%	3,07	61,57%	4,63	92,63%	Improved
2	2,39	49%	2,92	58,42%	4,34	86,84%	Improved
3	1,86	38%	2,86	57,36%	4,36	87,73%	Improved
4	2,05	48%	3,21	62,21%	4,23	84,73%	Improved
5	1,92	43,5%	3,07	61,57%	3,68	73,68%	Improved
6	1,71	36,5%	2,78	55,78%	4,55	91,05%	Improved
Total	1,95	39,12%	2,99	59,82%	4,30	86,05%	Improved

Based on the data above, it shows that children's independence in Cycle II reached 86.05%, indicating that the study can be considered successful. Therefore, the researcher concluded that no further cycles were necessary. The table also shows that the most significant improvement occurred in the physical ability indicator, where children were able to perform activities independently, particularly in self-help skills, with a percentage of 92.63% in Cycle II. This improvement is supported by the increase in the self-confidence indicator, enabling children to demonstrate their abilities and assure themselves, "I can do this and I want to try." Consequently, a sense of responsibility, discipline, and emotional control emerges. Although the sociability indicator recorded the lowest percentage at 73.68%, this does not pose a significant obstacle, as sociability is expected to continue improving as long as the children maintain or enhance the other five indicators.

The table above shows that each indicator experienced varying levels of improvement, yet all exceeded the agreed minimum average threshold of 72%. This indicates that children have developed independence through toothbrushing activities at KB Bintang, West Java Province. Furthermore, qualitative data show that children are no longer dependent on their parents during the learning process, both inside and outside the classroom. Children are more active in participating in learning activities, more focused, and able to control their emotions while playing with peers. They also demonstrate a sense of responsibility, as seen in activities such as putting items back in their proper place after use, and exhibit self-confidence when expressing their opinions.

In line with the findings of the research conducted by Nurfaidah & Watini (2023) that children who demonstrate initiative, can manage their time, and optimally utilize available resources without assistance from others can enhance their independence in the learning process. This was evidenced by research at TK Ar-Raudhatul Ulum, which showed an increase in children's independence through the implementation of engaging rewards. Similarly, the results of the study conducted by Robilah dkk (2022) that children's independence can improve through play-based methods, such as using the snakes and

ladders game with Group B children. The study results showed that the percentage of children's independence increased from 25% in the pre-cycle, to 64.28% in Cycle I, and reached 92.8% in Cycle II. It can be concluded that children's independence improved through play-based activities using the snakes and ladders game.

Pedagogically, toothbrushing activities are effective because they are concrete, routine, and closely connected to children's daily lives. Through this activity, children's physical abilities are developed as it involves fine motor coordination and body balance in manipulating the toothbrush. Self-confidence grows as children are able to perform the activity independently, fostering a sense of assurance in their abilities. Responsibility is cultivated as children learn to understand their duty to maintain dental hygiene and accept the consequences of their actions. Discipline develops through habituation to schedules and rules, such as brushing teeth twice a day according to the set routine. Sociability emerges when children interact positively with peers during group activities, such as waiting for their turn and modeling good behavior. Meanwhile, emotional control is trained when children are able to remain patient, stay calm, and complete the activity even when encountering minor difficulties.

Reflections on the implementation of the actions indicate that establishing simple yet meaningful routines can have a layered effect on children's development. In the first cycle, some children still depended on the educator's assistance and were easily distracted. However, after the educator improved strategies in the second cycle—such as providing direct demonstrations, using play-based approaches, and giving positive reinforcement—children began to show significant improvements in independence. This demonstrates that contextual and consistent learning strategies can effectively shape children's behavior toward greater independence.

The practical implication for early childhood educators is that toothbrushing activities can be used not only to promote health habits but also as an effective character-building learning tool. Educators can integrate this activity into the daily classroom routine while observing the development of children's physical, social, emotional, and moral aspects. By providing examples, consistent guidance, and positive reinforcement, educators can help children achieve comprehensive independence. Thus, toothbrushing becomes a simple yet meaningful pedagogical tool for fostering the independence of young children.

5. CONCLUSION & RECOMMENDATION

Conclusion

The researcher conducted a study in Class B at KB Bintang, West Java Province, involving 19 children. During observations, it was found that many of the children's activities did not demonstrate independence, such as eating, putting on shoes, and completing learning tasks, as they still sought help from their parents. As a result, children's focus during the learning process was reduced. During class activities, children frequently looked out the window and called for their parents. Some children even cried when given tasks by the educator. Children showed little willingness to socialize, preferring to communicate only with their parents. Additionally, they were reluctant to return used items to their proper place. In

the pre-research phase, children's independence was measured at 39.12%; in Cycle I, it increased to 59.82%, and in Cycle II, it reached 86.05%. It can be concluded that children's independence improved through toothbrushing activities. Toothbrushing is not merely a routine hygiene activity but an effective pedagogical strategy to foster comprehensive independence in early childhood. Through this simple activity, children learn to control their bodies, build self-confidence, develop a sense of responsibility, cultivate discipline, enhance social interaction skills, and practice emotional regulation.

Recommendation

Based on the results of this study, it is recommended that educators continue to develop learning activities focused on enhancing children's independence through simple, enjoyable, and contextual daily routines, such as toothbrushing, which has been proven effective in fostering a sense of responsibility. The significant increase in independence from the pre-cycle to Cycle II demonstrates that activity-based learning approaches, like toothbrushing, can transform children's behavior from dependence to autonomy. Therefore, early childhood teachers should incorporate this activity as an integral part of daily learning, as it has been shown to effectively and consistently develop children's character and independence. Early childhood institutions are expected to provide supportive facilities and learning environments that allow children to practice independence, while parents are encouraged to collaborate with schools by giving children opportunities to perform activities independently at home. Additionally, future researchers are advised to expand on this study by exploring other activity variations or broadening the research subjects to obtain more comprehensive results on strategies for enhancing early childhood independence.

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