



Teacher Strategies in Developing Self-Regulation in Hyperactive

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Abstract

Research on hyperactive children in early childhood education (PAUD) generally focuses on the effectiveness of strategies in general but has not examined how teachers actually interpret and apply these strategies in specific learning contexts to develop self-regulation. This study seeks to investigate teacher strategies in developing self-regulation in children with hyperactive characteristics at RA Amanah Bunda Sungai Liuk Seberang. The study used a qualitative approach with a descriptive design. The research subjects consisted of three teachers who were purposively selected based on their direct involvement in assisting hyperactive children. Data were collected through semi-structured observations and in-depth interviews, then analyzed using the interactive model of Miles, Huberman, and Saldaña, which includes data condensation, data presentation, and drawing conclusions. The results showed that teacher strategies included an individual approach, the use of structured physical activities to channel children's energy, modifications to the learning environment, and the application of positive reinforcement. These strategies play a role in helping children improve their self-regulation skills, particularly in controlling attention, impulses, and behavior. In addition, collaboration between teachers and parents is an important factor in supporting the consistent development of self-regulation. Challenges faced include limited concentration and a tendency for impulsive behavior. This research emphasizes the importance of an adaptive, contextual, and sustainable pedagogical approach in supporting the development of self-regulation in early childhood with hyperactive characteristics.

Keywords: early childhood education, hyperactive children, inclusive learning, self-regulation, teacher strategies

INTRODUCTION

Early Childhood Education (PAUD) is a crucial foundation for child development, aiming to provide comprehensive stimulation for physical and spiritual growth and development from an early age, preparing them for the next level of education (Khairunnisa & Fidesrinur, 2021; Khadijah & Amelia, 2020). PAUD is provided through formal, non-formal, and informal channels, with non-discriminatory and equitable principles. In this context, educational services are required to accommodate the diversity of children's characteristics, including those with diverse developmental needs (Ulfah, 2019).

One characteristic frequently encountered in PAUD practice is hyperactive behavior. In this study, the term "hyperactivity" is used in a pedagogical and observational sense, referring to children's behaviors that demonstrate difficulty concentrating, impulsivity, and excessive motor activity in a learning context, rather than as a clinical diagnosis such as Attention Deficit Hyperactivity Disorder (ADHD) (Nurfadhillah et al., 2021). Children with these characteristics generally have difficulty following instructions, maintaining focus, and interacting adaptively with the learning environment. This condition directly impacts learning engagement and classroom dynamics (McDougal et al., 2023). Hyperactivity typically emerges in childhood and has the potential to persist into later developmental stages, such as adolescence and adulthood, and requires special attention from parents, educators, and health professionals to ensure optimal child development (DuPaul et al., 2020).

In this context, one important developmental aspect to develop is self-regulation. Self-regulation refers to a child's ability to manage emotions, attention, and behavior adaptively according to the demands of the situation (Zimmerman, 2000; Blair & Raver, 2015). In children with hyperactive characteristics, this ability is often not optimally developed, resulting in difficulties following rules, waiting their turn, controlling impulses, and maintaining focus during learning activities (McClelland & Cameron, 2012; Diamond, 2013). Therefore, developing self-regulation is an important goal in early childhood education practices, particularly in inclusive learning contexts.

Teachers play a strategic role in developing children's self-regulation through various pedagogical strategies. Teachers function not only as transmitters of material but also as facilitators, helping children learn to control their behavior and emotions (Rahman et al., 2023). Strategies such as structured classroom management, providing simple instructions, using movement-based activities, and positive reinforcement are believed to support the development of children's self-regulation that is responsive to their needs. The success of these strategies depends heavily on the teacher's ability to understand children's characteristics and adapt learning practices contextually (Arita et al., 2024a; Anggraeni & Putro, 2021).

Good classroom management is key, requiring teachers to provide clear, simple, and straightforward-to-understand instructions. The use of techniques involving physical activity, such as the Total Physical Response (TPR) method, can be an effective alternative to help children maintain focus and engagement in the learning process (Annisa & Fatmaridah Sabani, 2023). Teachers' patience, positive motivation, and deep attention to children's emotional and

social needs are crucial factors that will make children feel valued and supported, ultimately enabling them to optimize their learning potential (Islamiah et al., 2023).

Several studies have shown that classroom management strategies and behavior modification can help increase learning engagement while reducing hyperactive behavior (Abdul Latif et al., 2024; Mansyur et al., 2024). Furthermore, Arita (2024b) emphasized that collaboration between teachers and professional staff is also considered effective in designing sustainable interventions. Through this professional synergy, it is hoped that a responsive, adaptive learning environment can be created that supports the optimal development of children with hyperactive characteristics (Yahya & Abdullah, 2020).

This research has strategic contributions to the development of educational policies and teacher training systems, particularly in the context of developing self-regulation in children with hyperactive characteristics. By identifying teachers' pedagogical strategies, educational institutions can design more targeted development programs to enhance teachers' professional capacity in creating inclusive learning that is responsive to children's self-regulation needs (Saputri & Katoningsih, 2023; Rachmawaty et al., 2022). Various previous studies have shown that approaches such as structured learning, activities that involve active participation, and individual attention are effective in supporting the learning process of hyperactive children (Arita et al., 2024b).

However, these studies generally focus on the general effectiveness of strategies and have not yet thoroughly examined how these strategies are used to develop self-regulation and how teachers interpret and apply them in practice. Furthermore, previous research has not focused much on the context of religious-based educational units such as Raudhatul Athfal (RA), which have unique values, learning approaches, and learning cultures. RA Amanah Bunda Sungai Liuk Seberang, as the research location, presents a unique context, both in terms of student backgrounds, the integration of Islamic values, and heterogeneous classroom dynamics, potentially influencing teacher strategies in developing self-regulation in hyperactive children. Therefore, this study is important to provide a more contextual understanding and enrich pedagogical practices in supporting the development of children's self-regulation in early childhood education (PAUD) settings.

Based on the description, this study aims to explore and classify teacher strategies in developing self-regulation in hyperactive children, as well as to reveal the pedagogical rationale underlying the selection and application of these strategies in learning practices at RA Amanah Bunda Sungai Liuk Seberang. Thus, this study not only describes the strategies used but also understands the professional considerations of teachers in real contexts. The research

questions posed are: What are the forms and classifications of teacher strategies in developing self-regulation in hyperactive children at RA Amanah Bunda Sungai Liuk Seberang, and what is the pedagogical rationale underlying teachers' selection and implementation of these strategies to support the development of children's self-regulation? This study is expected to provide theoretical contributions to the development of self-regulation studies in early childhood education, as well as practical contributions for teachers in designing learning strategies that are more adaptive and contextual and support the development of children's self-regulation.

METHOD

Research Design

This study employed a qualitative approach with a descriptive design. This approach aimed to gain an in-depth understanding of teachers' pedagogical strategies in developing self-regulation in children with hyperactive characteristics through a contextual and systematic description of the phenomenon (Assyakurrohim et al., 2022). The study was conducted at RA Amanah Bunda Sungai Liuk Seberang, with three teachers purposively selected based on their direct involvement in assisting hyperactive children.

Data analysis was conducted in stages, referring to the interactive model of Miles, Huberman, and Saldaña (2014), which included data condensation, data presentation, conclusion drawing, and verification. Furthermore, thematic analysis was used through data reading, coding, grouping themes, reviewing, and interpreting according to the focus of self-regulation development.

Data validity was maintained through technical triangulation (observation and interviews) and source triangulation (between participants). The researcher served as the primary instrument, maintaining objectivity through self-reflection and systematic record-keeping. The ethical aspects of the research are taken into account by providing informed consent, maintaining the confidentiality of participants' identities, and ensuring that the entire research process is carried out with respect for the comfort and rights of participants.

Data Extraction

Data were collected through semi-structured observations and in-depth face-to-face interviews, lasting 10–20 minutes per participant, starting in November 2024. The entire data collection process was audio-recorded and then transcribed verbatim for further analysis.

RESULTS AND DISCUSSION

The research findings indicate that teachers at RA Amanah Bunda Sungai Liuk Seberang developed various pedagogical strategies to support the self-regulation of children with hyperactive characteristics. Researchers obtained these findings through interviews and reinforced them with direct classroom observations.

Identification and Understanding of Child Characteristics

The research findings indicate that teachers conducted ongoing observations to understand the child's characteristics contextually, particularly regarding attention span, impulsivity, and motor activity. This identification process was not carried out instantly, but rather through repeated observations in various learning situations. One informant stated:

"This child can't stay still for long, only focusing for a few minutes, after which he starts walking around." (Excerpt from interview with Teacher EV)

This statement is supported by observations showing that the child tends to move around in his seat, talks to himself, and can only maintain attention for a short period of time, approximately 5–10 minutes before becoming distracted by his surroundings. These findings demonstrate that teachers' understanding of child characteristics is fundamental to determining appropriate strategies, particularly in supporting the development of self-regulation through gradual attention and behavior management.

Teacher Strategies for Developing Self-Regulation through Structured Physical Activity

Research findings indicate that teachers play an active role in helping children develop self-regulation, particularly through energy and attention management. One key strategy implemented is providing physical activity before the start of class. This activity aims to help children channel excess energy so they are better prepared for the learning process. Most teachers stated that children with hyperactive characteristics have difficulty focusing immediately without a preliminary activity. This phenomenon is illustrated in the following quote:

"Usually, before learning, I invite them to jump and count, so their energy is released, and then they can calm down." (Excerpt from an interview with Teacher EV)

This finding is supported by observations showing that after physical activity, children appear better able to sit still and follow teacher instructions compared to before the activity. Activities such as jumping and counting serve as an energy outlet and integrate simple cognitive stimulation. These results demonstrate that physical activity-based strategies play a crucial role in helping children control their behavior and increase their readiness to learn, which is part of developing self-regulation.

Using Interactive Strategies to Direct Children's Attention

In addition to physical activities, teachers also use interactive strategies such as songs, movements, and simple instructions to direct children's attention during learning. These strategies are used when children begin to lose focus or exhibit uncontrolled behavior. Several teachers explained that this approach is effective because it aligns with the characteristics of children who enjoy movement and auditory stimuli. This is evident in the following quote:

"When they start to lose focus, I clap or sing, and then they join in and return to paying attention." (interview excerpt from Teacher S)

Observations show that when teachers use songs or clapping, children respond quickly, follow instructions, and re-engage in learning activities. This finding indicates that the use of multimodal strategies can help children positively divert their attention while also practicing impulse control skills. Thus, this strategy contributes to supporting the development of self-regulation through a fun and developmentally appropriate approach.

Managing the Learning Environment to Support Self-Regulation

Teachers also implement managing the learning environment as a strategy to help children develop self-regulation. Seating placement is one form of intervention used to minimize distractions and facilitate supervision. This is reflected in the following statement:

"I usually seat hyperactive children at the front so they can be more easily directed." (excerpt from interview with Teacher R)

Based on observations, placing children at the front of the class allows teachers to provide direct instruction and respond more quickly to children's behavior. Children also appear to pay more attention to the teacher than when they are positioned further away from the center of attention. This finding suggests that appropriately organizing the learning environment can be a crucial factor in supporting children's ability to control their attention and behavior during learning.

Individual Approach and Positive Reinforcement in Improving Self-Control

An individual approach is an important strategy implemented by teachers in addressing children's differing characteristics. Teachers provide special attention and positive reinforcement to encourage desired behavior. This approach is evident in the following quote:

"If he can sit quietly for even a moment, I immediately praise him to motivate him." (excerpt from interview with Teacher S)

Observations show that children respond positively to praise, such as smiling, stopping disruptive behavior, and trying to follow instructions. This finding indicates that positive

reinforcement can help children gradually build self-control. This strategy not only reduces negative behavior but also increases children's motivation and confidence in the learning process.

Obstacles to Self-Regulation Development

Although various strategies have been implemented, teachers still encounter a number of obstacles in the learning process. The main obstacles include children's difficulty sitting still, boredom, and a tendency to disturb their peers. This concern was expressed by one informant as follows:

"The most difficult thing is keeping them in their seats; sometimes they move again after a short time." (excerpt from an interview with Teacher R)

Observations also showed that children often move around, talk to themselves, and lose focus when learning activities last too long or lack variety. These findings indicate that developing self-regulation in hyperactive children still faces challenges, requiring more varied and sustainable strategies.

Collaboration Between Teachers and Parents

Collaboration between teachers and parents is crucial in supporting the development of children's self-regulation. Teachers actively communicate to align strategies implemented at school and at home. As stated below:

"We always communicate with parents so that they implement the same strategies at home." (Excerpt from an interview with Teacher EV)

This finding suggests that consistent approaches between the school and home environments play a crucial role in helping children develop optimal self-regulation skills

Research at RA Amanah Bunda Sungai Liuk Seberang shows that developing self-regulation in children with hyperactive characteristics is a complex process and requires a comprehensive pedagogical approach. This process begins with teachers' ability to identify through continuous observation, focusing not only on overt behavior but also understanding the context, patterns, and background of the child's behavior. This understanding forms the basis for designing strategies that go beyond simply controlling behavior but also lead to the development of self-regulation skills, particularly in aspects of attention, impulse control, and emotional regulation (Kostyrka-Allchorne et al., 2022; Santrock, 2018).

An individualized approach is a key finding of this study. Teachers do not implement a uniform strategy but instead adapt it to each child's individual characteristics, needs, and responses. This aligns with the view that self-regulation development is unique to each individual and is influenced by the interaction of cognitive, emotional, and environmental

factors (Zimmerman, 2000; Schunk & Greene, 2018). Thus, the teacher's role is not merely as a teacher but as a facilitator who helps children gradually develop self-control through meaningful and ongoing interactions.

The most prominent strategy is the use of structured physical activity before learning. This approach demonstrates that teachers understand the link between physiological regulation and learning readiness. Motor activities combined with simple cognitive elements have been shown to help children channel excess energy and improve focus. From a self-regulation perspective, this strategy serves as an initial stage of regulation, helping children manage their internal states before engaging in learning activities (Diamond, 2013; Russell et al., 2023). However, this strategy still tends to be oriented toward external regulation and needs further development to enable children to internalize self-control independently.

Furthermore, the use of interactive strategies such as songs, movements, and simple instructions demonstrates the practice of co-regulation, where the teacher acts as an external regulator in helping children redirect their attention and behavior. This approach aligns with sociocultural theory, which emphasizes that self-regulation develops through social interaction and scaffolding from adults (Vygotsky, 1978; Blair & Raver, 2015). While effective in the short term, this strategy is still situational and therefore needs to be complemented by approaches that encourage internalization of self-control in children.

Managing the learning environment is also crucial in supporting self-regulation. Seating arrangements, reducing distractions, and creating a flexible classroom atmosphere demonstrate that the environment plays a significant role in helping children control their behavior (Hahn-Markowitz et al., 2020; Dvorsky et al., 2021). However, this approach still places regulation in the hands of external factors, so it needs to be balanced with strategies that develop children's self-awareness and self-control.

The positive reinforcement approach implemented by teachers also contributes to building children's motivation and self-confidence. Appreciating positive behavior helps children understand expected behavior and strengthens emotional regulation and intrinsic motivation (Skinner, 1953; Abidin, 2023). However, the use of external reinforcement needs to be balanced with the development of self-reflection so that children do not become entirely dependent on external rewards to control their behavior.

On the other hand, this study also revealed obstacles to developing self-regulation, such as difficulty maintaining focus, a tendency to switch activities, and children easily becoming bored. This suggests that self-regulation in early childhood is a long-term process that requires

consistency, a variety of strategies, and a sustainable approach (Blair & Diamond, 2008; Zelazo, 2015). Limited use of varied learning media also contributes to children's low engagement in the learning process.

Collaboration between teachers and parents is a crucial factor in supporting the successful development of self-regulation. Consistent approaches between the school and home environments enable children to gain continuous learning experiences in managing behavior and emotions (Bronfenbrenner, 1979; Yahya & Abdullah, 2020). Therefore, developing self-regulation is not solely the responsibility of the school but is the result of synergy across the child's developmental environments.

Overall, the findings of this study indicate that teacher strategies for developing self-regulation in children with hyperactive characteristics encompass various approaches, such as physical activity, interactive strategies, environmental management, and positive reinforcement. However, most strategies remain at the external regulation and co-regulation levels. Therefore, the development of a more systematic, reflective, and independence-oriented approach is needed to enable children to achieve optimal self-regulation (self-regulated behavior) (Zimmerman, 2000; Schunk & Greene, 2018). This research confirms that developing self-regulation is not simply a matter of controlling behavior, but rather a continuous pedagogical process that shapes children's ability to manage themselves independently.

CONCLUSION

This study revealed that teachers' strategies for developing self-regulation in children with hyperactive characteristics at RA Amanah Bunda Sungai Liuk Seberang included individual approaches, modifications to the learning environment, and collaboration with parents. Teachers implemented adaptive classroom management, such as the use of structured physical activities (e.g., the Total Physical Response/TPR approach) to help children manage energy and improve learning readiness. Furthermore, the learning environment was designed flexibly with the support of interactive media, and positive reinforcement was used to build self-confidence and encourage behavioral regulation without negative punitive approaches. Individualization strategies were also evident through adjustments to learning based on each child's characteristics, emotional needs, and behavioral patterns. Challenges encountered included difficulty concentrating, impulsivity, and disruption to classroom dynamics. To address these issues, teachers established intensive collaboration with parents to ensure consistency of approaches between home and school. The implications of this study for early childhood education (PAUD) teachers are the importance of developing pedagogical competencies that focus not only on behavior management but also on facilitating the gradual development of

children's self-regulation through adaptive, reflective, and contextual strategies. However, this study has limitations because it was conducted in a single location with a limited number of informants, so the findings cannot be broadly generalized. Therefore, further research is recommended to involve more subjects and various contexts of PAUD institutions and examine in more depth the long-term effectiveness of teacher strategies in developing self-regulation in children with hyperactive characteristics.

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