

# **INVESTIGATING LOW ATTENTION SPAN IN KINDERGARTEN 3: A CASE STUDY AT SEKOLAH XYZ**

## **[PENYELIDIKAN RENDAHNYA RENTANG PERHATIAN DI TAMAN KANAK-KANAK 3: SEBUAH STUDI KASUS DI SEKOLAH XYZ]**

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### **Abstract**

The attention span of early childhood children is a critical factor in forming their developmental foundation, encompassing physical, cognitive, social, and emotional growth. Informal interviews with classroom teachers reveal that students struggle to maintain attention during instruction, often displaying behaviors such as restlessness and lack of focus immediately after the lesson begins. This research aims to investigate the impact of internal and external factors on the attention span among Kindergarten 3 students at Sekolah XYZ, focusing on regular classroom settings and specialized classes (music and art). This research employs a case study method by combining observations, interviews, and documentation to provide a comprehensive understanding of the issue. The findings of this research include a limited direct exploration within the classroom and the type of curriculum currently used, which are reasons for the low attention span of Kindergarten 3 students. This study highlights the novelty of tactile learning approaches to enhance attention span. To expand these findings, future research is expected to consider comparative studies across Yayasan XYZ network, investigating the impact of direct exploration and different educational approaches on the attention and learning outcomes of students in specialist classes.

**Keywords:** Attention span; case study; early childhood; kindergarten

### **Abstrak`**

Rentang perhatian anak usia dini adalah faktor kritis dalam pembentukan dasar perkembangan mereka, mencakup pertumbuhan fisik, kognitif, sosial, dan emosional. Wawancara informal dengan guru-guru kelas mengungkapkan bahwa murid kesulitan untuk mempertahankan perhatian selama instruksi, sering menunjukkan perilaku seperti gelisah dan ketidakfokusan segera setelah pembelajaran dimulai. Penelitian ini bertujuan untuk menyelidiki dampak dari faktor internal dan eksternal terhadap rentang perhatian di kalangan murid Kindergarten 3 di Sekolah XYZ, berfokus pada setting kelas reguler dan khusus (musik dan seni). Penelitian ini menggunakan metode studi kasus dengan menggabungkan observasi, wawancara, dan dokumentasi untuk memberikan pemahaman komprehensif tentang isu tersebut. Hasil dari penelitian ini ialah eksplorasi langsung yang terbatas dalam kelas, juga jenis kurikulum yang digunakan saat ini yang menjadi alasan rendahnya rentang perhatian siswa TK 3. Penelitian ini menyoroti kebaruan dari pendekatan pembelajaran taktil untuk meningkatkan rentang perhatian. Untuk memperluas temuan ini, penelitian masa depan diharapkan mempertimbangkan studi perbandingan di seluruh jaringan Yayasan XYZ, menyelidiki dampak eksplorasi langsung dan pendekatan pendidikan yang berbeda terhadap perhatian dan hasil belajar murid di kelas-kelas khusus.

**Kata Kunci:** Rentang perhatian; anak usia dini; taman kanak-kanak; studi kasus

### **Introduction**

Early childhood, encompassing the period from birth to around eight years old, is a crucial phase for establishing the foundation of child development. This phase focuses on physical, cognitive, social, and emotional elements that shape a child's growth. Children in early childhood development undergo significant milestones such as developing motor skills, language skills, and basic cognitive concepts like numbers and shapes.

The attention span of early childhood children significantly influences their developmental foundations. Factors such as gross and

fine motor development, language acquisition, and study concentration play vital roles in their learning experiences. The explanation mentioned above are also acknowledged and expected to occur in the learning process of Kindergarten 3 students at Sekolah XYZ. According to informal interviews conducted by the researcher with classroom teachers, it was found that Kindergarten 3 students at Sekolah XYZ have difficulty maintaining their attention span when instructions are given, both in homeroom settings and specialist settings (music and art). The decrease in student attention span can be seen from their gestures, such as fidgeting, looking elsewhere, or doing other unrelated activities, and these changes in posture and gestures occur quickly after the teacher starts teaching or giving instructions. According to the music teacher, the Kindergarten 3 students are chaotic in most of their music class. Students came to the classroom without having self-control and were not ready for the class. According to the homeroom teacher, she had a talk with the students and most of them said that they can not sit still during music class and were not able to pay attention to the art teacher because they were busy talking to one another. Many factors can influence the dynamics of the attention span of early childhood children, including the average age of five years of Kindergarten 3 students at Sekolah XYZ at Kemang Village. This is also recognized by the teachers and assistant teachers who interact with them every day.

Kindergarten 3 students at Sekolah XYZ were raised amid the COVID-19 pandemic, which presents challenges and dynamics in their development process. Restrictions on social interaction and a lack of direct stimulus from the environment, especially during distance learning or restrictions on activities outside the home, can affect the development of their senses. Limiting indirect experiences with the physical environment can impact the development of gross and fine motor skills, understanding of concepts, and social interaction abilities.

Based on the above explanations, this research is initiated to conduct a more in-depth and comprehensive investigation regarding the dynamics of the attention span of Kindergarten 3 students at Sekolah XYZ. There are three research questions to be answered by this case study qualitative research. First, why do Kindergarten 3 students at Sekolah XYZ have a low attention span in learning settings? second, what are the negative impacts of low attention span of Kindergarten 3 students and the learning process at Sekolah XYZ? third, what strategies do teachers

and the school use to help Kindergarten 3 students maintain their attention span in both homeroom and specialist classes?

### **Attention Span**

Attention span, also known as the span of attention, is a vital cognitive parameter measuring an individual's ability to focus on a stimulus or task within a specified timeframe. Attention span itself is one of core competencies of executive functioning developed by Luria (1973). While a learner's subject knowledge is important, it is their ability to focus and pay attention determines how they use that knowledge (Bixler, 2024). It influences how effectively one can concentrate without being distracted, with older individuals generally demonstrating longer attention spans than younger ones.

According to Courage & Richards (2008) and Dixon, Zelazo, & De Rosa (2010), attention undergoes significant developmental changes during childhood as cognitive abilities mature and environmental demands shift. Toddlers typically exhibit brief attention spans, frequently shifting focus between activities without sustained engagement in any single object or event (Santrock, 2018). The capacity of preschool-aged children to manage and prolong their attention spans is intricately linked to their readiness for school, including their achievement and language skills, as Rothbart and Posner (2015) suggested.

According to Aisah (2019), indicators of attention span in early childhood are as follows:

1. The listening aspect is when students actively listen to oral explanations from the teacher or friends in their class. This active listening will show how they can follow instructions given by the teacher.
2. Looking; is when students direct their gaze to the teacher or learning media while learning occurs in the classroom.
3. Active; when students are actively engaged, they contribute to the learning process by asking questions, sharing their opinions, and expressing their thoughts about the material being discussed.

Memorization involves the ability of students to recall and reproduce information related to a specific topic or subject matter.

### **Cognitive Development of Preoperational Stage (2 - 7 years)**

During the preoperational stage, which spans from ages 2 to 7, children start to use symbols for communication and engage in imaginative play. According to Santrock (2011), children in the preoperational stage exhibit developing symbolic abilities, such as drawing pictures to represent objects or experiences. However, as Bjorklund and Blasi (2012) highlighted, logical reasoning skills are not yet fully developed at this stage. Additionally, at this stage, children begin to understand identities, causality, classification, and numbers. However, they may exhibit immature aspects such as centration, irreversibility, limited knowledge of thinking and mental states, false beliefs, struggles with appearance versus reality, and animism in their thinking as mentioned by Piaget in Papalia and Martorell (2021).

### **Social Interaction in Early Childhood**

Social interactions in early childhood, particularly during settings like Kindergarten 3, are crucial for children's growth. They involve how children behave, act, and think when interacting with others. Importantly, these interactions should be both comfortable and efficient for everyone involved (Suhartini & Laela, 2018). When children have strong social skills, they become well-liked and respected by their peers and adults around them (Machmud, 2019). Social interactions help in the development of essential skills like communication, cooperation, empathy, and conflict resolution (Ismail, 2019). Developing strong social skills allows children to form identities, build friendships, express themselves effectively, and navigate social norms. Positive social behavior lays the foundation for enriching interactions, fostering mutual respect, harmony, and acceptance within the group and broader community (Utami, 2018).

### **Early Childhood Instructions**

Kanchan (2019) argues that Children devote special attention to the situation which are likely to represent learning opportunities. This means children are naturally drawn to situations that brim with learning potential. Anything new and unfamiliar piques their curiosity, prompting them to focus their attention. Ramirez and Vittrup (2023) stated that

intentional and purposeful high-quality classroom environments are a priority for optimal child growth and development. The literature suggests that children benefit significantly from having autonomy and freedom of movement in well-structured spaces dedicated to their development (Greenman and Lindstrom 2017; Zane, 2015). Vygotsky in Santrock (2018) believed children learn through interactions with adults, absorbing and internalizing what they gain from these interactions. In Alharbi (2022), Vygotsky highlighted how children can grow from needing help to learning independently. He saw them as active participants in their learning journey, supported by others (like teachers). The learning process should empower students to actively seek out answers to their questions and satisfy their curiosity (R. Pertiwi et al., 2019). This approach encourages students to take initiative, fostering an environment where they feel motivated to explore, investigate, and learn independently. Vygotsky viewed play as a transitional stage where children use their imagination and practice their higher mental functions (Bodrova & Leong, 2015). Vygotsky saw play as the cornerstone of children's learning and development. Teachers who understand how children learn can leverage this by building a playful curriculum. By recognizing what children can do on their own and what they need help with, educators can create learning experiences that are both engaging and supportive, making play the foundation for a strong curriculum (Alharbi, 2022).

### **Classroom Management in Early Childhood**

Classroom management is the art of creating a positive and productive learning environment in a classroom. According to Tal (2016), classroom management is defined in this chapter as a developing meta-competency that focuses on leading classrooms – children, staff, and parents – toward the achievement of moral and learning goals that the teacher has set or helped formulate. Therefore, the responsibility does not lie solely with the teachers. It must encompass the standards of educators and staff, infrastructure, processes, and overall management (Mustari & Muhammad, 2023). Within the classroom, the teacher also acts as an administrator (Argon, 2015; Handayani, 2016). Cobbold and Boateng (2016) suggested that classroom management involves a teacher's skill in maintaining order, actively engaging preschoolers in learning, and securing their cooperation in all classroom activities.

Mohammad and Bafrin (2015) emphasized that effective classroom management focuses on how preschool teachers organize and oversee classroom activities to maintain a well-ordered environment. Ineffective classroom management can lead to significant stress for preschool teachers as they struggle to uphold discipline and prevent issues such as classroom violence and bullying (Cobbold & Boateng, 2016). For that, the ratio of student and teacher is essential. In a large class size, teacher often dedicate a significant portion of their instructional time to teaching students how to maintain discipline and order (Nicks, 2012). This focus on discipline means that preschool teachers might not be able to cover all the necessary learning content, preventing preschoolers from fully achieving the instructional objectives (Kissi-Abrokwah et al., 2022). Walker (2019) reported that an increase in class size within a limited physical space for preschoolers impacts behavior and safety issues in the classroom.

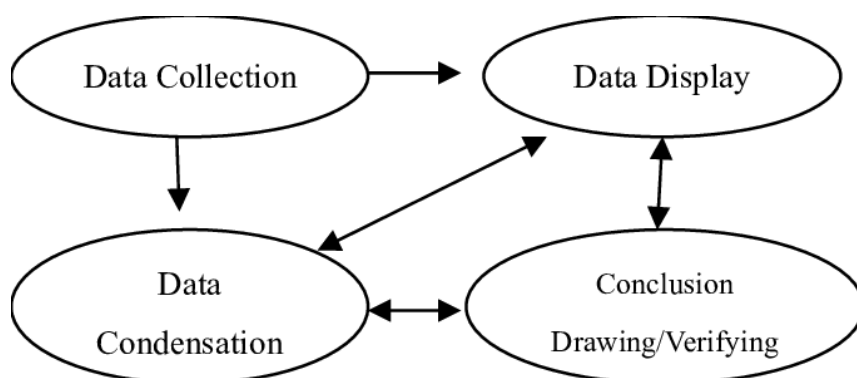
## **Method**

This research uses the case study method to understand the low attention span of K3 students at Sekolah XYZ. Priya (2021) stated that case studies are a qualitative design in which the researcher explores a program, event, activity, process, or one or more individuals in depth. This in-depth exploration often involves using a variety of data collection methods. The goal is to understand complex and contextual phenomena (Neuman, 2015). In this research, the researcher used observation, interview, and documentation to gather the data.

The researcher uses source triangulation as a data validation system. The researcher will synchronize the results of interviews with teachers, the JS principal, and the Learning Support Teacher. The researcher uses sign triangulation using diverse data, concepts, and theories to confirm data consistency and accommodate the research. The researcher asked the school counsellor of Sekolah XYZ, Lecturer of Teaching Children with Special Needs at UPH, and thesis supervisor to validate the interview instrument.

In this research, the researcher used data analysis techniques using the interactive model by Miles and Huberman. Miles and Huberman divide the steps in data analysis into several parts: data collection, data

reduction, data display, and conclusion drawing/verifying (Sugiyono, 2008).



**Figure 1. Miles and Huberman Interactive Models**

This research investigates the attention span of Kindergarten 3 students at Sekolah XYZ, a unique learning environment with a diverse student body. The class comprises 25 students, with a slightly higher number of females (15) than males (10). Maintaining focus amongst a larger group of students becomes paramount with a 2:1 teacher-to-student ratio (considering the limited availability of the assistant teacher who also supports Kindergarten 1 and 2). In this context, the researcher will investigate various factors that might contribute to the low attention span observed in the Kindergarten 3 students at Sekolah XYZ.

## **Result and Discussion**

### **The Cause of Low Attention Span**

There are four causes of low attention span in homeroom settings. Sources reveal the bustling atmosphere in Kindergarten 3 classrooms hampers students' ability to focus due to transitions between engaging activities and calmer states. Factors like digital distractions, lack of readiness, and overdependence on caregivers hinder attention span development, aligning with researchers like Rothbart, Posner, and Santrock. Strategies to enhance attention include movement breaks and diversified activities to engage students effectively.

There are four causes of low attention span in specialist settings. Specialist classes, with a high student-to-teacher ratio, face challenges in managing distractions from students' energetic and sociable nature. Strategies such as music and storytelling are employed, yet issues with



prolonged instructions, lack of hands- on exploration, and large class sizes interfere with students' engagement.

### **Negative Impacts of Low Attention Span on Kindergarten 3 Students**

Low attention span in Kindergarten 3 students has been found to negatively impact their cognitive development. Many students struggle to follow instructions promptly, exhibit disruptive behaviors, and prioritize their own needs over others. This is in line with Piaget's theory of cognitive development in preoperational stage (age 2 – 7) in Santrock (2018). In his theory, Piaget stated that the one of the characteristics of preoperational stage is egocentrism, this egocentrism is one of the immature aspects of preoperational stage. This egocentrism can lead to difficulties in comprehending instructions, retaining information, and engaging in problem-solving tasks, affecting language skills and critical thinking. This insights from the teachers are corroborate the multifaceted nature of attention highlighted by Wickens et al. (2023), emphasizing its critical role in cognitive functioning and learning processes. Poor attention impacts how individuals absorb, process, and respond to information, directly affecting language skills, academic proficiency, and critical thinking. Insights from teachers highlight the crucial role attention plays in cognitive functioning and learning processes, impacting students' ability to absorb and respond to information effectively.

Aside from cognitive development, the low attention span in Kindergarten 3 students also affects their social interactions. Impulsivity resulting from poor attention control can hinder positive relationships with peers, disrupting the smooth flow of social interactions. Restlessness and disruptive behaviors like interfering with classmates' activities can lead to negative attention from peers or teachers, impeding collaboration and relationship-building. According to Junaedah & Ahmad (2020), early childhood is a time of significant social development. Children develop important social skills like friendship, independence, friendliness, and a sense of right and wrong. The negative attention from peers or teachers because of these disruptive behaviors can further impact social development by creating barriers to collaboration and relationship-building. This result, of course, does not align with what Ismail (2019) said, that strong social behavior is the foundation for positive and

enriching social interactions. It fosters a sense of harmony, peace, and mutual respect within a group.

Besides the negative impact in cognitive and social interaction, the teaching process for Kindergarten 3 students is also disrupted by low attention spans, with teachers facing challenges in maintaining students' focus during lessons. Interruptions caused by behavior problems require teachers to address them promptly, impacting the flow of instruction. Efforts to manage disruptive behaviors and regain students' attention consume instructional time, hindering lesson continuity and frustrating both teachers and well-behaved students. This finding highlights potential gap with Vygotsky's theory as highlighted by Alharbi (2022), which emphasizes the importance of social interactions in learning. Vygotsky saw children as active participants in their learning journey, supported by others such as teachers. Effective scaffolding techniques are needed to help students manage their behavior and focus, transitioning from constant assistance to independent learning to ensure a conducive learning environment for all students.

### **Teaching Strategies to Maintain Student's Attention Span**

In homeroom classes, teachers employ various techniques to keep students engaged, such as a 5-station rotation in Mathematics class for flexible grouping and personalized instruction. This is in line with one of the key principles of differentiated instruction mentioned by Sullivan & Weeks (2018) and Zafiri et al. (2019) namely flexible grouping. Strategies like hands-on activities and "stop, look, listen" help refocus attention and manage classroom behavior. However, challenges arise in incorporating play-based activities due to traditional teaching materials, limiting the use of play as an educational tool. Movement activities are introduced to engage students, aligning with creating intentional and developmentally supportive classroom environments. Research by Greenman & Lindstrom (2017) and Zane (2015) supports the idea that children benefit significantly from autonomy and freedom of movement within well-structured environments dedicated to their development.

In specialist classes, strategies vary from starting with reminders of classroom expectations to incorporating calming music and engaging activities. Challenges include lengthy explanations affecting student attention and repetitive songs and movements leading to disengagement. This makes it difficult for students to focus and they prefer to seek out other more interesting activities. This is aligning with

the study found that a lack of interest in activities can shorten the attention span of kindergarteners (Fiedacan et al. 2018). Kanchan (2019) also stated that children are naturally drawn to new and unfamiliar situations that represent learning opportunities, which capture their attention and curiosity.

The importance of introducing touchable musical instruments for exploration and hands-on learning is emphasized. These strategies align with theories on maintaining attention, providing varied learning materials, and managing class sizes effectively to enhance student engagement and learning outcomes as outlined by Cade et al. (2022).

### **School's Strategies to Support Teacher**

The teachers emphasizing the need for comprehensive support from various aspects of the school environment, not solely relying on teachers. It must encompass the standards of educators and staff, infrastructure, processes, and overall management (Mustari & Muhammad, 2023). Suggestions include maintaining a balanced ratio of teachers to students. Hence, maintaining a balanced ratio not only improves the overall quality of education but also positively affects classroom dynamics, student participation, and learning outcomes (Koc & Celik, 2015). Early identification of student needs and implementing more structure in the classroom are also mentioned by the teachers. The importance of providing professional development for teachers, external training opportunities, and resources is crucial for effective support. This professional development for the teachers is relate to the Social Learning Theory by Bandura (1960), which suggests that individuals learn from observing others and through direct experiences. In this context, providing professional development opportunities for teachers is akin to social learning, where educators can acquire new strategies and techniques for understanding and supporting students with special needs, managing behavior, and providing emotional support.

### **Conclusion**

Four causes of low attention span in homeroom settings were identified, including high student energy levels, developmental readiness, parenting styles, and digital distractions during the pandemic. The study also revealed three causes of low attention span in specialist settings, such as high student-to-teacher ratios, disruptive environments,

and time management challenges. Negative impacts of low attention span on students' cognitive skills and behavior were listed, along with engagement strategies implemented in classrooms to address these issues.

Based on the conclusions, recommendations are provided for Kindergarten 3 teachers, schools, and future research studies. Teachers are advised to manage students' energy levels effectively, promote readiness skills, employ differentiated instruction, and incorporate hands-on exploration in specialist classes. School is encouraged to offer professional development for teachers, lower student-teacher ratios, implement early identification procedures, and involve parents in promoting healthy learning habits. Future research suggestions included conducting comparative studies across schools to investigate the impact of hands-on exploration and contrasting teaching approaches on student attention and engagement.

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