

The Influence of Tetris Block Media on the Concentration of ADHD Children in Tamansari 1 Yogyakarta

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ABSTRACT

This study aims to determine the effect of Tetris block media on the concentration of ADHD children. The research was conducted at the Tamansari 1 Yogyakarta Inclusive State Elementary School from July to September. The research was carried out using a quantitative approach with the type of experimental research using the Single Subject Research (SSR) method. The data collection technique used one of the ADHD student subjects at the Tamansari 1 Yogyakarta Inclusive State Elementary School. The data collection technique was carried out by observation, measurement of concentration duration, and documentation. This research is a study with an ABA research design by carrying out observation phases before and after intervention and an intervention phase. Data analysis showed changes in results in each phase of the research; in the baseline phase, there was an increase in the duration of stable concentration. Based on these results, it can be concluded that there is an influence of Tetris's block media on the concentration of ADHD children

Keywords: ADHD, Concentration, Tetris Block Media

INTRODUCTION

School-age children are the nation's investment because school-age children are the next generation and determine the quality of a nation. School-age, especially elementary school age, is also known as a period of intellectual development and a place for perfecting children's imagination when learning and developing their potential more deeply to be useful in the future because, at that age, children have the desire and openness to gain knowledge and experience. Education is both a solution and a cause of various problems in Indonesia. One of the problems that happens in education is regarding student learning concentration (Kintari, 2014). Often, students cannot or lack focus in the learning process because they prefer to be busy talking with their friends, and most students are even so sleepy that they fall asleep when the teacher explains the lesson material. This lack of concentration in learning often becomes a problem after children enter school age and even greatly affects children's learning achievements. They concentrate on self-study so that students are more focused, and it is easier to accept and grasp the lessons given by the teacher, which will increase students' thinking abilities and knowledge (Aryati, 2010).

Student learning concentration is influenced by two factors, namely internal and external factors. Internal factors are factors that arise within the students themselves, including children with special needs such as ADHD, because they are related to their physical or biological and psychological conditions. In contrast, external factors are influences that come from outside the individual. The physical environment, such as sound,

lighting, and so on, are external factors that can help students concentrate more on studying. At the same time, physical conditions and psychological conditions are internal factors that must also be considered if you want to increase students' learning concentration, including the environment (improving temperature, lighting, sound, and learning design), improving learning modalities, monitoring struggles, and paying attention to psychological aspects (Engkoswara, 2012). According to the United Nations Educational, Scientific and Cultural Organization (UNESCO) data released in 2014, Indonesian education was ranked 57th for education worldwide among 115 countries. Research results from the International Program for International Student Assessment (PISA) in 2018 stated that students' learning achievement in Indonesia was still low; Indonesia was ranked 72nd out of 77 countries, including children with ADHD and children with other special needs.

Attention Deficit Hyperactivity Disorder (ADHD) is a disorder of activity and attention (hyperkinetic disorder), which is a psychiatric disorder that is often found with the main symptoms of inattention (lack of attention), hyperactivity, and impulsivity (acting without thinking), which are inconsistent with the child's level of development, teenagers, or adults. (A. Dayu 2013). ADHD is a medical condition that includes brain dysfunction when a person experiences difficulty in controlling impulses, inhibits behavior, and does not support attention span or attention span is easily distracted because the main characteristic of ADHD itself is the tendency to move from one activity to another without being able to complete the task. Given that a person cannot concentrate well when working on a task that demands cognitive involvement, there appears to be irregular, excessive, and chaotic activity.

Based on the results of field observations, it was found that ADHD children showed obstacles in focusing attention or concentration, which affected their ability to complete tasks during the learning process at school. His attention is always focused on other students, teachers, and objects around him. The intervention carried out by teachers for ADHD has not been optimal, as there is still a lack of information sharing between class teachers and special teachers at school. They still receive the same treatment as other normal students, and there has been no evaluation or increased progress; therefore, supporting media is needed for ADHD intervention. One way to train and improve the concentration of ADHD children is to provide creative, interesting, and fun activities. Like using Tetris block media. Tetris blocks are a game where you arrange blocks according to a block pattern with other blocks to fit together like tiles. So, the author wishes to research the effect of using Tetris block media to improve the concentration of ADHD children

METHOD

Method study is something scientific to get data for certain uses; what is meant by scientific means research activities that are based on characteristic features of science, rational, empirical, and systematic, which has been explored in the philosophy of science. Sugiyono (2018). The research approach used in this research is quantitative research. Quantitative methods are a type of research whose specifications are systematic, planned, and structured with clarity from the start until the creation of the research design. Later in this research, the researcher used the approach experiment, which is the SSR (Singles Subject Research) method, which aims to obtain the data required with results. There is or is no influence from something treatment or treatment given to the subject in a way over and over again.

Single-subject is a quantitative research that provides intervention or treatment to subject study in a period certain. Many experts state that single-subject research is a single-case experimental design or SCED (Kazdin, 2021; Lane & Gast, 2014; Rassafiani & Sahaf, 2010; Smith, 2012). Term Single subject does not mean that only one research subject is studied, but it is more typical to be somewhere between one and five participants (Gast & Ledford, 2014; Lane & Gast, 2014).

This research aims to obtain the required data by seeing results from some intervention in application influence media block Tetris increasing the concentration of ADHD students at Tamansari 1 Inclusion State Elementary School Yogyakarta. In the study, this sees conditions beginning (baseline-1), application (Intervention), and consequence application (baseline-2).

RESULT AND DISCUSSION

The subjects in this study were ten years old according to observation results done on each baseline observation (A1) done three times, baseline (B) intervention five times sessions, and baseline (A2) 3 times repeated observation sessions. Then again, baseline (A1) was highest at 5, 12 minutes, baseline (B) post-intervention at 7, 15 minutes, and baseline repetition (A2) at 9, 26 minutes. Characters who appear When researchers make observations, the child experiences hyperactivity, often evaporates, And is easily distracted. Results observation supported by The theory states that a child has ADHD when someone experiences difficulties controlling impulses, inhibiting behavior, and not supporting ranges attention or span attention easily distracted (Dayu P, 2013:29).

In ADHD children as research subjects, concentration measurements were taken, and learning shows that the child is less able to focus when accepting material. The child also easily diverts attention to his friends, which makes it difficult for him to focus or concentrate because the child is not yet capable of learning in silence. This makes children tend towards style kinesthetic learning. The behavior directed by the child is supported by statements by Piffner & Barkley (1990) in Ayu (2017), which explains that children with ADHD When in class, the child often show behavior where it is difficult for them to respond to teaching and less able to complete academic assignments compared to his peers. Another characteristic also appears is a lack of concentration when carrying out educational and non-academic activities. According to Supriyono (2007) in Setiani (2014: 14), concentration is focusing the mind's attention on something by ignoring all unrelated things. So from That problem, the following study Was done by researchers to see if the game tetris blocks effect with increasing duration concentration.

The intervention carried out was in the form of games using tetris block media because it can give children the opportunity to develop abilities in systematic thinking, stimulate creativity child as well as form concentrate the child's eyes, and coordinate fine and gross motor skills (Dodge et al. in Masnipal 2013:295).

After giving intervention, change levels on data, thus indicating a positive change (+). Research results in the baseline phase (A1) obtain duration time, most of which is 3.45 minutes to 5.12 minutes. Intervention at baseline (B) experiences enhancement with number 4.9 until 7.15 minutes, then receive a concentration duration of 8.46 to 9.26 minutes. Over data means that the concentration duration increases and Tetris blocks can be used to overcome the problem of concentration in children with ADHD. Based on the results of research that has been carried out, then the answer to the problem formulation

in the study For know influence media block tetris to concentration child ADHD with see change enhancement duration concentration before And after giving intervention form media block tetris in school Base Country Inclusion Tamansari 1 Yogyakarta is a child who is capable and concentrates on improving ability creativity through block game.

Table 1. Condition ADHD

Condition	A1	B	A2
Long Condition	3	5	3
Propensity Estimation Direction	(+)	(+)	(+)
			
Trend Stability	Stable 100 %	Stable 100%	Stable 100 %
Estimate Footsteps Data	(+)	(+)	(+)
			
Levels Change	(3, 45-4, 22)	(4, 9 – 7, 15)	(8, 46-9, 26)
	+ 0, 77	+ 2, 25	+1, 39
Range	Stable	Stable	Stable
	(3.45-4.22)	(4, 9 – 7.15)	(8.46-9, 26)

Table 2. Comparison

Comparison Condition	B/A1	B/A2
Variable Which changed	1	1
Change Trenddirection and effects	(+) 	(+) 
	(+) 	(+) 
Change trendstability	Stability toStability	Stability toStability
Change Levels	4, 22 – 4.9 = +0, 68	7.15- 8, 46 = +1, 31
Percentage Overlap	<u>1 x</u> 100% = 20%	<u>1 x</u> 100% = 20%
	5	5

CONCLUSION

Based on the results of the study and observation as well as intervention, it was concluded that the Tetris block media could influence the duration of concentration of ADHD students at the Tamansari 1 Yogyakarta Inclusion State Elementary School. Study This is proven by an increased duration of concentration time on the subject student ADHD, an increase that happened on each baseline.

In the baseline observation phase (A1), observations were carried out for three sessions, meeting with a measurement of duration concentration of 15 15-minute First Learning. Duration concentration on baseline (A1) obtain duration most time A little 3, 45

minutes until 5, 12 minutes, Then researcher start to give treatment or intervention on baseline (B) before learning started done five session meeting Then step furthermore measure return duration my time ADHD students' concentration during the first 15 minutes of learning. Duration It was found that there was an increase from 4.9 to 7.15 minutes. The final phase repetition observation baseline (A2) was done during three sessions, the same as the baseline (A1). Results from repetition post-intervention experience increase by obtaining a concentration duration of 8.46 to 9.26 minutes. Whether the means show that enhancement concentration Is positive, then it is concluded that the influence of tetris block media on a child's concentration ADHD at school Tamansari State Inclusion Policy 1 Yogyakarta exists.

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