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Building Block Games to Train Concentration in Children Aged 3-4 Years

Zulfatin Ni'mah
Islamic Religious Institute Nahdlatul Ulama' Tuban
e-mail correspondent: zulfatinnikmah43@gmail.com

Abstrak

Tujuan dalam penelitian ini yaitu untuk mengetahui pengaruh permainan building block untuk melatih konsentrasi belajar anak usia 3-4 tahun. Penelitian ini menggunakan pendekatan penelitian kuantitatif dengan menggunakan metode eksperimen dengan jenis one group pree-test post-tes design. Subjek dalam penelitian ini adalah anak usia dini (usia 3-4 tahun). Teknik pengumpulan data yang digunakan adalah observasi dan dokumentasi. Teknik analisis data menggunakan Uji Wilcoxon. Berdasarkan hasil analisis data diperoleh Thitung=-2 dan Ttabel untuk N=17 Taraf signifikan 5% atau 0,05 sebesar 35, maka (-2<35). Data tersebut menunjukkan H0 ditolak dan Ha diterima. Hasil penelitian permainan building block dapat mempengaruhi atau mengingkatkan konsentrasi belajar dan anak menjadi lebih fokus serta tenang dalam belajar.

Kunci Kunci : Anak usia dini, Permainan *Building Block*, Konsentrasi Belajar.

Abstract

The objective of this study was to determine how building block games affected the development of concentration in children between the ages of three and four. This study employed an experimental design with a single group pre-test-post-test methodology, utilizing a quantitative research strategy. This study included early childhood (3–4 years old) as its subjects. Documentation and observation are the methods used to obtain data. The Wilcoxon Test is used in the data analysis method. Ttable with N = 17 and Tcount = -2 was identified based on the data analysis results. If the significance level is 0.05 or 5% and 35, then (-2 <35). The data demonstrates that H0 is rejected and Ha is accepted. The results of research on building block games can influence or increase learning concentration and children become more focused and calmer in learning.

Keywords: Early childhood, Game Building Blocks, Learning Concentration

INTRODUCTION

The preschool generation, frequently known as the "golden age," is in its prime, and as such, educational activities for them must be planned and executed to the best of their abilities, taking into account a variety of factors that are pertinent to their maturation. Anything that children learn in this day and age needs to be beneficial to how their lives evolve later on (Zulfajri et al. 2021, 38). Young children are distinct individuals who play and develop in ways that are appropriate for their age throughout their everyday lives. During their early years, they frequently exhibit

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an impulsive, organic, and inquisitive demeanor. Stimulation that can promote a child's growth is necessary for the elements of the child to develop. Several aspects of development are usually present in children, including cognitive, language, social-emotional, religious, and moral values, art, and physical motor skills.

In essence, PAUD is education that is organized to facilitate the child's overall growth and development or emphasize the development of all aspects of the child's personality. Therefore, to foster many facets of children's development, PAUD has to provide a variety of activities. PAUD education is crucial in enabling children a foundational framework for the creation and development of fundamental knowledge, attitudes, and abilities. Early childhood education's effectiveness will serve as the cornerstone for later educational endeavors (Veryawan, 2022).

For the educational process to function in a structured, informal, and responsive manner to children's differences, PAUD must be implemented by the characteristics, growth, and developmental stage of the children. This can be achieved through activities that are directly conducted in a play environment. Wardhani (2018). In this situation, educators serve as facilitators who can both teach and create an enjoyable learning environment. To maximize children's potential, educators must also be able to use the right learning practices. Teachers are also required to provide children access to age-appropriate instructional material. Teachers have to decide which media is suitable for their students and which is not. There are various kinds of educational media provided, especially educational media that can stimulate children to train their concentration in learning (Haryanti and Tejaningrum, 2022).

Several problems can be encountered in early childhood education. One thing that children often experience is a lack of concentration during the learning process so children will play alone during the learning process. It is not uncommon for a child's behavior like this to encourage other children to follow suit. Therefore, there is a need for learning strategies that can train children's concentration, thus, children will be calm when studying but in a fun way.

PAUD has come to be associated with the idea that education for children needs to be more comprehensive and varied, utilizing media and learning resources; children who struggle with abstract concepts need to start with the tangible; easy things are taught first, followed by harder ones; etc. Using a range of educational materials and media will facilitate and expedite children's comprehension, keep their attention for longer, and keep them from becoming bored as they study (Masnipal, 2013).

For young children, playing is an excellent way to learn. Children are encouraged to use, investigate, and learn from the objects in their environment

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through play activities. Preschoolers' learning environments need to be designed in a manner that will stimulate their curiosity, make them feel content, and support their achievement of effective learning (Zulfajri et al., 2021). This can be performed while still paying attention to safety and comfort. Children can use their imaginations to enhance their creativity as they play. Giving children the chance to ponder helps them identify and engage in more innovative thought processes that come in handy in daily life. This implies that they will have a variety of ideas. Although parents might consider it abstract at times. Furthermore, playing allows children to release their boredom from their regular routines. Children's boredom is typically brought on by monotonous everyday routines. Consequently, it should come as no surprise that children act in strange and humorous ways when they play. This is not a bad thing because children's natural creative development occurs as they learn new things (Utami et al. 2022).

Children's learning concentration skills can be trained through learning tactics that appeal to them. Innovative play activities that help train children's concentration are necessary since youngsters who still prefer to play alone and don't pay attention during the learning process will pose problems. Teachers can create a variety of exercises or strategies to help kids practice focus, like the Building Block game. One of the numerous advantages of this Building Block game for children's development is that it assists with concentration.

Building blocks can be made from wood or plastic and can also use natural materials. Typically, this game constructs a house, palace, bridge, or a variety of other structures. Groups of children—for instance, five people—are created. Building chips or parts that will eventually be put together to create a building are then distributed to each group. The teacher first goes over the game's rules. Speed, unity, children's focus, and collaboration in building are the virtues that may be drawn from this game. The teacher organizes the game once the students are divided into groups. Teachers merely offer guidance and inspiration for the game. After completion, teachers can evaluate depending on each group's collaboration and pace. Following that, the teacher provided an assessment stating that the game had yielded numerous values (Darmadi, 87–88).

Building block games can help children develop and train their ability to concentrate. These activities are typically played in institutions utilizing APE Lego or blocks. This game may encourage children's enthusiasm for learning since it keeps them from becoming disinterested in the process of learning. Children can learn shapes and colors from Lego and building blocks, which come in a variety of forms. In addition to these morals, playing will help children focus on finishing tasks. Repurposed roof tile pieces can be assembled into a building shape to create this toy.

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The children will learn to focus and exercise caution so that the building fails to collapse and they may stand tall and sturdy.

Based on the background above, researchers are interested in conducting research with the title "The Effect of Building Block Games on Training Concentration in Children Aged 3-4 Years". This study aims to explain the use of building block activities and assess their impact on children ages 3–4 in developing their ability to concentrate. Additionally, it is hoped that this research will aid education by enhancing learning methodologies, particularly when it comes to teaching children to concentrate through building block games.

METHOD

This study employs quantitative, experimental research approaches. Pre-experimental design with one group pre-test and post-test is employed in this study. Under very controlled circumstances, experimental research is performed to ascertain how one variable affects another. The objective of the experimental technique is to elucidate the causal link, or cause and effect, between two variables (variable X and variable Y).

The Salafiyah Play Group institution, which is situated in Jarorejo Village, Kerek District, Tuban Regency, was the study site. This study had 17 youngsters in the 3–4 age range as its sample. Data collection methods encompass observation, interviews, and documentation. The pretest and posttest results in this study are presented as rankings. Furthermore, the research sample was relatively small—just 17 children made up of it. Therefore, non-parametric statistics are utilized in statistical analysis. This study tests the hypothesis at a significance level of 5% or 0.05 using the Wilcoxon analysis approach. The hypothesis criteria proposed are if $p \leq 0.05$ then H0 is rejected, if $p \geq 0.05$ then H0 is accepted. With the following interpretation provisions:

a. H0 = There is an influence on building block games to train concentration in young children
b. Ha = There is no influence on building block games to train concentration in young children (Irianto, 2021, 13–14)

The form of the Wilcoxon table is as follows:

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Table 1. Wilcoxon Table

No	*Pretest*	*Posttest*	Difference		Rank	Rank Sign	
	X1	Y1	X1- Y1			+	-
1							
2							
3							
Etc.							
Amount							

Information:
X1: Value before treatment
Y1: Value after treatment
X1- Y1: The difference between before treatment and after treatment

RESULTS AND DISCUSSION

The three stages of this research's implementation were the pre-test (before treatment), the treatment (stage 2), and the post-test (after treatment). The first step is a pre-test exercise that is conducted during the learning process so that researchers can watch firsthand many students who struggle to focus and maintain composure while studying. This can undoubtedly impair the learning process' efficacy because kids who struggle with concentration will also affect their friends. The students are assessed following the administration of the pre-test.

Building block games are utilized in conjunction with a learning method during the second stage of treatment. A game called "Building Blocks" can be created with plastic, wood, and other natural materials. Since the object of this game is to arrange or construct a building, children's concentration is naturally developed through the cooperative and precise play of building blocks. Playing with building blocks encourages cognitive development as well since it teaches children problem-solving skills like how to arrange buildings to stay upright. Furthermore, this game enhances children's social and emotional growth.

Educators use educational gaming tools like Lego and blocks to carry out this treatment stage. Children can then use this medium to build structures. Building block games can spark children's interest in learning, which helps them to be calmer and more focused while they learn. This allows children to learn while having fun. The children can now sit still and are eager to participate in the learning process, which leads to the third stage—the post-test. This can help the learning process progress more easily, but as educators, it is our responsibility to consistently come up with creative learning tactics that keep children from becoming bored and help them focus more throughout class.

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Based on information gathered from the Wilcoxon Matched Pairs Test results for the first and last observations (pre-test and post-test), which assessed the impact of building block games on children's ability to focus utilizing age ranges of 3 to 4 years. Following the acquisition of the summary results of the activities conducted before receiving treatment and the activities performed after receiving treatment. Subsequently, conduct a comprehensive analysis of the data to verify the validity of the employed hypothesis. To examine the information, researchers constructed the following table of statistical analysis results.

Table 2. Wilcoxon Table Analysis of Initial and Final Measurements

No	Name	Pre-test	Post-test	Difference	Rank	Rank Mark	
		X1	Y1	X1-Y1		+	-
1	AR	70	80	10	14.5	14.5	-
2	ATAM	65	72	7	7	7	-
3	AVK	65	70	5	2	2	-
4	ARM	60	70	10	14.5	14.5	-
5	DPJ	62	68	6	4.5	4.5	-
6	DPSN	63	70	7	7	7	-
7	watershed	60	69	9	11	11	-
8	HEM	60	70	10	14.5	14.5	-
9	IM	65	70	5	2	2	-
10	KKN	66	75	9	11	11	-
11	KKF	75	70	-5	2		-2
12	MBDA	65	73	8	9	9	-
13	MSNM	60	66	6	4.5	4.5	-
14	MTNA	64	71	7	7	7	-
15	MRA	62	73	9	11	11	-
16	SMR	65	75	10	14.5	14.5	-
17	ZAA	70	80	10	14.5	14.5	-
Amount		1,099	1227	135	150.5	148.5	-2

Information:
X1: Activity measurement data before treatment
Y1: Activity measurement data after treatment
X1-Y1: Difference between measurements from the pre-test and post-test

It is evident from the following table that the post-test value is more and better than the pre-test value, according to the statistical test conducted using the Wilcoxon formula. The value or score from the lowest level is selected to calculate the statistical calculation value or Tcount, and the results are -2. In the meantime, Ttable is identified by calculating (Na), where N is the number of research samples and an is the 5% or 0.05 significance level in the statement. Thus, the T table is

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obtained based on a sample size of 17 children or N = 17 with a significance level of 5%, hence, the total T table = 35. From the total number of numbers obtained by Ttable, the total is 35, then Tcount < Ttable (-2<35).

If Tcount<Ttable then Ha is accepted and H0 is rejected, thus based on the research results above Tcount<Ttable (-2<25) means that the hypothesis in this study is accepted because there are differences in the results of the pre-test and post-test. Therefore, it can be concluded that building block games has an impact on developing children's learning concentration. When a child plays quietly and intently, these outcomes are immediately observed and evaluated. As a result, teachers can employ engaging teaching techniques that encourage students' curiosity and help them enhance their ability to concentrate.

CONCLUSION

Based on the results of research discussing the influence of building block games on training children's concentration, there was an increase in scores before the treatment (pre-test) and after the treatment (post-test), namely from 1,099 to 1,227. In addition, the results were compared using the Wilcoxon test shows that Tcount = -2 is smaller than Ttable with a significance level of 5% or 0.05 with the number of samples or N=17 obtained by Ttable of 35 (Tcount<Ttable = -2<35). The building block game is employed to implement learning methodologies. By playing, educators can make direct observations and subsequently provide an assessment of the planned samples. This produces outcomes or assessment scores. According to the research results, children who play the building block game learn more calmly and intently as they arrange pieces of different shapes to create buildings.

REFERENCES

Darmadi. t.t. *Asyiknya Belajar Sambil Bermain*. Bogor: Guepedia.

Haryanti, Dwi, dan Dhiarti Tejaningrum. 2020. *Keaksaraan Awal Anak Usia Dini*. Pekalongan: Penerbit NEM.

Irianto, Prof Dr H. Agus. 2021. *Statistik Untuk Ilmu Sosial: Aplikatif untuk Ilmu-ilmu Sosial*. Prenada Media.

Masnipal. 2013. *Siap Menjadi Guru & Pengelola PAUD Profesional*. Jakarta: Elex Media Komputindo.

Utami, Fitria Budi, dan dkk. 2022. *Bermain dan Permainan Anak Usia Dini*. Pekalongan: Penerbit NEM.

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DOI : https://doi.org/10.22515/abna.v4i1.7134

Veryawan. 2022. *Konsep Dasar Pendidikan Anak Usia Dini*. Solok: Insan Cendekia Mandiri.

Wardhani, Nia. 2018. *Raudhatul Athfal, Kurikulum dan Metodologi Pembelajaran Pendidikan Anak Usia Dini*. Darussalam: CV. Naskah Aceh.

Zulfajri, dan dkk. 2021. *Pendidikan Anak Prasekolah*. Tasikmalaya: Edu Publisher.