



The Relationship Between Breakfast Habits and Playing Activities for Children Aged 5-6 Years in Al-Kautsar Integrated Islamic Kindergarten

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Article Info

History of Article

Received:

26 May 2022

Revised:

14 April 2023

Published:

15 October 2023

Abstract

Breakfast is essential since it affects children's playing activities at school. This study, therefore, aimed to determine the relationship between breakfast habits and children's playing activities aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang. The research approach used was quantitative with this type of correlational research. The sample studied was 41 children. Data collection techniques employed observation and questionnaires. The instrument utilized was an observation sheet of children's breakfast habits filled in by the child's parents, while the teacher filled in a questionnaire about playing activities. The instrument was tested for validity and reliability. Testing the instrument validity used the Product Moment formula, whereas the reliability test used was the Alpha formula. The data analysis technique used was a product-moment correlation for hypothesis testing. The results of testing the hypothesis in this study obtained an R-count of 0.527. This result was higher than the r-table at a significance level of 5%, gaining 0.316. This study found a positive relationship between breakfast habits and playing activities of children aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang. The effective contribution of breakfast habits to playing activities in children aged 5-6 years at Al-Kautsar Islamic Integrated Kindergarten, Lubuk Begalung, Padang, was $r^2 \times 100\%$, i.e., 27.75%. This result could be a reference for parents and teachers to be more concerned about breakfast habits for children's development.

Keywords:

Active Learning, Breakfast Habits, Kindergarten, Playing Activities

How to cite:

Lisda, K., & Mahyuddin, N. (2023). The relationship between breakfast habits and playing activities for children aged 5-6 years in Al-Kautsar Integrated Islamic Kindergarten. *EduBasic Journal: Jurnal Pendidikan Dasar*, 5(2), 103-114.

Info Artikel*Riwayat Artikel*

Diterima:

26 Mei 2022

Direvisi:

14 April 2023

Diterbitkan:

15 Oktober 2023

Abstrak

Sarapan sangat penting karena mempengaruhi aktivitas bermain anak di sekolah. Oleh karena itu, penelitian ini bertujuan untuk mengetahui hubungan kebiasaan sarapan pagi dengan aktivitas bermain anak usia 5-6 tahun di TK Islam Terpadu Al-Kautsar Lubuk Begalung Padang. Pendekatan penelitian yang digunakan adalah kuantitatif dengan jenis penelitian korelasional. Sampel yang diteliti adalah 41 anak. Teknik pengumpulan data menggunakan observasi dan kuesioner. Instrumen yang digunakan adalah lembar observasi kebiasaan makan pagi anak yang diisi oleh orang tua anak, sedangkan guru mengisi angket tentang kegiatan bermain. Instrumen diuji validitas dan reliabilitasnya. Pengujian validitas instrumen menggunakan rumus Product Moment, sedangkan uji reliabilitas menggunakan rumus Alpha. Teknik analisis data yang digunakan adalah korelasi product-moment untuk pengujian hipotesis. Hasil pengujian hipotesis pada penelitian ini diperoleh R-hitung sebesar 0,527. Hasil ini lebih besar dari r-tabel pada taraf signifikansi 5%, diperoleh 0,316. Penelitian ini menemukan adanya hubungan positif antara kebiasaan sarapan pagi dengan aktivitas bermain anak usia 5-6 tahun di TK Islam Terpadu Al-Kautsar Lubuk Begalung Padang. Sumbangan efektif kebiasaan sarapan pagi terhadap aktivitas bermain pada anak usia 5-6 tahun di TK Islam Terpadu Al-Kautsar Lubuk Begalung Padang adalah $r^2 \times 100\%$ yaitu sebesar 27,75%. Hasil ini dapat menjadi acuan bagi orang tua dan guru untuk lebih memperhatikan kebiasaan sarapan bagi tumbuh kembang anak.

Kata Kunci:

Pembelajaran Aktif, Kebiasaan Sarapan, TK, Aktifitas Bermain

Cara Mensitasi:

Lisda, K., & Mahyuddin, N. (2023). The relationship between breakfast habits and playing activities for children aged 5-6 years in Al-Kautsar Integrated Islamic Kindergarten. *EduBasic Journal: Jurnal Pendidikan Dasar*, 5(2), 103-114.

INTRODUCTION

Early childhood is a child at the age of 0-6 years. The early age period in human life is essential for brain growth, intelligence, personality, memory, and other aspects of development. It indicates that stunted growth and development at this time can result in delays in later periods (Susanto, 2017).

On the other hand, breakfast is a condition to consume the main course in the morning. Breakfast time starts from 06:00 am until 10:00 am. Breakfast is crucial in meeting energy needs (Noviyanti & Kusudaryanti, 2019). Breakfast is also very beneficial for everyone, children and adults. Breakfast can maintain physical endurance, maintain endurance while working, and increase work productivity (Ermona & Wirjatmadi, 2018).

Breakfast habits also help to meet the adequacy of daily nutrition. Types of dishes for quality breakfast can be selected and arranged according to circumstances (Lasidi, Umboh & Ismanto, 2018). However, it would be better if it consisted of food sources of energy, sources of builder substances, and sources of regulatory substances as mandated by the Ministry of Health of Indonesia in *Pedoman Umum Gizi Seimbang (General Guidelines for Balance Nutrition)*. Through breakfast activities, foods containing balanced nutrition and fulfilling 15-30% of the total energy in a day can be consumed, which is done in the morning before activities (Lynch et al., 2014).

Children will do many playing activities at school at an early age. Playing are all children's activities, moving, including work, channeling hobbies, and is their way of knowing the world (Parker, Thomsen & Berry, 2022). Playing activities are also a means of socialization, which is expected to provide opportunities for children to explore, discover, express feelings, have recreation, and learn in a fun way (Lehto & Eskelinen, 2020). Through play, children can develop physical motor skills, both gross and fine motor skills. In gross motor games, movements occur due to the coordination of large muscles, such as walking, jumping, running, and throwing. In contrast, fine motor games train hand-muscle coordination in activities such as playing playdough, folding, cutting, stringing,

squeezing, and others (Wiresti & Na'imah, 2020). The playing activities are properly connected to the chemical proses of their body (Lani, Margawati & Fitrianti, 2017).

Based on the initial observations that researchers conducted at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, researchers found that many children were less enthusiastic about their playing activities. For example, when a friend invited them to play or did a playing activity together, the child did not want to and said he was tired (looked lethargic). When the teacher conveyed information about the child's condition, the teacher stated that the child often looked lethargic, unenthusiastic, and lazy to carry out playing activities. It was due to not getting breakfast. The researchers also found this in several other students at the Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang.

In connection with the findings that the researchers obtained at the Al-Kautsar Integrated Islamic Kindergarten Lubuk Begalung Padang regarding the relationship between breakfast and children's playing activities, the researchers are interested in conducting research by proposing investigation on the relationship between breakfast habits and playing activities for children aged 5-6 years in Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang.

METHODS

This type of research used a quantitative approach with a correlational design. The research sample was the total number of children in Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, totaling 41 children. Data collection techniques employed questionnaires and documentation. The data analysis technique utilized correlation statistics with the help of the SPSS version 22 program. Then, the measurement statistics used were Likert scale with quantitative values of 5, 4, 3, 2, and 1 in positive statements and vice versa for negative statements, with the category: "Always", "Often", "Sometimes", "Rarely", and "Never". The instrument was arranged using theories of breakfast habits and playing activities.

Table 1. Outline Instruments of Breakfast and Children's Playing Activities

Variable	Sub Variable	Indicator
Breakfast habits and playing activities	Breakfast habits (Noviyanti & Kusudaryanti, 2019)	Time
		The role of parents
		Gender
	Playing activity (Hurlock, 2014)	Nutrition knowledge
		Food type
		Health
Playing activity (Hurlock, 2014)	Playing activity (Hurlock, 2014)	Playgroup
		Intelligence
		Gender
		Playing tool
		Playing environment

RESULTS AND DISCUSSION

Description of Research Data

The researchers obtained data by distributing questionnaires to parents and children at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, which consisted of 16 questions regarding children's breakfast habits. In addition, researchers made observations of children's playing activities using 11 questions regarding children's playing activities with the teacher's help on duty. This observation was carried out on all predetermined samples, namely 41 children.

Percentage of Children Who Have Breakfast and No Breakfast

The following will present a picture of the percentage of children who had breakfast and did not have breakfast from the first to the sixth day. Data recapitulation of breakfast and non-breakfast children can be seen in detail in the below figures.

1) First day

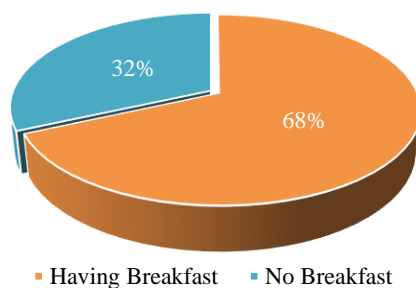


Figure 1. Percentage of Children Who Have Breakfast and No Breakfast on the First Day

In the figure above, the ratio of children who had breakfast with no breakfast was 68% (28 children) and 32% (13 children).

2) Second day

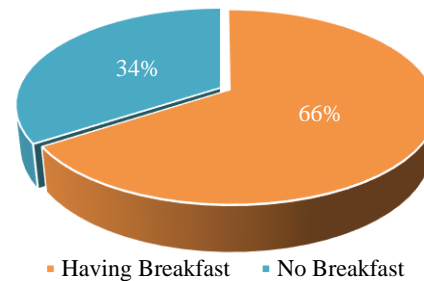


Figure 2. Percentage of Children Who Have Breakfast and No Breakfast on the Second Day

In the figure above, the ratio of children who have breakfast with no breakfast was 66% (27 children) and 34% (14 children). Children who had breakfast decreased from the previous day, from 68% (28 children) to 66% (27 children). Meanwhile, children who did not have breakfast experienced an increase from 34% (14 children) to 32% (13 children).

3) Third day

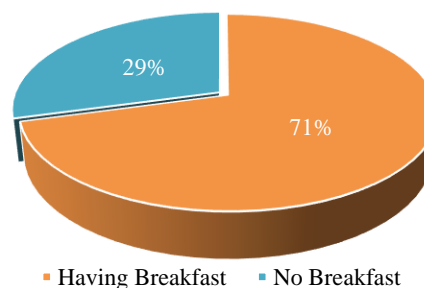


Figure 3. Percentage of Children Who Have Breakfast and No Breakfast on the Third Day

In the figure above, 71% (29 children) had breakfast, while 29% (12) did not. Children who had breakfast increased from the previous day, from 66% (27 children) to 71% (29 children). Meanwhile, children who did not have breakfast decreased from 34% (14 children) to 29% (12 children).

4) Fourth day

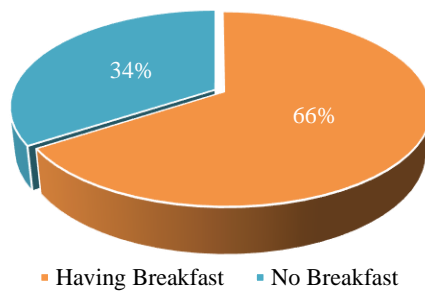


Figure 4. Percentage of Children Who Have Breakfast and No Breakfast on the Fourth Day

In the figure above, 66% (27 children) had breakfast, while 34% (14) did not. Children who had breakfast decreased from the previous day from 71% (29 children) to 66% (27 children). Meanwhile, children who did not have breakfast experienced an increase from 29% (12 children) to 34% (14 children).

5) Fifth day

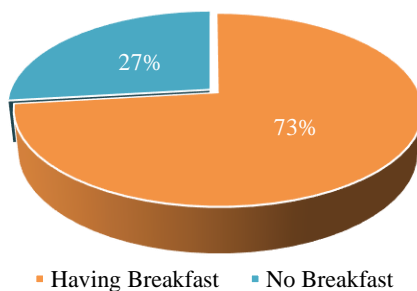


Figure 5. Percentage of Children Who Have Breakfast and No Breakfast on the Fifth Day

In the figure above, 73% (30 children) had breakfast, while 27% (11) did not. The number of children who had breakfast increased from 66% (27) to 73% (30). Meanwhile, children who did not have breakfast decreased from 34% (14 children) to 27% (11 children).

6) Sixth day

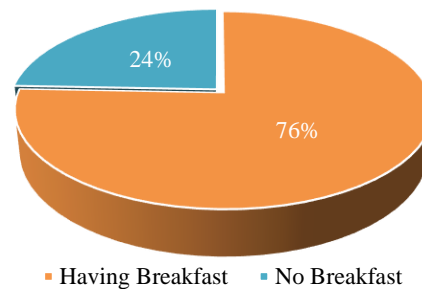


Figure 6. Percentage of Children Who Have Breakfast and No Breakfast on the Sixth Day

In the figure above, 76% (31 children) had breakfast, while 24% (10 children) did not have breakfast. The number of children who had breakfast increased from 73% (30) to 76% (31). Meanwhile, children who did not have breakfast decreased from 27% (11 children) to 24% (10 children).

Percentage of Children Who Play with Enthusiasm and Not Enthusiasm

In the following, figures are presented regarding the percentage of children who play with enthusiasm and not enthusiasm from the first day to the sixth day.

1) First day

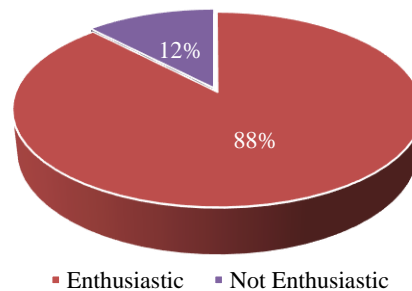


Figure 7. Percentage of Children Playing with Enthusiasm and Not Enthusiasm on the First Day

In the figure above, the comparison between children who played with enthusiasm and not enthusiasm was 88% (36 children) and 12% (5 children).

2) Second day

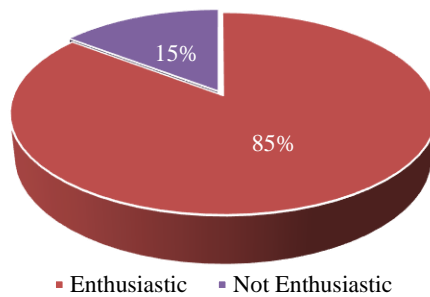


Figure 8. Percentage of Children Playing with Enthusiasm and Not Enthusiasm on the Second Day

In the figure above, the ratio of children who played enthusiastically and not enthusiastically was 85% (35) and 15% (6). Children who played enthusiastically decreased from the previous day from 88% (36 children) to 85% (35 children). Meanwhile, children who were not enthusiastic experienced an increase from 12% (5 children) to 15% (6 children).

3) Third day

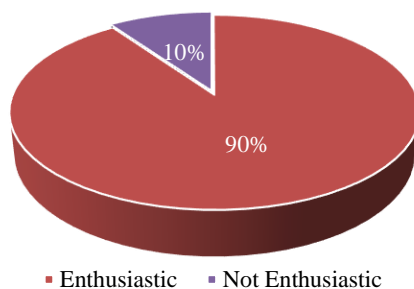


Figure 9. Percentage of Children Playing with Enthusiasm and Not Enthusiasm on the Third Day

In the figure above, the comparison between children who played with enthusiasm and not enthusiasm was 90% (37 children) and 10% (4 children). Children who played enthusiastically experienced an increase from the previous day from 85% (35 children) to 90% (37 children). Meanwhile, the not enthusiastic children decreased from 15% (6) to 10% (4).

4) Fourth day

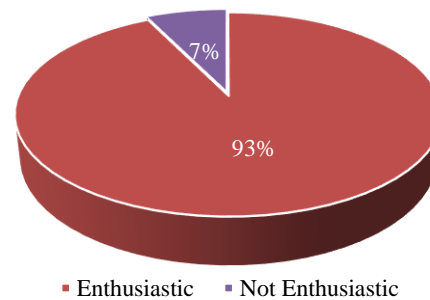


Figure 10. Percentage of Children Playing with Enthusiasm and Not Enthusiasm on the Fourth Day

In the figure above, the comparison between children who played with enthusiasm and not enthusiasm was 93% (38) and 7% (3). Children who played enthusiastically experienced an increase from the previous day from 90% (37 children) to 93% (38 children). Meanwhile, unenthusiastic children decreased from 10% (4) to 7% (3 children).

5) Fifth day

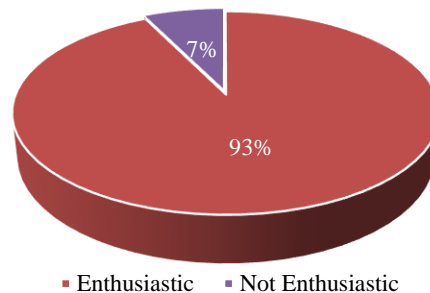


Figure 11. Percentage of Children Who Play with Enthusiasm and Not Enthusiasm on the Fifth

In the figure above, the comparison between children who played with enthusiasm and not enthusiasm was 93% (38) and 7% (3). Children who played enthusiastically and those who were not had the same number as the previous day.

6) Sixth day

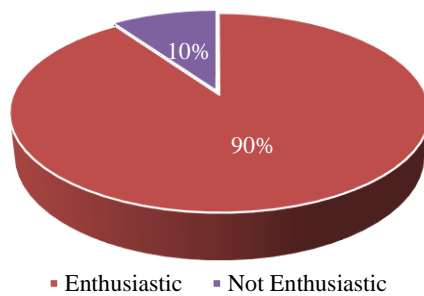


Figure 12. Percentage of Children Who Play with Enthusiasm and Not Enthusiasm on the Sixth Day

In the figure above, the comparison between children who played with enthusiasm and not enthusiasm was 90% (37 children) and 10% (4 children). Children who played enthusiastically decreased from the previous day from 93% (38 children) to 90% (37 children). Meanwhile, unenthusiastic children experienced an increase from 7% (3 children) to 10% (4 children).

Breakfast Habit Statistical Data

Breakfast habits are the way individuals or groups of individuals own, consume, and use the available foods based on social and cultural factors where they live (Folta et al., 2016). Statistical data on breakfast habits were obtained from a questionnaire filled out by the child's parents. Before filling out the questionnaire, the researchers gave directions to parents to help fill in and assess it. The scores used by the researchers were 1 to 5. The following presents statistical data on breakfast habits at the Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang.

Table 2. Breakfast Habit Category Formula

No	Interval	Category
1	$X < (48 - 1.0. 11)$	Low
2	$(48 - 1.0. 11) \leq X < (48 + 1.0. 11)$	Moderate
3	$(48 + 1.0. 11) \leq X$	High

Table 3. Category and Percentage Level of Breakfast Habits

No	Category	Interval	F	Percentage
1	Low	$X < 37$	2	5
2	Moderate	$37 \leq X < 59$	9	22
3	High	$59 \leq X$	30	73
Total			41	100

Based on the frequency distribution of children's breakfast habits in the table above, it can be seen that the frequency of each category was different. The difference in frequency can be illustrated through the following chart.

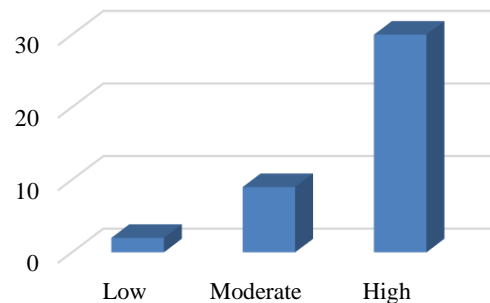


Figure 13. Breakfast Habits Frequency

It can be seen that the majority of children in Al-Kautsar Integrated Islamic Kindergarten had a high breakfast habit level of 30 (73%), a moderate category of 9 (22%), and a low category of 2 (5%).

Playing Activity Statistical Data

Playing activity is carried out with or without tools that generate understanding, provide information, give pleasure, and develop imagination in every child. The score used by the researchers was 1 to 5.

Table 4. Playing Activity Category Formula

No	Interval	Category
1	$X < (33 - 1.0. 7)$	Low
2	$(33 - 1.0. 7) \leq X < (33 + 1.0. 7)$	Moderate
3	$(33 + 1.0. 7) \leq X$	High

Each respondent's answer scores were then tabulated, and the mean of 33, median of 45, mode of 45, the highest value of 55, the lowest value of 11, and standard deviation of 7 were obtained.

Table 5. Category and Percentage Level of Playing Activity

No	Category	Interval	F	Percentage
1	Low	$X < 26$	4	10
2	Moderate	$26 \leq X < 40$	4	10
3	High	$40 \leq X$	33	80
Total			41	100

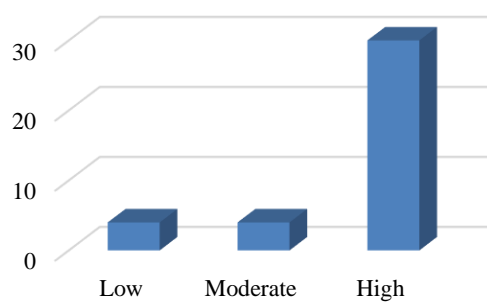


Figure 14. Playing Activity Frequency

Based on the table and chart above, it can be seen that the majority of children's playing activities at Al- Kautsar Integrated Islamic Kindergarten had a level of playing activity in the high category of 33 (80%), the moderate category of 4 (10%), and the low category of 4 (10%).

Prerequisite Test

Before calculating the data, the data were first tested with a prerequisite test, i.e., the normality test and linearity test, as follows.

Normality Test

The normality test was carried out with the help of the SPSS program using a significant level of 5%, and the SPSS output is executed using Kolmogorov-Smirnov Test. The results of these calculations can be seen in the table below.

Table 6. Normality Test Calculation Results

Kolmogorov-Smirnov Z	Asymp. Sig.	Description
0.104	0.200	Normal

The data could be said to be normally distributed since the significance of 0.200 was higher than 0.05 (5%).

Linearity Test

The linearity test was used to determine whether the independent and the dependent variables had a linear relationship. The condition that the two variables are considered linear is if the calculation shows that $F\text{-count} < F\text{-table}$, with a significance level of 5%.

Table 7. Linearity Test Calculation Results

Relationship	F-count	F-table	Sig.	Conclusion
Breakfast Habits and Playing Activities	1.651	2.114	0.133	Linear

The linearity test results showed that the F-value was 1.651, the sig was 0.133, and the F-table value was 2.114. Thus, it can be said that the relationship between breakfast habits and playing activity was linear because it can be seen that after calculating with the help of SPSS, the $F\text{-count} < F\text{-table}$ of 2.114. In addition, from the table, it is also known that the significant value of the relationship between breakfast habits and playing activities was 0.133.

Hypothesis Testing

After the prerequisite test was carried out to find out whether the data were normally and linearly distributed, a hypothesis test was conducted. Hypothesis testing was done with product moment correlation to find out how significant the relationship was between breakfast habits and playing activities.

Table 8. Product Moment Correlation Results

Correlation	r-table	r-count	Result
Breakfast Habits and Playing Activities	0.316	0.527	H_a is accepted, and H_o is rejected.

It is known that the r-count value was 0.527, and the r-table value was 0.316. The table also shows that the r-count was positive. These results denote that the r-count was more significant than the r-table, so H_a was accepted, and H_o was rejected. It indicates a positive relationship between breakfast habits and children's playing activities aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang. Based on the benchmark results of calculating the correlation (Sugiyono, 2017), the relationship between breakfast habits and playing activities of children aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, was included in the

category of enough relationship with the value r-count of 0.527. The contribution of breakfast habits with playing activities for children aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, was $r^2 \times 100\%$, i.e., 27.75%.

Table 9. Correlations Testing Result

		Breakfast Habits	Playing Activity
Breakfast Habits	Pearson Correlation	1	.527**
	Sig. (2-tailed)		.000
	The sum of Squares and Cross-products	4918.439	1815.073
	Covariance	122.961	45.377
	N	41	41
Playing Activity	Pearson Correlation	.527**	1
	Sig. (2-tailed)	.000	
	The sum of Squares and Cross-products	1815.073	2413.512
	Covariance	45.377	60.338
	N	41	41

** . Correlation is significant at the 0.01 level (2-tailed).

SPSS 22 Output Analysis

Since Sig. (2-tailed) = 0.000 < 0.025, H_0 was rejected. (H_a : a positive relationship exists between breakfast habits and playing activities.)

Pearson Correlation/R-count = 0.527 (The correlation value is quite strong.)

NR = The number of variables

$$\begin{aligned} Df &= N - NR \\ &= 41 - 2 \\ &= 39 \end{aligned}$$

R-table = 0.316 (Determined through Table R)

R-count > R-table = 0.527 > 0.316, so H_0 is rejected. (H_a : a positive relationship exists between breakfast habits and playing activities.)

$$\begin{aligned} KD \text{ (Coefficient of Determination)} &= R\text{-count}^2 \times 100\% \\ &= 0.527^2 \times 100\% \\ &= 27.75\% \end{aligned}$$

From the calculation using the formula above, the coefficient of determination was 27.75%. From these results, the contribution of breakfast habits to playing activities for children aged 4-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk

Begalung, Padang, was 27.75%. Meanwhile, 72.25% were influenced by other factors.

Discussion

From the hypothesis test, H_a was accepted, and H_0 was rejected because the test showed that the correlation value was more than zero: the r-count was 0.527, had a positive sign, and was more significant than the r-table with a value of 0.316. There was a relationship between the two variables from the correlation number, which was more than zero and more significant than the r-table value. The positive sign on the r-count indicates a positive direction of correlation, so it can be said that there is a positive relationship between breakfast habits and children's playing activities aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang. In other words, if children have breakfast habits, children's playing activities are good, and vice versa; if children do not have breakfast habits, children's playing activities decrease.

Further, the contribution of breakfast habits to playing activities for children aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, was $r^2 \times 100\% = 27.75\%$. In contrast, the remaining 72.25% were influenced by factors other from within and outside the child. From these results, it can be said that the effective contribution of breakfast habits to playing activities for children aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang was 27.75%. At the same time, another factor influenced the remaining 72.25%. It indicates that breakfast habits are not an absolute factor affecting the playing activities of children aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang.

The results of calculating the effective contribution of breakfast habits to playing activities align with the theory put forward by Hurlock, mentioning several factors that influence children's playing activities: health, playgroup, intelligence, gender, environment, and play equipment (Hurlock, 2014). Breakfast is included in the health category because breakfast can supply energy for playing activities. It is consistent with the theory the Ministry of Health and Nutrition

presented and previous research by Khalifah, Asna & Sari (2019). It is stated that breakfast is vital since, with it, children will get energy so that they can carry out their activities well, their brains can work more optimally, and they will not get sleepy quickly. The function of breakfast for the body is also a supplier of energy and a source of energy to carry out all activities, growth, and maintenance of tissues (Zulaekah, 2012). In addition, children who are used to having breakfast are more active than children who do not because their nutritional intake is not met in the morning to start activities (Solihin in Ramadhani & Fourianalistyawati, 2015). Hence, it can be concluded that breakfast habits have benefits such as maintaining body endurance during activities, including playing activities.

Generally, breakfast provides an energy contribution of 25% of daily nutritional needs. The recommended breakfast is consuming foods containing balanced nutrition, 20-25% daily, done in the morning before learning activities at school since it positively correlates to learning achievements (Hapsari & Martini, 2022). In this case, parents need to prepare a nutritious food menu for children to consume before going to school so that they can directly monitor the intake children consume at breakfast (Kawalec & Pawlas, 2021). This research result also supported the associations of breakfast habits with healthy intake to physical activity and sedentary time (Helgadóttir, 2021).

The descriptive analysis yielded that breakfast habits and playing activities of children aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, were included in the high category. It can be seen from the descriptive analysis results with the help of SPSS. The descriptive analysis results of the breakfast habit variable showed that 30 children were included in the high breakfast habit category, nine children in the moderate breakfast habit level category, and two children in the low breakfast habit category. From these results, it can be seen that the number of children aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, with high breakfast habits, reached 73%, of which 22% belonged to the moderate category and the remaining 5% were in a low category. The

descriptive analysis results of the breakfast habits also revealed a maximum value of 79 and a minimum value of 35. While the mode was 48, the mean of this variable was 63. It indicates that the average breakfast habit of children aged 5-6 years in Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, was in the high category. This pattern is slightly similar to the result of research by Harahap (2019) that mostly varied the frequency and quality of children's breakfast habits.

Moreover, the descriptive analysis results of playing activities uncovered that 33 children were included in the high category, 4 in the moderate category, and 4 in the low category. These results show that the number of children with high-category playing activities reached 80%, of which 10% were in the moderate category and the remaining 10% were in the low category of playing activities. The maximum value of the playing activity variable was 54, and the minimum value was 24. Meanwhile, the mode was 45, and the mean of the breakfast variable was 44. It denotes that the average activity of children aged 5-6 years in Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, were in the high category.

It can be concluded that breakfast habits with playing activities of preschoolers had a positive relationship. It was indicated by hypothesis testing to obtain a positive relationship. Thus, breakfast habits with playing activities are interrelated so that when children make breakfast habits, children's playing activities in class are better than children who do not have breakfast habits (Ward et al., 2016) With other variables related, breakfast habits of children will affect the activity based on its frequency and quality (Zakrzewski-Fruer et al., 2019)

Meanwhile, the fact that happened in the field is that some children were not enthusiastic about playing activities. It was caused by children not having breakfast, which made them lethargic. It supported the research by López-Gil (2022) which mentioned that skipping breakfast potentially cause psychosocial problem such as swing mood. To boost children's eagerness for breakfast, parents need also to employ games and interesting strategies (Kostecka, 2022). Less

diverse types of games also potentially made children bored playing. Another thing causing children to be unenthusiastic in playing was the unevenness of the teacher giving instructions for using the game (Gündoğan, 2020). Sometimes, children did not get the game they wanted. The potential problem is not fully addressed in this study and could be a major investigation in future related studies.

CONCLUSION

Breakfast habits and playing activities for children aged 5-6 years at Al-Kautsar Integrated Islamic Kindergarten, Lubuk Begalung, Padang, were included in the high category. Breakfast habits with playing activities had a positive relationship. Thus, children who did not have breakfast made them lethargic. Less diverse types of games also made children bored playing. Another thing causing children to be unenthusiastic in playing was the unevenness of the teacher giving instructions for using the game. Sometimes, children did not get the game they wanted.

REFERENCES

- Ermona, N. D. N., & Wirjatmadi, B. (2018). Hubungan aktivitas fisik dan asupan gizi dengan status gizi lebih pada anak usia sekolah dasar di SDN Ketabang 1 Kota Surabaya Tahun 2017. *Amerta Nutrition*, 2(1), 97-105. <https://doi.org/10.20473/amnt.v2i1.2018.97-105>
- Folta, S. C., Djang, H. C., Halmo, M., Metayer, N., Blondin, S. A., Smith, K. S., Economos, C. D. (2016). School staff, parent and student perceptions of a Breakfast in the Classroom model during initial implementation. *Public Health Nutrition*, 19(9), 1696-1706. <https://doi.org/10.1017%2FS1368980015003754>
- Gündoğan, A. (2020). Play activities in kindergarten: Their effects on school liking and relationships with teachers *International Journal of Early Childhood Education Studies*, 4(2), 15-32. <http://ijeces.hku.edu.tr/en/pub/issue/51853/581399>
- Hapsari, W. D., & Martini, S. (2022). The effect of breakfast habits on the learning achievement of children in public elementary school 2 Tanggunharjo. *Jurnal Profesi Bidan Indonesia*, 2(1), 23-27. <https://www.pbijournal.org/index.php/pbi/article/view/36>
- Harahap, H., Widodo, Y., Sandjaja, S., Khouw, I., & Deurenberg, P. (2019). Quantity and quality of breakfast of children aged 2.0 to 12.9 years in Indonesia. *Gizi Indonesia*, 42(1), 31-42. <http://dx.doi.org/10.36457/gizindo.v42i1.355>
- Helgadóttir, B, Baurén, H, Kjellenberg, K, Ekblom, Ö, & Nyberg, G. (2021). Breakfast habits and associations with fruit and vegetable intake, physical activity, sedentary time, and screen time among Swedish 13–14-year-old girls and boys. *Nutrients*, 13(12), 4467. <https://doi.org/10.3390/nu13124467>
- Hurlock, E. B. (2014). *Perkembangan Anak*. Jakarta: PT Erlangga.
- Kawalec, A., & Pawlas, K. (2021). Breakfast frequency and composition in a group of Polish children aged 7–10 years. *Nutrients*, 13(7), 2241. <https://doi.org/10.3390/nu13072241>
- Khalifah, D. N., Asna, A. F., & Sari, A. E. (2019). Breakfast habits, physical activities, and overweight in elementary school children. *Indonesian Journal of Nutrition and Dietetics*, 7(1), 9-15. [http://dx.doi.org/10.21927/ijnd.2019.7\(1\).9-15](http://dx.doi.org/10.21927/ijnd.2019.7(1).9-15)
- Kostecka, M. (2022). The Effect of the "colorful eating is healthy eating" long-term nutrition education program for 3- to 6-year-olds on eating habits in the family and parental nutrition knowledge. *International Journal Environmental*

- Research and Public Health*, 19(4), 1981.
<https://doi.org/10.3390%2Fijerph19041981>
- Lani, A., Margawati, A., & Fitranti, D. Y. (2017). Hubungan frekuensi sarapan dan konsumsi jajan dengan z-score IMT/U pada siswa sekolah dasar. *Journal of Nutrition College*, 6(4), 277–284. <https://doi.org/10.14710/jnc.v6i4.18250>.
- Lasidi, O. D., Umboh, A., & Ismanto, Y. (2018). Hubungan status gizi dan kualitas sarapan pagi dengan prestasi belajar siswa kelas IV dan V di SD Negeri 21 Manado. *Jurnal Keperawatan*, 6(1), 1-7. <https://doi.org/10.35790/jkp.v6i1.19491>
- Lehto, S., & Eskelinen, K. (2020). 'Playing makes it fun' in out-of-school activities: Children's organised leisure. *Childhood*, 27(4), 545–561. <https://doi.org/10.1177/0907568220923142>
- López-Gil, J. F., Smith, L., López-Bueno, R., & Tárraga-López, P. J. (2022). *Frontiers in Nutrition*, 9, 871238. <https://doi.org/10.3389/fnut.2022.871238>
- Lynch, C., Kristjansdottir, A. G., Te Velde, S. J.,... & Yngve, A. (2014). Fruit and vegetable consumption in a sample of 11-year-old children in ten European countries--the PRO GREENS cross-sectional survey. *Public Health Nutrition*, 17(11), 2436-2444. <https://doi.org/10.1017/s1368980014001347>
- Noviyanti, R. D., & Kusudaryanti, D. P. D. (2019). *Pentingnya Sarapan Pagi untuk Anak Sekolah*. Yogyakarta: Nuha Medika.
- Parker, R., Thomsen, B. S., & Berry, A. (2022). Learning through play at school – A framework for policy and practice. *Frontiers in Education*, 7, 751801. <https://doi.org/10.3389/feduc.2022.751801>
- Ramadhani, T. F., & Fourianalisyawati, E. (2015). Hubungan antara sikap terhadap kebiasaan sarapan pagi dengan tingkat berat badan pada siswa SD "X". *Psibernetika*, 8(1), 1–18. <http://dx.doi.org/10.30813/psibernetika.v8i1.483>
- Sugiyono, S. (2017). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Susanto, A. (2017). *Pendidikan Anak Usia Dini: Konsep dan Teori*. Jakarta: Bumi Aksara.
- Ward, S. A., Bélanger, M. F., Donovan, D., & Carrier, N. (2016). Relationship between eating behaviors and physical activity of preschoolers and their peers: a systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 13, 50. <https://doi.org/10.1186/s12966-016-0374-x>
- Wiresti, R. D., & Na'imah, N. (2020). Aspek perkembangan anak: Urgensitas ditinjau dalam paradigma psikologi perkembangan anak. *Aulad: Journal on Early Childhood*, 3(1), 36-44. <http://dx.doi.org/10.31004/aulad.v3i1.53>
- Zakrzewski-Fruer, J. K., Gillison, F. B., Katzmarzyk, P. T.,... & Standage, M. (2019). Association between breakfast frequency and physical activity and sedentary time: a cross-sectional study in children from 12 countries. *BMC Public Health*, 19, 222. <https://doi.org/10.1186/s12889-019-6542-6>
- Zulaekah, S. (2012). Pendidikan gizi dengan media booklet terhadap pengetahuan gizi. *Kemas: Jurnal Kesehatan Masyarakat*, 7(2), 127–133. <https://doi.org/10.15294/kemas.v7i2.2808>