The Relationship Between Breakfast Habits And Learning Concentration Towards Students' Learning Achievements At Seumot State Elementary School, Nagan Raya District

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Abstract

Children's achievement in school can be obtained in various ways, one of which is by getting children used to eating breakfast. By getting children used to having breakfast, there are many positive things that will be obtained, one of which is increasing children's concentration and achievement in school. The learning achievement of a child who often has breakfast will tend to be better when compared to children who rarely have breakfast or do not have breakfast at all. The purpose of this study was to determine the relationship between breakfast habits and learning concentration on the learning achievement of students at Seumot Elementary School, Nagan Raya Regency. This study is a type of quantitative research that is included in observational research with a Cross Sectional design. The population used in this study were all 6th grade students at Seumot Elementary School, Nagan Raya Regency, totaling 39 students. While the number of samples used in this study was 39 students. The exact sample was students in class 6A: 20 students, class 6B: 19 students. The sampling technique used in this study was using a simple random sampling technique, namely a random sampling technique using a questionnaire and interview. The results of the study showed that there was no relationship between breakfast and learning concentration with a p-Value = 1.00, learning concentration with a p-Value = 1.00. The conclusion of this study is that there is no relationship between breakfast and learning achievement as well as learning concentration, there is no relationship between learning concentration and learning achievement. The suggestion in this study is that schools and teachers are expected to provide education to students about the importance of consuming nutritious breakfast before starting activities at school.

Keywords: Breakfast; Learning Concentration; Learning Achievement

Introduction

Breakfast is an eating and drinking activity carried out in the morning, starting from 06.00-09.00 am. Breakfast consumed contains nutritionally balanced foods and fulfills 15-30% of the total energy a day, done before activities. Good breakfast nutrition standards are those that contain carbohydrates (55-65%), protein (12%-15%), and fat (24-30%). The total amount of breakfast energy that must be fulfilled is between 500-600 kcal, and protein should be 9.8 to 14.7 grams (Hartanti in Anggita Septia, 2022).

Based on WHO data, the energy intake for breakfast that must be met includes 60-75% carbohydrates, 10-25% fat and 10-15% protein. Based on the Basic Health Research (Riskesdas) 2023, 26% of children in Indonesia only drink water, tea or milk for breakfast. Not all children who eat breakfast follow a healthy and

balanced pattern. From the same data source, only 10.6% of breakfasts provide 30% of daily energy needs. In Majalengka Regency, the Central Bureau of Statistics (BPS) in 2006 found that only 15.2% of adolescents were accustomed to eating breakfast.

In some western countries there is a prevalence of adolescent children who do not eat breakfast, around 10%-30% are found in adolescent girls and children from families with low socioeconomic status. Research conducted by Hardiansyah and Perdana reported that 69.6% of children in Indonesia have not consumed breakfast in accordance with balanced nutrition recommendations (25% of daily needs (Swari et al, 2022). The incidence of not having breakfast in children and adolescents in Indonesia in school-age children is 16.9%, adolescents 50% and adults 31.2% (Yuniarsih, 2021).

The Indonesian Ministry of Health has noticed how important breakfast is for everyone, by making the Breakfast Habit one part of the 10 Balanced Nutrition messages guideline. Many Indonesians still do not make a habit of eating breakfast with balanced nutrition. Not eating breakfast can have an impact in the form of reducing work productivity, decreasing the quality of the learning process, causing obesity, and the emergence of unhealthy snacks (Hanim et al, 2022).

The results of the Aceh Provincial Research (2023) show that there are still many children who are not accustomed to breakfast, namely around 35000 school- age children (26.1%) who only have breakfast with drinking water and 44.6% of energy intake from breakfast is less than 15% AKG energy. Therefore, the Government of Aceh through the Aceh Food Service in collaboration with the National Food Agency launched an education and nutritious feeding movement (Genius) for elementary school students in 5 districts / cities in Aceh. The launch was carried out at 72 public elementary schools in Aceh.

The impact for students who leave breakfast can cause not concentrating when learning in class, because the body does not get enough nutrients. Instead, students choose snacks at school to fill their stomachs. But the quality of snack food is not balanced. Therefore, the habit of breakfast is maintained in every family. In addition, breakfast plays an important role, especially to provide energy and passion for learning and work at the beginning of a new day (Yoshepin,2018).

Lack of breakfast intake causes students to lack anergy intake, which can cause weakness, lack of concentration, and even fainting. So good breakfast habits are very important for the learning process and student activities at school (Rohma et al, 2020).

Learning concentration is the concentration of learning with the mind or attention. Concentration is essential for a child to be able to remember, record and develop academic material at school. To fulfill this role children must already be able to think logically and make decisions about what to connect logically. To learn, students must concentrate. If they cannot concentrate, then it will be difficult for them to understand the information or material presented by the teacher. However, if they can concentrate during learning, they will be able to understand the information presented (Luthfillah, 2022 in Prasetyo & Hasyim,2022).

The importance of concentration can make students better master the material provided and increase

enthusiasm and motivation to be more active during the teaching and learning process. Concentration has a big influence on the succes of the teaching and learning process, what if someone has difficulty concentrating then the teaching and learning process is not optimal. This will waste time, energy and money. The characteristics of someone who is not concentrated include often being bored with something, always moving places, not listening when spoken to, diverting the conversation, often chatting, and disturbing other friends (Winata, 2021).

Factors that affect children's learning concentration consist of two factors, namely internal factors such as psychology including talent, interest, motivation, habitual memory and nutritional status including family meal consumption patterns, family food supplies,breakfast, family income and nutrients in the family. External factors such asnon-social which include the environment, training, learning methods, facilities and infrastructure as well as language, culture and social which include teachers and parents (Nisa & Arifin, 2021).

Good achievement can be obtained in various ways, one of which is by eating breakfast. By familiarizing children with breakfast, many positive things will be obtained, one of which is increasing children's concentration and achievement at school. The learning achievement of children who often have breakfast tends to be better when compared to children who rarely have breakfast or do not have breakfast at all (Rahman, 2020).

Based on previous research from Rahma (2018), in the field of education, especially learning achievement, Indonesia is ranked 5th out of 10 ASEAN countries after Thailand which is ranked 4th in terms of learning achievement. The results of PISA (Program for International Students Assessment) in 2012, Indonesia is in the 3rd place as a country that has the most students in the category of low-achieving students (ASEAN 2016 in Rahma 2018).

High rates of breakfast skipping have been reported in adolescence. Research in the Netherlands conducted by Vingerhoed states that as many as 39.7% of adolescents aged 12-18 years do not eat breakfast every day. Research conducted by Khalida also states that breakfast habits can affect cognitive function which includes concentration levels, learning performance and memory (Mervelia et al 2021).

Based on a study from Zaeni, (2022) that there is a significant relationship between breakfast habits and learning achievement. According to Saidin (Saidin, 2021) with breakfast, the stomach will be refilled after 8-10 hours empty so that blood sugar levels increase again. This situation has to do with brain work, especially learning concentration in the morning. The impact of skipping breakfast in addition to reducing learning concentration which will lead to a decrease in children's learning achievement. Eating breakfast or breakfast has an important role in meeting the energy needs of school children, because it can increase learning concentration and make it easier to absorb lessons at school, so that learning achievement becomes good (Azwar, 2022).

From the results of previous research conducted by Laila & Altha on 6th grade students of SD Negeri 56 Banda Aceh, it shows that out of 37 students there are 3 students who rarely do breakfast (8.1%) have good

achievement, 16 students sometimes have breakfast (43.2%) have good achievement, and 1 student who often does breakfast (2.7%) with good achievement. Meanwhile, students who have excellent achievement but sometimes do breakfast are 3 students (8.1%), and students who have excellent achievement and often do breakfast are 14 students (37.8%) (Laila & Altha). Meanwhile, students who have very good achievement but sometimes do breakfast are 3 students (8.1%), and students who have very good achievement and often do breakfast are 14 students (37.8%) (Laila & Altha 2021).

SD Negeri Seumot, Nagan Raya Regency is a public school with NPSN : 10104685 with B accreditation and not yet certified with ISO Certification. The high number of students who have not had breakfast at SD Negeri Seumot is seen from the results of an initial survey conducted by the author directly to SD Negeri Seumot Nagan Raya involving 10 students as samples, where 3 students who often do breakfast (5-7 times a week), as many as 4 students said they sometimes do breakfast (3-4 times a week), and 3 students rarely do breakfast (1-2 times a week). Of the 10 students who had breakfast, 7 students had "Good" achievement where the average score of students ≥ 80-89 was categorized as Good. While 3 students have "Fair" achievement where the average score ≤ 70-79 is categorized as Fair.

Methods

This research was conducted at Seumot State Elementary School, Nagan Raya Regency. The time of this research was conducted on Monday, March 4, 2024, the data collection process was carried out when the learning process began.

This research is a type of quantitative research that is included in observational research with a Cross Sectional design. The population used in this study were all 6th grade students of Seumot State Elementary School, Nagan Raya Regency, totaling 39 students. While the number of samples used in this study was 39 students. The exact sample was 6A grade students: 20 students, 6B grade students: 19 students. The sampling technique used in this study was using the simple random sampling technique, namely the technique of taking samples randomly using questionnaires and interviews taking samples randomly using questionnaires and interviews.

Results

Univariat Analysis

Univariate analysis in this study aims to determine the description of Breakfast Habits and Learning Concentration on Learning Achievement, which can be seen in the following table.

Table 1. Respondents by Gender, Age, and Grade

No.	Category	Frequency (n)	Percentage (%)
	Gender		
1	Male	20	51.3%
2	Female	19	48.7%
	Total	39	100%

No.	Category	Frequency (n)	Percentage (%)
Age of Respondent			
1	13 Years	15	38.5%
2	12 Years	22	56.4%
3	11 Years	2	5.1%
	Total	39	100%
Respondent Class			
1	VI A	20	51.3%
2	VI B	19	48.7%
	Total	39	100%

(Source: Primary Data, 2024)

The characteristics of respondents based on gender are dominantly male with a total of 20 people with a percentage of 51.3% male students, while 19 female students with a percentage of 48.7% female students.... The age characteristics of respondents were more dominant at the age of 12 years with a total of 22 people with a percentage of 56.4%, while the age of 13 years was 15 people with a percentage of 38.5% and students with 11 years of age amounted to 2 people with a percentage of 5.1%.

The characteristics of respondents based on the class of students are more dominant in class VIA than class VIB where the number of students in class VIA is 20 people with a percentage of 51.3% while class VIB is 19 people with a percentage of 48.7%.

Table 2. Breakfast Habits

No.	Independent Variable (Breakfast Habits)	Frequency (n)	Percentage (%)
1	Not so good	20	51.3%
2	Good	19	48.7%
	Total	39	100%

(Source: Primary Data, 2024)

Overview of Breakfast Habits of Students at Seumot State Elementary School, Nagan Raya Regency, it is known that out of 39 respondents, 20 (51.3%) respondents with poor breakfast habits and 19 (48.7%) respondents with good breakfast habits were obtained.

Table 3. Learning Concentration

No.	Independent Variable (Learning Concentration)	Frequency (n)	Percentage (%)
1	Not Good	30	76.9%
2	Simply	9	23.1%
	Total	39	100%

(Source: Primary Data, 2024)

It is known that out of 39 respondents, 30 (76.9%) respondents have poor learning concentration and 9 (23.1%) respondents have good concentration.

Table 4. Learning Achievement

No.	Dependent Variable (Learning Achievement)	Frequency (n)	Percentage (%)
1	Good	34	87.2%
2	Simply	5	12.8%
	Total	39	100%

(Source: Primary Data, 2024)

Overview of Learning Achievement of Students of SD Negeri Seumot, Nagan Raya Regency, it is known that out of 39 respondents, 34 (87.2%) respondents had good achievement and 5 (12.8%) respondents had sufficient achievement.

Bivariat Analysisi

Bivariate analysis in this study aims to determine the relationship between breakfast habits and concentration on learning achievement, which can be seen in the following table:.

Table 5. Relationship between Breakfast and Learning Achievement of Students of SD Negeri Seumot, Nagan Raya Regency

Variable Breakfast Habits	Achievements Learning				Total		P -Value	Ratio Prevalance (RP)
	Simply		Good					
	N	%	N	%	n	%		
Not so good	3	15,0	17	85,0	20	100	1,00	1,2
Good	2	10,5	17	89,5	19	100		

(Source: Primary Data, 2024)

Based on table 5 Relationship between Breakfast Habits with Learning Achievement of Students of Seumot State Elementary School, Nagan Raya Regency, it is known that 20 respondents who have poor breakfast habits (85.0%) while respondents with good achievement (15.0%), 19 respondents with good breakfast habits (89.5%) than respondents with Fair Learning Achievement (10.5%). The Chi-square test analysis results show that the p-value is 1.00, which means that the p-value $\geq$ 0.05, meaning that there is no relationship between breakfast habits and learning achievement of students of Seumot State Elementary School, Nagan Raya Regency. With a Prevalance ratio value obtained of 1.2 ($\geq$1), there is a risk factor for breakfast with learning achievement..

Table 6. Relationship between Learning Concentration and Learning Achievement of Students of SD Negeri Beutong, Nagan Raya Regency

Variable Learning Concentration	Learning Achievement				Total		P-Value	Ratio Prevalance (RP)
	Simply		Good					
	N	%	N	%	n	%		
Not so good	4	13,3	26	86,7	30	100	1,00	2
Good	1	11,1	8	88,9	9	100		

(Source: Primary Data, 2024)

Based on table 4.6 Relationship between Learning Concentration and Learning Achievement of Students / SD Negeri Seumot Nagan Raya Regency, it is known that 30 respondents who have poor concentration (86.7%) while respondents with good achievement (13.3%), 9 respondents with good

concentration (88.9%) than respondents with sufficient learning achievement (11.1%). The Chi-square test analysis results show that the p-value is 1.00, which means that the p-value ≥ 0.05, meaning that there is no relationship between learning concentration and learning achievement of students of Seumot State Elementary School, Nagan Raya Regency. With a prevalance ratio value obtained of 2 (≥1), there is a significant risk factor between learning concentration and learning achievement.

Discussion

Relationship between Breakfast Habits and Learning Achievement

The results of the Chi-square Test Analysis show that the p-value is 1.00, which means the p-value ≥ 0.05, meaning that there is no relationship between breakfast habits and learning achievement of students of Seumot State Elementary School, Nagan Raya Regency. However, the Prevalance ratio value was obtained as 1.2 (≥1), so there is a risk factor between breakfast and learning achievement. This means that there is no relationship between breakfast habits and learning achievement of students of Seumot State Elementary School, Nagan Raya Regency, it is known that out of 20 respondents who have poor breakfast habits (85.0%) while respondents with good achievement (15.0%), 19 respondents with good breakfast habits (89.5%) than respondents with Fair Learning Achievement (10.5%).

The International Food Information Council Foundation (2018) explains that the factors that cause adolescents not to eat breakfast are the existence of a busy morning schedule so that adolescents feel they do not have enough time to prepare breakfast and lack of funds. In addition, adolescents forget to eat their breakfast due to a busy morning schedule, and because they consider themselves fat, they decide not to eat breakfast in order to lose weight.

The results of this study are in line with research conducted (Rahmiwati A, 2014) showing that the results of statistical analysis using the chi-square test show that there is no relationship between breakfast and learning achievement with a p- Value = 0.870 (p-Value = ≥0.05). The results of this study are not in line with research (Marvelia R. et al. 2021) showing that there is a relationship between breakfast and learning achievement with p-Value = 0.014 (P-Value ≤ 0.05) as well as research (Mahbub, et al. 2018) which shows p-Value = 0.048 (p-Value = ≥0.05).

The results of this study are in line with previous research conducted (Dwi et al, 2022), showing that 56 respondents have the habit of not eating breakfast with a percentage (31.6%), while 121 respondents are accustomed to eating breakfast with a percentage (68.4%). Likewise, the results of research (Mustikowati et al, 2022) show that 29 respondents have a habit of eating breakfast with a percentage (64.4%) while 16 respondents do not often do breakfast with a percentage (35.6%). The benefits of breakfast are very important for the body, especially can help maintain blood glucose levels. Considering the time between dinner and breakfast is very long, which is approximately 10 hours, blood glucose levels, which are the source of energy in the body, decrease in the morning. Therefore, leaving breakfast in the morning will

cause the body to lack blood glucose, resulting in all body activities such as the ability to think and concentrate can be disrupted (Al-Faida, 2021).

According to the researcher's assumption, it shows that many students still do not know the importance of breakfast because the school does not provide understanding / education to students about the importance of breakfast. While learning achievement can be seen from the daily grades of students for approximately 1 week here more dominant students who have an average score ≥80-89 are categorized as Good.

The Relationship between Learning Concentration and Learning Achievement

The results of the Chi-square Test Analysis show that the p-value is 1.00, which means that the p-value ≥ 0.05, meaning that there is no relationship between learning concentration and learning achievement of students of Seumot State Elementary School, Nagan Raya Regency. With a prevalance ratio value obtained of 2 (≥1), there is a significant risk factor between learning concentration and learning achievement. This means that there is no relationship between learning concentration and learning achievement of students of SD Negeri Seumot, Nagan Raya Regency, it is known that 30 respondents who have poor concentration (86.7%) while respondents with good achievement (13.3%), 9 respondents with good concentration (88.9%) than respondents with sufficient learning achievement (11.1%).

According to Hengkiriawan, (2018) Good learning concentration can affect learning achievement, indicating that learning achievement is an achievement or proficiency that is manifested in expertise or a collection of knowledge. Achievement in the classroom produces changes expressed in the form of symbols to show the ability to achieve work results in a certain time.

This can be compared with several opinions including: according to Leidy et al.2019 emphasizes that breakfast with a high protein menu can reduce appetite so that it can improve the quality of food intake in obese children. This is due to the hormone ghrelin which can stimulate hunger and increase the hormone PYY which is related to satiety (Leidy, et al.2019). Carbohydrate intake in students in this study was in the always category, where carbohydrate intake has the benefit of preventing hypoglycemia, preventing dehydration after fasting, stabilizing blood glucose levels, and can improve the ability to remember.

The results of this study are in line with research conducted (Khalida, 2015) respondents who have good learning achievement with a percentage (46.8%) while respondents who have sufficient learning achievement with a percentage (41.8%) and respondents who have poor learning achievement with a percentage (1.3%). Likewise, research (Rahmiwati A, 2014) shows that more dominant respondents with learning achievement below average with a percentage (58%).

Research (Adolphus K L. C., 2013) which explains that there is no relationship between breakfast consumption and students' concentration ability. Based on the research, most students (85.5%) are accustomed to doing breakfast and as many as 74.5% do breakfast by bringing lunch from home. At the time of this study, only 78% of students always had breakfast, and 10% of the students bought food in the canteen if they did not have time to have breakfast. This is because students did not have time to have breakfast because they were

in a hurry to go to school.

Other factors that influence learning concentration are external factors including environment, teachers and society, while internal factors include genetics, aptitude and intelligence. Physical environmental factors such as sound, lighting, temperature and learning design have a big influence on children's learning concentration. In addition, teachers who do not motivate children to learn can also affect children's enthusiasm for learning and concentration. Another factor is the community and the environmental conditions where children live will affect children's learning concentration. (Nugroho., 2017)

According to the researcher's assumption, it shows that the relationship between learning concentration and learning achievement of elementary school students. This is because students who have achievement are not measured from breakfast. But it is measured by his persistence in learning knowledge at school.

Conclusion

Based on the results of research on the Relationship between Breakfast and Learning Concentration on Learning Achievement of Students of Seumot State Elementary School, Nagan Raya Regency, it can be concluded as follows :Based on the results of the study, it shows that there is no relationship between breakfast and learning achievement. This can be seen from the results of the p-value = 1.00 (p-value = ≥0.05). With an RP value of 1.2 (≥1), there is a risk factor between breakfast and learning achievement. Based on the results of the study, it shows that there is no relationship between learning concentration and learning achievement. This is due to the value of p-Value = 1.00 (p-Value = ≥0.05). With an RP value of 2 (≥1), there is a significant risk factor between learning concentration and learning achievement.

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