



**GENERAL REVIEW**

**THE RELATIONSHIP BETWEEN HABITS OF BREAKFAST AND ACADEMIC ACHIEVEMENT OF 3rd, 4th, AND 5th GRADE STUDENTS**

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<b>ABSTRACT</b>	<b>Keywords</b>
<p>The habit of having breakfast for school-age children is very important, because of their school because their school activities need more energy and calories. Children who do not have breakfast are more prone to hypoglycemia (low blood glucose levels) resulting in dizziness, cold sweat and fainted, which will eventually disrupt their activities. Not having breakfast will lead to decreasing learning interest and the power of their bodies. Research type was analyzed case control with a retrospective research technique approach. The purpose of this study is to analyze the relationship of breakfast habits with student achievement. The population was all elementary school students of 3rd, 4th, and 5th grade at SDN Selotapak, Trawas District, Mojokerto Regency with a sample of 91 respondents by using total sampling method. Data collection technique was conducted by using interviews and observation. Interviews were conducted to obtain a more in-depth information about the variables researched. Data analysis was conducted by using crosstab test. The habit of breakfast is important for students to help them meet their energy needs. It will make them more excited and more involved in learning. Moreover, their concentration and memory will be increased, that the children will be more confident and their academic achievement will increase.</p>	<p>Breakfast, Academic Achievement</p>

## INTRODUCTION

The habit of having breakfast or eating in the morning is the first meal consumed by someone. People usually have meal at 7 pm, and have another meal at 6 am in the morning. They are fasting for 10-12 hours. That fasting leads to their blood sugar (glucose) deposit is only enough for two to three hours activities in the morning. That condition is caused by lacking glucose in our body, which is a source of energy for the brain (Wiharyanti, 2006). Breakfast is very important for school students because school time is full of activities requiring large amount of energy and calories. Children who do not have breakfast are prone to low blood glucose (hypoglycemia) leading to dizziness, cold sweating, and fainting. These will eventually disrupt their activities. The effects of not having breakfast can decrease learning ability and body endurance. (Wiharyanti R, 2006). Many types of research suggest that good nutritional status of school children will generate good health status as well as good level of intelligence. The bad nutritional status will lead to bad health status, prone to disease exposure, and low intelligence level that will lead to low achievement at school. (Devi, 2012)

Based on the research in “*Breakfast Reduces Declines in Attention and Memory Over The Morning in School Children*” conducted by K.A. Wesnes, C. Pincock, D. Richardson, G Helm, Shails, British nutritionists in 2003 with the random method on 29 children, regarding attention level and memory 30, 90, 150, 210 minutes after breakfast for four days. The results were: Children who didn't have breakfast and only drinks glucose suggested significantly decreasing concentration and memory as time goes. On the other side, those who ate cereals also experienced decreasing concentration though insignificant. Based on the research,

it can be concluded that breakfast menu containing complex carbohydrate gave positive effects on children in maintaining their learning concentration and memory at school. (Wiharyanti, 2006).

The result of initial research conducted on 25th of February 2014 at 3rd, 4th and 5th-grade students of SDN Selotapak, Trawas District, i.e. ten students. Based on their academic report scores in the recent two years suggested that seven students (70%) had constantly decreasing academic achievement, decreasing concentration, and were often drowsy in the classroom. Other three students (30%) had increasing academic achievement though insignificant; they were also diligent in the class. The result of an interview with parents of 3rd, 4th, and 5th-grade students it was known who didn't have breakfast at home or bring a packed meal to school that the students were often drowsy in the classroom and their concentration is low when they have academic tests.

Giving proper food to school age children must be reviewed from several aspects, e.g., economic, social, cultural, religious, as well as the children's medical factors. Food prepared for school-age students must be harmonious and balanced. Balanced means that the nutrition must be compatible with the need regarding their ages and types of food such as carbohydrate, protein, and fats. Because the need of food variance is different from one child and another. School-age must be further classified into gender, considering each has different needs. Boys do more physical activities that the need more calories than that of girls. (Widodo Judarwanto, 2006). The purpose of this study is to analyze the relationship of breakfast habit with student achievement.

## RESEARCH DESIGN

The design of this research was analytical design. This research used Analytical Correlational research design with Cohort approach. The samples in this research were all students of 3rd, 4th, and 5th grade of SDN Selotapak, Trawas District, Mojokerto Regency. Data gathering used data collection techniques and procedures by using interview method, observing breakfast habits, and observing score list of elementary school students.

The statistical hypothesis in this research was that There Is No Relationship Between Breakfast Habits and Academic Achievement of 3rd, 4th, and 5th Grade Students of SDN Selotapak, Trawas District, Mojokerto Regency.

**Table 1:** Operational definition of relationship variables between breakfast habits and academic achievement of 3rd, 4th, and 5th-grade students of SDN Selotapak, Trawas District, Mojokerto regency

No	Variable	Measurement Tools	Data Scale	Criterion
1	Identification of independent variables: Breakfast Habits	interview	ordinal	1. Regularly having breakfast 2. Sometimes having breakfast 3. Not having breakfast Source: Syafnida, 2007
2	Identification of dependent variables: Students' Academic Achievement	Observation	Ordinal	1. Good (score 76-100) 2. Fair (score 56 – 75) 3. Low (score <56) Source: Office of Education, KTSP 2012

## RESULTS OF RESEARCH

### Respondents General Data

Table 2 Respondents Distribution based on Genders at SD Negeri Selotapak Trawas District Mojokerto Regency 2014.

Table 3 Respondents Distribution based on

No.	Age	Sum	%
1	8 – 10 yrs old	46	50.55
2	11 – 13 yrs old	45	49.45
Sum		91	100.00

Age at SD Negeri Selotapak Trawas District Mojokerto Regency 2014.

### Respondents Specific Data

Table 4 Respondents Distribution based on Breakfast Habits at SD Negeri Selotapak Trawas District Mojokerto Regency 2014

Table 5 Respondents Distribution based on Academic Achievement at SD Negeri Selotapak Trawas District Mojokerto Regency 2014.

Type	Grade			Sum	%
Gender	3rd	4th	5th		
Male	10	20	16	46	50.55
Female	19	12	14	45	49.45
Sum	29	32	30	91	100

No.	Academic achievement	n	%
1	Good	66	72.50
2	Fair	22	24.20
3	Low	3	3.30
Total		91	100.00

No.	Breakfast Habits	n	%
1.	Regular	22	24.20
2.	Sometimes	66	72.50
3.	Never	3	3.30
Total		91	100.00

Table 6 Cross Tabulation between Breakfast Habits and Academic Achievement of

Students of SD Negeri Selotapak Trawas District Mojokerto Regency

	Achievement						Total	
	Good		Fair		Low		n	%
	n	%	n	%	n	%		
<b>Breakfast Habits</b>								
<b>Regular</b>	2		0	0	0	0	22	24.2
<b>Sometimes</b>	4	48.3	2	24.20	0	66	72.5	
<b>Never</b>	0	0	0	0	3	3.33	3.3	
<b>Total</b>			2				91	100.0
	66	0	2	0	3	0		

Cross-tabulation above suggest that there is a relationship between breakfast habits and students' academic achievement. Those who had breakfast regularly and got good scores were as many as 22 students (24.20%), 66 students didn't have breakfast regularly or only sometimes and they got fair scores, while 3 students (3.30%) who never had breakfast got low scores. According to the result of the research, it is suggested that there is no relationship between breakfast habits and students' academic achievement, and breakfast is one of the supporting factors so that students get enough intake of glucose to support their learning concentration.

## DISCUSSION

Relationship Between Breakfast habits and Academic Achievement at SD Negeri Selotapak Trawas District Mojokerto Regency 2014.

Academic achievement is a term consisting of academic and achievement. It can also mean academic result, especially after students participate in studying certain subjects for certain time range. In this research, students achievement can be gotten from their average score at the end of the semester. Academic achievement of students of SD Negeri Selotapak tended to vary. It can be seen from the percentage,

students having a good achievement (72.50%), students having the fair achievement (24.20%), and students having a low achievement (3.30%).

The result of the research suggests that between breakfast habits and academic achievement, generally students having good breakfast habits would have good and fair achievement index. While those with bad breakfast habits or never had breakfast, their academic scores will be affected and they will get low scores.

According to Mahrul Syafnida (2007), academic results of students are reflected from the average of their academic reports scores. Students are declared as academically successful if the average of all subjects they learn is higher than . However, in this research, students were categorized as high achiever if the average of their score is the same as or higher than class average for all subjects. This is because by taking a class average from all subjects, it can represent overall academic achievements of students instead of achievement of each subject.

According to scientists, morning breakfast is a special meal for brains. Research even suggested that breakfast has strong relationship with mental intelligence. It gives positive values to brain activities, makes it smarter, more sensitive, and easier to concentrate. A survey suggests that teenagers having breakfast rich in carbohydrates have better performance. And they can give more attention to the subjects they study, as well as become happier, more cooperative, and more friendly (Anonymous, 2008).

The result of research suggests that students' academic achievement does not have a significant relationship with breakfast

habits. It can be seen from the proportion of the students tended to have breakfast sometimes, 44 students (48.30%) of 66 (72.50%) respondents having good achievement, and of all students having breakfast regularly, 22 students (24.20%), all of whom got good scores.

However, breakfast habit is not the only factor affecting academic achievement. Because of there still many other factors influencing academic achievement such as intelligence, personality, the need of achievement, teachers, peers, learning situation, home environment (parental attention) and how the society behave toward them, as well as psychological and genetical factors. The factors affecting breakfast habits are parents' occupation, income level, as well as lacking knowledge level of parents regarding children's nutritional needs.

Parents with lacking care of who do not take care of their children's food intake will lead to their children get a low score or even fail in their study. This is because food intake in the morning functions to shape the brain before the first lesson even starts. This can happen to children from the family whose both parents are too busy with their jobs.

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Children who have breakfast regularly or only sometimes, their concentration can be affected that it functions to stimulate brains to support the academic achievement of school age students in the morning. Those who have breakfast rarely will get an inadequate supply of glucose to the brain that students lack the energy to concentrate. The author assumed that breakfast habit regularly conducted every day could support good academic achievement.

### CONCLUSION

There is no meaningful relationship between breakfast habits of 3rd, 4th, and 5th-grade students of SD Negeri Selotapak, Trawas District, Mojokerto Regency in 2014. Therefore, the hypothesis can be rejected.

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