

Factors Associated with Breakfast Habits of Elementary School Children at UPT SDN 101878 Kanan I Buntu Bedimbar Village, Tanjung Morawa District

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ABSTRACT

The research aims to determine the factors associated with the breakfast habits of school children. The study was conducted at UPT SDN 101878 Kanan I, Buntu Bedimbar, commencing in May 2023, using an observational analytical research method with a cross-sectional design. The research sample consisted of fourth and fifth-grade students, with a total sample size of 46 students. Data collection was carried out through questionnaires and interviews, and statistical analysis was performed using the Chi-Square test. The research results indicated that the availability of breakfast was correlated with breakfast habits in 65.2% of cases. The pocket money category was correlated with breakfast habits in 71.7% of cases among the 33 students, while the mother's occupation category was correlated with breakfast habits in 58.6% of cases among the 27 students. Cross-tabulation results demonstrate a significant correlation between these factors and breakfast habits. In conclusion, the presence of a morning breakfast's availability is related to breakfast habits, with a p-value of 0.006, rejecting the null hypothesis (Ho). There is also a relationship between pocket money and breakfast habits, with a p-value of 0.007, rejecting the null hypothesis (Ho), as well as a connection between the mother's occupation and breakfast habits, with a p-value of 0.038, rejecting the null hypothesis (Ho).

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INTRODUCTION

According to the World Health Organization (WHO), school-age children are children aged 7-15 years. The group of school age children (7 - 12 years) in this case is a group that is vulnerable to nutrition, in general this group is associated with rapid development in their intellectual processes and skills and has active physical activities so they require relatively large amounts of nutrients. (Noviyanti & Kusudaryati, 2018). According to the Indonesian Ministry of Health and WHO, nutritional status is a condition resulting from a balance between the intake of nutrients from food and the nutritional needs required by the body for metabolism. Nutritional status is defined as a health status resulting from a balance between nutritional needs and input. Good nutritional status can occur if the body obtains enough nutrients it needs efficiently. One way to obtain good health and nutritional status is to get used to eating breakfast. (Hartini et al., 2017).

Breakfast or breakfast according to National Breakfast Week is the first meal that is usually eaten after not eating all night. Breakfast time starts from 06.00 to 10.00 am. But unfortunately there are various reasons that often cause children not to eat breakfast. There are those who feel that time is very limited because the school is quite far away, they wake up late in the morning, or they don't have the appetite for breakfast (Hartini et al., 2017). Based on Basic Health Research (Riskesdas) in 2010, it was stated that as many as 16.9% - 50% of school-age children and teenagers, as well as an average of 31.2% of adults in Indonesia, do not usually eat breakfast. As many as 26.1% of school children only consume drinks at breakfast such as water, milk or tea and 44.6% consume low-quality breakfast. The quality of Indonesian people's breakfast is still low because there are still many children who are not used to having a healthy breakfast.

Based on the results of the preliminary survey conducted by researchers on 10 students, namely elementary school students and girls, of the 10 children, it was found that 6 students did not have breakfast when going to school because they did not have time to eat breakfast, there was no breakfast available at home and the children were lazy about breakfast. It is known that there are 4 children who always eat breakfast in the morning because they wake up early so that the mother is on time to prepare breakfast at home and makes the children always have breakfast before going to school. Based on the background above, researchers are interested in conducting research on "Factors Associated with Breakfast Habits of Elementary School Children at UPT SDN 101878 Kanan I, Buntu Bedimbar Village, Tanjung Morawa District, Deli Serdang Regency".

The diet of preschool children plays an important role in the growth and development process, therefore a lot of food is needed contains nutrients. If a child's diet is not achieved properly then growth and development will be hampered. The developmental stage of pre-school age children is passive consumers, children will receive food intake from what is provided by their mother or caregiver (Syahroni et al., 2021). For children aged 10 - 12 years, needs are divided according to gender. Boys do more physical activity and therefore require more energy than girls. Girls already have a menstrual cycle so they need more protein and iron than before (Hanim & Ariyani, 2022).

Breakfast is an eating and drinking activity that takes place in the morning, starting from 06.00 to 09.00 in the morning. Through breakfast activities, food can be consumed that contains balanced nutrition and fulfills 15 - 30% of the total energy for the day which is done in the morning before activities (Hanim & Ariyani, 2022). The benefits obtained if someone eats breakfast include providing energy for the brain, increasing vitamin intake, improving memory, and increasing resistance to stress. The reason that makes food beneficial is that when the body does not get food intake at night (10-12 hours), blood sugar will decrease. Breakfast helps increase sugar intake to a stable level so that it can improve mood and provide the energy needed by the body (Mustikowati et al., 2022). Children who skip breakfast tend to do less physical activity, which can contribute to a positive energy balance and increased body weight. The cause is an imbalance of incoming energy and outgoing energy (Hartini et al., 2017). Factors that can influence children not having breakfast are because there is no breakfast available at home and not having an appetite because they don't like the type of menu that has been provided and also waking up late. The availability of breakfast is influenced by the mother's job because it is usually the mother who provides breakfast at home (Rahmawati, 2017).

Many factors influence the breakfast habits of school-age children, including: gender, availability of breakfast, pocket money, mother's job, family encouragement. Gender is a factor that influences the importance of a person's food consumption, because gender determines the size of a person's nutritional needs. Men need more energy and protein than women, so they need more food. The availability of food for breakfast at home is very important in facilitating and supporting children to get used to breakfast. If food is available every morning for children's breakfast, this will psychologically form children's healthy eating patterns. (Hanim & Ariyani, 2022). If children don't have time to eat breakfast at school, parents usually bring lunch to eat at school or school snacks in the morning as a substitute for not having time to eat breakfast at home (Labu & Selatan, 2018). The amount of pocket money that school children have determines their purchasing power for food while the child is outside the home. A family with only one person who has a job, in this case the mother does not have a job, will have less income than a family with a working mother. However, on the other hand, this family has its own advantages in that the mother has more free time to pay more attention to her children. Encouragement from the family can shape children's breakfast habits. Children who are invited and required to have breakfast by their parents will eat breakfast more often than children who are not invited or required by their parents to have breakfast. In this study, it was discovered that informants who often had breakfast were often invited by their parents and

forced to have breakfast, while informants who rarely had breakfast had also been advised by their parents to have breakfast, but their parents would just let them be if they still didn't want to have breakfast.

METHOD

This type of research is analytical observational research using a survey method with a cross-sectional research design, namely collecting independent variables (related factors) and dependent variables (breakfast habits) at once at a time. To find out factors related to students' breakfast habits, assessments were carried out through interviews and filling out questionnaires.

The types of data collected in this research are primary data and secondary data. Data collection is carried out by;

a) Primary data:

1. Sample identity data was collected using the interview method by filling out a questionnaire,
2. Data on breakfast habits was collected using the interview method by filling out a questionnaire,
3. Breakfast availability data was collected using the interview method by filling out a questionnaire,
4. Pocket money data was collected using the interview method by filling out a questionnaire,
5. Mother's employment data was collected using the interview method by filling out a questionnaire.

b) Secondary Data

Data is collected based on information provided by the school regarding the school's description.

This research was carried out at UPT SDN 101878 Kan I, on Jalan Sultan Serdang, Buntu Village, Tanjung Morawa District, Deli Serdang Regency. Research time is May 16 - May 25 2023. The research population is the entire research object or objects being researched (Notoatmodjo, 2010). The population in this study were all students in grades I (One) - VI (six) at UPT SDN 101878 Kan 1 in Tanjung Morawa subdistrict, Deli Serdang Regency, Jalan Sultan Serdang, Buntu Bedimbar Village, namely 205 students.

The research sample is part of the total population. The samples in this study were partly students from grades IV (Four) - V (Five) at UPT SDN 101878 Kan I in Tanjung Morawa sub-district, Deli Serdang Regency, Jalan Sultan Serdang, Buntu Bedimbar Village, namely 85 students. Based on the formula above, the sample size that will be obtained from the 85 population is:

$$n = \frac{N}{1 + N(d^2)}$$

$$n = \frac{85}{1 + 85(0,1^2)}$$

$$n = \frac{85}{1 + 85(0,01)}$$

$$n = \frac{85}{1 + 0,85}$$

$$n = \frac{85}{1,85}$$

$n = 45,9$ dibulatkan menjadi 46 siswa.

Figure 1. Population

Based on the calculation above, the number of students obtained was 46 students. Sampling using the Random Sampling method using the Simple Random technique. Sampling must have inclusive criteria:

1. Willing to be a research sample,
2. Students of class IV (four) - V (five) at UPT SDN 101878 Kanan I,
3. Can be communicated with well.

Data processing is carried out through; Sample identity data, breakfast habits data, breakfast availability data, pocket money data, mother's employment data.

Data analysis was carried out in the following way:

1. Univariate Analysis

Univariate analysis was performed for each variable from the research results which are presented in the form of a frequency distribution table. This analysis produces a distribution of presentations for each of the variables analyzed, namely age, gender, breakfast habits, availability of breakfast, pocket money and mother's occupation for students.

2. Bivariate Analysis

This analysis was carried out to determine the interaction of variables, namely the relationship between each independent variable and the dependent variable which is presented in a cross table which was tested using the Chi Square statistical test with a significance level of $p < 0.05$. This statistical test uses computer tools.

RESULTS AND DISCUSSION

Results

The age category of school children at SDN 101878 Kanan I Buntu Bedimbar Village Class IV (Four) - V (Five) is most often found at the age of 10, namely 24 students (52.2%), while the least is at the age of 12 year, namely 1 student (2.2%). Based on the gender of school children at SDN 101878 Kanan I Buntu Bedimbar Village, Class IV (Four) - V (Five), there are 22 students (47.8%), while there are 24 students (52%) female. 2%). The largest number of students are Class V (Five) students, namely 25 students (64.3), while the smallest number of students are Class IV (Four) students, namely 21 students (45.7%). The results of research conducted by researchers at SDN 101878 Kanan I Buntu Bedimbar Village, the following data was obtained:

- a. Absorption Habits

Table 1. Frequency Distribution Based on Breakfast Habits.

Breakfast Habits	n	%
Always	38	82.6
Seldom	8	17.4
Total	46	100

Table 1. Above shows that the breakfast habit category is rare with a total of 8 students (17.5%). 3 students had reasons for not liking breakfast, 4 students had reasons for being lazy about breakfast and 1 student had the category of rarely having breakfast, namely because breakfast was not available in the morning.

If school-aged children are not used to eating breakfast continuously, it will result in a decrease in body weight and immune system, malnutrition and iron deficiency anemia. Of the causes of not eating breakfast, most are decreased student learning outcomes and malnutrition. School-aged children who are not used to eating breakfast must get used to eating breakfast every day so that when they take part in teaching and learning activities at school, the children will receive these lessons well and increase the nutritional intake of school-aged children (Eni, 2017).

b. Availability of Breakfast

Table 2. Frequency Distribution Based on Breakfast Availability.

Availability of Breakfast	n	%
Always Available	32	69.6
Rarely Available	14	30.4
Total	46	100

Table 2. Above shows the categories based on breakfast availability, namely Rarely Available for 14 students (30.4%). 7 students have the reason that breakfast is rarely available at home because their parents work every day so they sometimes forget to prepare breakfast in the morning, while 7 students have the reason that breakfast is rarely available at home because their parents don't work or as housewives who are sometimes too lazy to cook. and woke up too late so I didn't have time to cook breakfast.

c. Pocket money

Table 3. Frequency Distribution Based on Pocket Money

Pocket money	n	%
Big	10	21.7
Small	36	78.3
Total	46	100

Table 3. Above shows the categories based on pocket money, namely the amount of pocket money for 10 students (21.7%). It is known that 5 students/I who have large pocket money because the child does not have breakfast from home so parents give more pocket money so that the child can buy breakfast in the school canteen, while 5 students/I who have large pocket money are used to buy other school needs.

d. Mother's Job

Table 4. Frequency Distribution Based on Mother's Occupation

Mother's Job	n	%
Work	17	37.0
Doesn't work	29	63.0
Total	46	100

Table 4. Above shows categories based on mother's occupation, namely Working with a total of 17 students (37.0%). Students who have working mothers tend to rarely prepare breakfast in the morning and there are also some working mothers who always make time to prepare breakfast at home.

e. Breakfast Availability Category with the Habit of Having Breakfast in the Morning.

The relationship between the availability of breakfast and breakfast habits, it is stated that there is a relationship between these two variables. This has been proven based on the results of the analysis using the Chi square test, it was found that $p < 0.006 < \alpha (0.05)$ so it can be stated that H_0 is rejected and H_a is accepted, meaning that there is a relationship between factors related to breakfast habits at UPT SDN Kanan I Buntu Bedimbar, Tanjung Morawa District.

Table 5. Distribution of Breakfast Habits Based on Breakfast Availability

Breakfast Availability Category	Breakfast Habits				Total		P
	Always		Seldom		n	%	
	n	%	n	%			
Always Available	30	65,2	2	4,4	32	69,6	0,006
Rarely Available	8	17,4	6	13,0	14	30,4	
Total	38	82,6	8	17,4	46	100	

f. Large Category of Pocket Money with Breakfast Habit

The relationship between pocket money and breakfast habits, it is stated that there is a relationship between these two variables. This has been proven based on the results of the analysis using the Chi square test, it was found that $p = 0.007 < \alpha (0.05)$ so it can be stated that H_0 is rejected and H_a is accepted, meaning that there is a relationship between factors related to breakfast habits at UPT SDN Kanan I Buntu Bedimbar, Tanjung Morawa District.

Table 6. Distribution of Breakfast Habits Based on Pocket Money

Pocket Money Category	Breakfast Habits				Total		P
	Always		Seldom		n	%	
	n	%	n	%			
Big	5	10,9	5	10,9	10	21,8	0,007
Small	33	71,7	3	6,5	36	78,2	
Total	38	82,6	8	17,4	46	100	

Table 6. Above shows the amount of pocket money with the breakfast habit, namely the Large Pocket Money category with the habit of always having breakfast is 5 students (50.0%), and the large pocket money with the habit of rarely is 5 students (10.8). The Small Pocket Money category with the habit of always having breakfast was 33 students (71.7%), and the Small pocket money category with the habit of rarely was 3 students (6.5%).

The category of large pocket money with the habit of always having breakfast was 5 students (10.9) concluding that children always had breakfast from home but parents gave large pocket money because of the parents' own wishes or the large money could be used to buy the child's needs while at school. In the small pocket money category with an infrequent breakfast habit, 3 students (6.5) concluded that children preferred snacks in the canteen rather than breakfast from home.

g. Mother's job category with breakfast habits.

The relationship between mother's work and breakfast habits, it is stated that there is a relationship between these two variables. This has been proven based on the results of the analysis using the Chi square test, it was found that $p = 0.038 < \alpha (0.05)$, so it can be stated that H_0 is rejected and H_a is accepted, meaning that there is a relationship between factors related to breakfast habits at UPT SDN Kanan I Buntu. Bedimbar, Tanjung Morawa District.

Table 7. Distribution of Breakfast Habits Based on Mother's Occupation

Mother's Occupation Category	Breakfast Habits				Total		P
	Always		Seldom		n	%	
	n	%	n	%			
Bekerja	11	23,9	6	13,0	17	36,9	0,038
Tidak Bekerja	27	58,7	2	4,4	29	63,1	
Total	38	82,6	8	17,4	46	100	

Table 7. Above shows the occupation of mothers with breakfast habits, namely the Occupation category of mothers in the working category with the habit of always having breakfast is 11 students (23.9%), and the Occupation of mothers in the category of working with infrequent habits is 6 students (13.0%). There are 27 students (58.6%) in the category of non-working mothers who have the habit of always eating breakfast, and 2 students (4.3%) in the non-working category of mothers who have an infrequent habit of eating breakfast.

The work category of working mothers with the habit of always having breakfast was 11 students (23.9) concluding that mothers who were busy working sometimes forgot to cook breakfast for their children, there were also mothers who did not have time to prepare breakfast because they were too tired from working all night, which made the mother lazy to cook and buy breakfast from outside to be practical.

In the occupational category of non-working mothers with an infrequent breakfast habit, 2 students (4.4) concluded that mothers woke up late so they did not have time to make breakfast.

Discussion

The research results were based on the availability of breakfast being "always available" with the habit of always having breakfast as many as 30 students (65.2%) while the breakfast availability category was "always available" with the habit of having breakfast "rarely" as many as 2 students (4.4%). Based on the results of the research, it was concluded that, breakfast is always available at home, but sometimes children don't have the appetite for breakfast until breakfast is neglected, sometimes they are too rushed to go to school, which makes children forget to have breakfast at home. The breakfast availability category is "rarely available" with the habit of "always having breakfast" of 8 students (17.4%) and the breakfast availability category is "rarely available" with the habit of "rarely having breakfast" of 6 students (13%). From the results of research in the breakfast availability category "rarely available" with the habit of always having breakfast, namely 8 students (17.3%) and the researchers concluded that mothers were too lazy to cook so they did not provide breakfast at home, as a result children did not have breakfast from home. There are also mothers who are always monotonous and not good at creating food to prepare breakfast at home so that their children quickly get bored with the menu which is always the same, as a result children often have breakfast in the school canteen and eat fast food. Based on the results of the analysis using the Chi square test, it was found that p was $0.006 < \alpha$ (0.05), so it can be stated that H_0 is rejected and H_a is accepted, meaning that there is a relationship between the availability of breakfast and breakfast habits at UPT SDN Kanan I Buntu Bedimbar, Tanjung Morawa District.

These results agree with research (Gemily, 2015) which explains that the availability of breakfast at home does not have a significant relationship with students' breakfast habits. However, the results of research made by Artiningrum (2018) are not similar, stating that there is a significant relationship in the availability of breakfast and students' breakfast habits. Availability of breakfast at home is whether or not there is food in the morning prepared by the mother or other family members at home to fulfill nutritional needs which include regulating substances, building substances, energy substances. On average, students in Indonesia skip breakfast due to unavailability of food at home, a varied food list & reluctance to be interested in other types of food (Khomzan, 2005).

Large pocket money category with the habit of "always having breakfast" as many as 5 students (10.9%) concluded that children always have breakfast from home but parents give large pocket money because of the parents' own wishes or the large money can be used to buy the child's needs while at school. In the small pocket money category, 3 students (6.5%) (6.5%) concluded that children prefer snacks in the canteen rather than breakfast from home.

From this research that has been carried out, it can be seen the relationship between pocket money and breakfast habits, it is stated that there is a relationship between these two variables. This has been proven based on the results of the analysis using the Chi square test, it was found that $p < 0.007 < \alpha (0.05)$ so it can be stated that H_0 is rejected and H_a is accepted, meaning that there is a relationship between pocket money and breakfast habits at UPT SDN Kanan I Buntu Bedimbar, Tanjung Morawa District. The statement of pocket money with breakfast habits is confirmed by research (Kirana, 2017) showing that pocket money with large or small nominal amounts does not require children to buy food that is consumed alone, instead children will consume it together with their peers which may not necessarily meet their energy and energy needs. nutrients contained. It can be assumed that pocket money with large or small nominal amounts is not entirely used to buy snacks at school, but they allocate half of their pocket money to be used to save money at schools which are managed by their respective homeroom teachers so that there is no relationship between pocket money and habits. breakfast (Syahroni et al., 2021).

The results of the research were based on the occupation of mothers with breakfast habits, namely the Occupation category of mothers in the "working" category with the habit of having breakfast "always" as many as 11 students (23.9%), and the Occupation of mothers in the working category with the habit of "rarely" having breakfast as many as 6 students. (13.0%). Working mothers in the non-working category have the habit of having breakfast "always" as many as 27 students (58.6%), and in the non-working category with the habit "rarely" as many as 2 students (4.3%).

In the work category of working mothers with the habit of having breakfast "always" as many as 11 students (23.9) concluded that mothers who are busy working sometimes forget to cook breakfast for their children, there are also mothers who don't have time to prepare breakfast because they are too tired from working all night so makes mothers lazy to cook and buy breakfast from outside to make it practical. In the occupational category of non-working mothers with "rare" breakfast habits, 2 students (4.4%) concluded that mothers woke up late so they did not have time to make breakfast. The results of the research show that the reason why mothers do not work is because the mother's education tends to be more complete with primary school (SD), it is difficult to work to get information related to the world of work and the majority of mothers with work status as housewives (IRT) are more focused on taking care of the household. because they feel that the person who is more appropriate to earn a living is the husband because the husband is the head of the household.

From the research results it was found that; Availability of breakfast, pocket money and mother's job are factors related to breakfast habits among elementary school children at UPT SDN 101878 Kanan I, Buntu Bedimbar Village, Tanjung Morawa District.

CONCLUSION

School children's breakfast habits are in the rare category with a total of 8 students (17.5%). The availability of breakfast for school children is in the rarely available category with a total of 14 students (30.4%). The pocket money for school children in the large pocket money category is 10 students (21.7%). The employment of mothers of school children in the working category is 17 students (37.0%). There is a relationship between the availability of breakfast and the breakfast habits of school children at UPT SDN Kanan I Buntu Bedimbar Village in Tanjung Morawa District, $p < 0.006 < \alpha (0.05)$. There is a relationship between the amount of pocket money and the breakfast habits of school children at UPT SDN Kanan I Buntu Bedimbar Village in Tanjung Morawa District, $p < 0.007 < \alpha (0.05)$. There is a relationship between mother's employment and breakfast habits among school children at UPT SDN Kanan I Buntu Bedimbar Village in Tanjung Morawa District, $p < 0.038 < \alpha (0.05)$.

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