The Effect of Breakfast Habits on Work Productivity in CV Unggul Farm Sukoharjo

Anggreini Beta Citra Dewi[a]*

[a]D4 Keselamatan dan Kesehatan Kerja, STIKes Mitra Husada, Karanganyar, Indonesia

ABSTRACT. The low quality of human resources is a growing problem in the improvement of workers quality. This issue is affected by several factors, one of which is nutrition. Breakfast as an indicator of nutritional status, plays an important role in the activities of workers. Someone who does not eat breakfast have a risk of suffering from health problems. This state can reduce work productivity.This study purpose to analyze the influence of breakfast habits on work productivity in workers CV. Unggul Farm Sukoharjo. This study was an observational analytic study with cross sectional approach. The sampling technique data cillection was conducted on total of 30 samples use questionaire food recall and breakfast habits questionnaires to measure breakfast habits and productivity was measured calculate how many egg was selection. Data analysis was conducted using by chi-square methodes by SPSS. The results Chi square is for the measurement of breakfast habits influenced productivity (OR= 5.40, p 0.03. The value which means that the p-value <0.05 then the test results was significant. Breakfast habits influenced productivity of CV Unggul Farm Sukoharjo. Other factors future research should considers.

Keywords: breakfast habit, work productivity.

1. Introduction

The world of work is directed at the formation of professionals who are independent, have a high work ethic and are productive. The problem that develops in the formation of professionals is the low quality of human resources. This problem is influenced by several factors, one of which is nutrition.

Increase in occupational nutrition, it is hoped that human health and welfare can be realized in the production, distribution and work productivity processes so that they reach an optimal level, even if it is higher. With a healthy body, people will be more excited to work, think and will be more productive. So is the case with workers. Healthy workers will appear more agile, creative and enthusiastic at work. This is because the body's needs can be met properly so that the organs of the body will perform their functions properly too (Suma'mur, 2009).

Breakfast is very beneficial for everyone. For adults, breakfast or breakfast can maintain physical endurance and increase work productivity. Breakfast habits also help a person to meet his daily nutritional adequacy. A good breakfast consists of food sources of energy, sources of building blocks and sources of regulatory substances (Khomsan, 2003 and the Ministry of Health, 2002).

Breakfast is an indicator of nutritional status that plays a very important role in worker activities. It is hoped that the increase in activities will be able to increase work productivity.

Various theories have proven that a nutritious breakfast or breakfast has a role in the reasoning process and increases concentration power which is closely related to work productivity (Pradita, 2010).

A person who does not eat breakfast has a risk of suffering from health problems in the form of decreased blood sugar levels with signs such as weakness, cold sweats, decreased consciousness and even fainting. For workers this situation will reduce work productivity. Improving the nutritional status and health of the workforce will increase work efficiency through increasing individual abilities. The effect of health and nutrition programs on workers will be seen in product improvement.

Work productivity is often related to the effectiveness and efficiency of work or related to the problem of the ratio of work results (outputs) and various sources needed to achieve these work results (inputs). This output and input ratio can also be used to determine the work done by humans. Productivity in general can be formulated as follows: (July, 2004)

$$\text{Productivity} = \text{x time} \frac{\text{output}}{\text{input}} \qquad (1)$$

Several factors affect the level of work productivity, including external factors and internal factors.

External factors are factors that come from outside the body including tasks that are carried out both physically, such as work stations, layouts, tools, work fields, work attitudes, workflows and others. While the mental nature such as the complexity of the job or the level of difficulty of the job that affects the emotional level of workers, responsibilities at work and so on. Work organization, such as length of work time, rest

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*Corresponding author: bethacd5@gmail.com

periods, work shifts, remuneration systems, organizational structure models, and others. And Work environment, in the form of physical, chemical, biological and psychological work environments.

Internal factors are factors that come from within the body itself, including gender, age, body size, health status, nutritional status, motivation, discipline, work ethic, skills and education (Tarwaka et al, 2004). Labor is said to be productive if it is able to produce a larger product or many other workers for the same unit of time. (Sinungan, 2008). Based on the problems above, expected that the workforce will be aware of the importance of breakfast habits so that there will be an increase in work productivity.

2. Materials and Methods

The type of research used is analytic observational research, with a cross sectional approach, namely a study that studies the influence between risk factors (independent) and effect factors (dependent) and observation measurements are carried out once at the same time (Riyanto, 2011).

The method of work carried out in this research is:
1. Collecting research data by conducting observations and questionnaires.
2. Determine the data collection tool to be used.
3. Conducting research by giving food recall questionnaires and breakfast habits questionnaires to all respondent, calculating pulse rate and work productivity and measuring physical factors in the work environment as a confounding variable.
4. The data obtained were then processed using the Chi Square correlation statistical test ($X2$).

2.1 Data collection and data analysis techniques

Data from the beginning to the end of this study were obtained to answer the existing problem formulations and eachpartThe data obtained becomes a reference for taking the next step.

Primary data collection was obtained from observation, interviews and by using a questionnaire consisting of questions about breakfast habits and food recall which consisted of questions about the types of food consumed by workers. And secondary data collection was obtained from CV Unggul Farm regarding worker productivity.

To determine the effect of breakfast with work productivity, the Chi Square test statistical test was carried out. All data were analyzed using SPSS version 16.0 computer program with the interpretation of the results as follows;
1. If the p value < 0.05 then the test results are declared significant.
2. If the p value > 0.05 then the test results are declared insignificant (Dahlan, 2010).

3. Results and Discussion

The characteristics of workers at CV Unggul Farm that are seen are age, years of service and workload. This is one of the factors that affect work productivity. The number of respondents in this study were 30 respondents.

In Table 1 it can be seen that there are 11 male workers at CV Unggul Farm and 19 female workers. To find out the workload of workers,pulse rate measurement was performed. Pulse rate measurement is done by counting 10 beats per minute on the subject's pulse. The results of the workload

measurement are presented in Table 2, it is known that as many as 21 respondents (70%) experienced a light workload and as many as 9 respondents experienced a moderate workload.

Table 1
Characteristics of Respondents Based on Gender and Workload

Respondent Caracteristic	Amount	(%)
Gender		
- Men	11	36.7
- Women	19	63.3
Workload Pulse)		
- Light (75 – 100)	21	70
- Medium (100 – 125)	9	30

Table 2
Characteristics of Respondents by Age and Length of Work

Variable	Age	Length of working
mean	34.4	6.02
median	33.5	6.00
SD	11.46	4.65
Minimum	18	1
Maximum	65	15

Table 3
Heat Pressure Measurement Data

Measurment Locations	WGBT Out (℃)	Dry Bulb (℃)	Wet Bulb (℃)	Globe (℃)	ISBB (℃)
Point I	28,3	34,2	25,9		
Point II	27,2	30,6	27,4		
Point III	29,2	32,3	25,8		
Point IV	27	31,9	24,9		
Average					27,77

Table 2 shows that the respondents in this study were all workers at CV Superior Farm aged 18 – 65 years and the average age of workers is 34 years, the youngest workers are 18 years old and the oldest workers are 65 years old. have a working period of 1 – 15 years and the average worker has a working period of 6 years, the lowest farm worker has a working period of 1 year and the highest has a working period of 15 years.

The measurement results from the work environment obtained the following data:

a. Heat Pressure

Thermal pressure measurement data in the working environment at CV Unggul Farm, obtained the highest heat pressure of 30.75 ℃ and the lowest heat pressure of 27 ℃.

Table 3 shows that for each location of the heat pressure measurement from the measurement location I (Point I) to the 4th measurement location (Point IV), the results are between 27 ℃ to 28.43 ℃.

The average work climate measurement is 27.77 ℃. Based on Permenaker No. Per-13/MEN/X/2011 concerning NAV of Physical and Chemical Factors, especially the Wet and Spherical Temperature Index (ISBB) which is allowed for moderate workloads at working time settings every 75% - 100% hour is 28 ℃, so in this case the work environment can be ascertained to be still within the comfort limits of the subject in completing his work without disturbing work productivity.

b. Noise

The average noise intensity in the workplace is 59.6 dBA for 8 hours of work, which means it does not exceed the Threshold Value (NAV). The distribution of the intensity measurement results at CV Unggul Farm showed in Table 4.

Table 4
Measurement of Noise Level

No.	Measurement Location	Noise Intensity (dBA)	NAV (dBA)	Information
1	Point I	64.07	85	≤NAV
2	Point II	60.59	85	≤NAV
3	Point III	59,00	85	≤NAV
4	Point IV	58.4	85	≤NAV
5	Point V	50.7	85	≤NAV
6	Point VI	58	85	≤NAV
7	Point VII	64.5	85	≤NAV
8	Point VIII	66.5	85	≤NAV
9	Point IX	64	85	≤NAV
10	Point X	50.5	85	≤NAV
Mean (Average) 59.6				
Standard Deviation 5.65				

Tabel 5
Breakfast Habits

No	Breakfast	Amount	(%)
1	Don't have breakfast habit	10	33.3
2	Have a breakfast habit	20	66.7
	Total number	30	100

Table 6
Work Productivity

No	Productivity	Amount	(%)
1	Not productive	16	53.3
2	Productive	14	46.7
	Total number	30	100

Table 7
Work Productivity

	Variable	Not roductive (%)	Produ ctive (%)	Amount	OR	*P*
Breakfast Habits	Have a Breakfast habit	16.67	40	56.6	5.40	0.03
	No Have a Breakfast Habit	30	13.3	43.3		
	Friday	46.67	53.3	100		

Things that can affect work productivity is the work environment. One of the physical disturbances in the work environment is noise and heat stress. Based on the results of measurements of noise intensity carried out at 10 points, an average of 59.6 dBA which means it does not exceed the Threshold Value (NAV) for work for 8 hours or 40 hours a week (Permenaker No. Per-13/MEN/X/2011 concerning NAV Physical and Chemical Factors).

Noise is an environmental factor that can affect labor conditions on labor productivity. Where labor productivity takes part in the achievement of company goals in an effective and efficient manner. This is because labor is the only resource that has reason, taste, desire, ability, skill, knowledge, drive, power and work. Work harmony will be created if the workforce is satisfied with what they get, with this satisfaction the company can also use its resources optimally.

The measurement results, noise does not affect work productivity.

c. Breakfast Habits

The workers at CV Unggul Farm Sukoharjo have a breakfast habit and some don't. The data is presented in Table 5. In Table 5, it can be seen that on average, workers have breakfast habits as many as 20 respondents and workers who do not have breakfast habits as many as 10 respondents.

In this study, it was found that 20 workers had breakfast habits and 10 workers did not have breakfast habits. Workers who do not have the habit can result in inadequate nutritional intake in their bodies, because there are no carbohydrates used to increase blood sugar levels, where blood sugar levels can increase work concentration. For breakfast, you should follow a balanced diet with a composition of 50%-60% carbohydrates, 10%-15% protein, 20-25% fat, and 5-10% fiber (Depkes RI, 2002 and Khasanah, 2012).

d. Work Productivity

Measurement of work productivity is carried out by measuring the results of the number of eggs in eggstray units that can be taken for 2 working hours (07:00 – 09:00), the results showed in Table 6.

The results of the measurement of work productivity are presented in Table 6, it is known that as many as 14 respondents (46.7%) have been able to achieve work targets (productive) and 16 respondents (53.3%) have not been able to achieve work targets (non-productive).

e. Data Analysis

To find out whether there is an influence between breakfast habits on the productivity of workers at CV Unggul Farm Sukoharjo, the statistical test used is the Chi Square test. Considering that this statistical test is an index or number used to measure whether there is an influence between two nominal scale variables. The test results can be seen in Table 7.

The results of the measurement Effect of Breakfast Habits on Employee Productivity at CV Unggul Farm Sukoharjo that the Asymp Sig column is 0.03 which means p < 0.05 (0.03 < 0.05), then H_o is rejected and Ha is accepted, so that statistically there is a statistically significant influence between breakfast habits on the productivity of CV Unggul Farm workers with odd values. ratio of 5.40 which means that workers who do not have breakfast habits have a 5.40 times greater risk of experiencing low productivity than workers who have breakfast habits.

This is in line with the opinion of Khomsan (2002), where the habit of breakfast is very important for health, if workers do not have the habit of breakfast it can cause health problems such as decreased blood sugar levels so that to increase blood sugar levels, the body takes hydrate reserves of charcoal and if this runs out then fat reserves are taken so that the body can not do a good job.

Breakfast is also able to increase the ability of the brain so that a person is easier to concentrate. Recent research conducted by Suzan E. Bagwel (2008), proves that sleeping at night makes the brain lack of glucose. If you don't get enough glucose at breakfast, brain function, especially memory, can be impaired. Another opinion was expressed by Khasanah (2012) Breakfast provides energy and nutritional status both from sources of carbohydrates, protein, fat, vitamins, and minerals that will provide a source of energy and stamina to perform activities optimally until midday.

Breakfast helps the body meet its carbohydrate and nutritional needs so it doesn't cause workers to feel weak, dizzy or cold sweat due to a lack of glucose which can cause decreased work productivity.

Results of Bivariate Analysis of Confounding Variables on Productivity

Table 8
Bivariate Analysis of Confounding Variables on Productivity

Confounding Variables	Variable Bound	X2	P Value
Gender		0.919	0.1
Age	Work productivity	0.270	22.2
Length of working		0.496	10.3
Workload		0.746	3.4

4. Conclusion

Based on the results of research that has been done regarding the effect of breakfast habits on worker productivity at CV Unggul Farm Sukoharjo, a conclusion can be drawn, namely:

1. Based on the results of bivariate analysis using the Chi Square technique, it can be concluded that statistically there is an influence of breakfast habits on work productivity at CV Unggul Farm because the p value <0.05 is 0.03 so that breakfast habits affect work productivity.
2. Breakfast habits can affect productivityworkers at CV. Superior Farm Sukoharjo by*odds ratio*5.40, which means workers who have breakfast habits have 5.40 times greater ability to work with high productivity.

3. As many as 66.7% of CV Unggul farm workers have breakfast habits and 36.7% of workers do not have breakfast habits.
4. Workers at CV Unggul Farm Sukoharjo who have high productivity are 46.7% and those who have low productivity are 53.3%.

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