



The Influence of Occupational Health and Safety (K3) Attitudes and Behavior (K3) on the Work Productivity of Employees of Fish Processing Craftsmen on the Coast of Demak Regency

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Abstract, This research was conducted in order to participate in resolving the problems that occur in UMKM Processed Mina in the coastal areas of Central Java, especially the Sayung area. Many fish processing businesses in the area only pursue profits to help the household economy, considering that their business productivity has not developed/increased, which is likely due to a lack of attention to conscious efforts to carry out or comply with Occupational Health and Safety (K3), such as using personal protective equipment such as hand straps, boots, or in processing fish related to stoves, there are no manual extinguishers for home businesses. K3 attitudes and behaviors for those whose workers are mostly women, are not/may not yet aware of this. Efforts to foster K3 attitudes and behaviors are things that affect economic businesses, especially mina because productivity is increasing. The results of the study are expected to help the local village government to strive to improve their business.

Keywords: Attitude, Behavior, K3, Business productivity.

1. RESEARCH BACKGROUND

Problems related to attitudes towards Occupational Safety and Health (OHS) in Pantura faced by Micro, Small, and Medium Enterprises (UMKM) can vary greatly, but some common problems that may arise include those that are often encountered are; a) Lack of OHS Awareness: Many UMKM may not have adequate understanding of the importance of OHS and the risks associated with their business operations. This can result in a lack of concern for OHS aspects, b) Limited Resources: Many UMKM, especially those located in rural areas such as Sayung, may have limited resources to implement adequate OHS practices. They may have difficulty purchasing OHS equipment, training employees, or allocating time to comply with OHS rules, c) Unclear regulations: Problems can arise if regulations related to OHS are unclear or, especially for fishery product processors in Sayung, some home entrepreneurs are difficult for UMKM to access. The relationship between OHS and inadequate equipment due to the possibility of a lack of attitude and compliance or behavior that does not heed OHS. Research states in its research results that the risk of accidents and work safety can only occur in glass manufacturing, namely extreme risks related to open electrical panels and scattered cables that endanger employees, in addition to high risks. Likewise, research on Occupational Safety and Health (K3) in project implementation, states that K3 is greatly influenced not only by human error but also by structure.

Problem Statement

Based on the background of the problem above, it can be concluded:

- a) How does K3 Attitude affect the Work Productivity of Mina MSMEs
- b) How does K3 Behavior affect the Work Productivity of Mina MSMEs
- c) How does Attitude and Behavior together affect the Work Productivity of Mina MSMEs

Thus, the purpose of this study is to,

- a) Examine the influence of K3 Attitudes on the Work Productivity of Mina MSMEs
- b) Examine the influence of K3 Behavior on the Work Productivity of Mina MSMEs
- c) Examine together the influence of Attitudes and Behavior on the Work Productivity of Mina MSMEs

Research Objective

This research was conducted with research objectives, among others, Mina MSMEs in the coastal areas of Central Java, especially the Sayung Demak area, which are related to the understanding and use of Occupational Safety and Health (K3), in relation to K3 Attitudes and Behavior.

Methodology

This research was conducted using quantitative research methods. The sample used was 45 people, namely saturated samples. Statistical analysis using Smart PLS.

References – APA Styles/ IEEE styles

1. Occupational Health and Safety (K3) Attitude

Definition of Attitude, (7) Attitude or attitude as a reaction of an individual's views or feelings towards a certain object. The basis is the existence of experience, psychological conditions, information and individual needs.) attitude is the process of individual assessment of an object. So, the assessment appears, positive or negative influenced by previous information or personal experience. Meanwhile, according to (7), factors that influence attitudes include:

a) Internal factors, including

- Objects that are inherent in the individual, which are based on experiences related to objects by determining whether the attitude that emerges is positive or negative.

b) External factors, which consist of two main factors that shape human attitudes, namely:

- **Group interaction**

Each person in a group has behavioral characteristics. These differences provide information or examples to shape attitudes.

- **Communication**

Communication provides information that can provide suggestions, motivation and trust. Negative information will form negative attitudes, as well as positive information will have an impact on positive attitudes.

It is important to remember that individual attitudes towards K3 can vary and are influenced by these factors. Therefore, it is important for organizations to identify and manage these factors to increase awareness and implementation of K3 in the workplace. According to (3), the Safety Management System has an impact on employees and increases motivation for a safety culture.

Attitude Components:

1. Cognitive component, namely an individual's belief and understanding of an object through the process of seeing, hearing and feeling. The belief and understanding that Cognitive component, namely an individual's belief and understanding of an object through the process of seeing, hearing and feeling. The belief and understanding that are formed provide information and knowledge about the object.
2. Affective component, namely a component related to an individual's subjective emotional problems towards something.
3. Behavioral or conative component, namely an individual's tendency to behave towards the object they are facing.

Health and Safety Behavior

Behavior is a set of actions in responding to something that is then made a habit based on believed values (3). Thus, human behavior is essentially human actions or activities that are observed by humans related to the environment in the form of knowledge, attitudes, and actions (14).

Aspects of K3 Behavior

Aspects of K3 behavior (4) are initiative, bureaucratic, responsive and obedient in carrying out various actions.

Factors that Influence K3 Behavior

In theory related to factors that influence K3 behavior, among others; (a) predisposing factors, are positive factors that facilitate the realization of practices that are often called facilitating factors, namely: trust, confidence, education, motivation, perception, knowledge,

(b) supporting factors, in the form of the physical environment such as the availability of health infrastructure, (c) driving factors, the realization of attitudes and behavior of health workers or other officers, who are reference groups for community behavior.

Factors that can influence behavior include gender, related to special skills or abilities, and knowledge. Similarly, opinion (1) states that with the implementation of K3 which is a form of protection while in the work environment, which has an impact on minimizing work accidents in the work environment.

Productivity of fish processing carried out by craftsmen/UMKM (12)

Several figures convey that productivity is interpreted as the relationship between real or physical results in the form of goods or services with actual input. Productivity also means a comparison between the results achieved with all the resources used (input), which is related to a productive mental attitude including: attitude, discipline and others. In addition (12) is all goods and services produced divided by the input required (6).

Factors that influence productivity, including; (a) education, including the level of intelligence is very supportive in achieving the desired goals, (b) physical and mental health, including the arrangement of working hours, overtime, (c) work environment, (d) managerial factors, motivation, direction, moving his work team, (d) motivation, (e) equipment used, (f) attitude, (g) discipline Raviyanto (11).

Suggestions for efforts to address the problem:

To address this problem, there needs to be a coordinated effort between the government, non-governmental institutions, and business associations to raise awareness, provide training, and facilitate MSMEs' access to resources and information related to K3. In addition, effective monitoring and enforcement of K3 regulations also need to be improved to encourage compliance among MSMEs.

2. RESEARCH METHODS

This research was conducted using quantitative research methods with three variables, namely dependent variables, and two independent variables. Identification of variables as below:

Dependent variable : MSME productivity
Independent variable : K3 attitude
K3 behavior

Statistical analysis using SPSS version .25 with a population study of 54, of which only 43 subjects fulfilled the requirements consisting of fish processors and fishermen in the coastal area of Sayung Demak.

3. VALIDITY AND RELIABILITY TEST

Introduction

This study aims to measure the reliability and validity of the instruments used in measuring three different scales: Work Productivity Scale, OHS Behavior Scale, and OHS Attitude Scale. Reliability testing was conducted using Cronbach's Alpha, while validity testing was based on the correlation value between items to the total scale (Corrected Item-Total Correlation).

Methods

This study involved 38 respondents, all of whom provided complete data so that no cases were excluded from the analysis (N=38). Reliability analysis was conducted to determine the internal consistency of the items in each scale using Cronbach's Alpha, with the following interpretation criteria:

- Cronbach's Alpha ≥ 0.70 is considered acceptable reliability.
- Corrected Item-Total Correlation > 0.30 is considered a good indicator of item validity.

Results

1. Work Productivity Scale

- **Reliabilitas:** Cronbach's Alpha for this scale was 0.853 with 8 items, indicating excellent reliability.
- **Validitas Item:** All items have a Corrected Item-Total Correlation value above 0.30, with the lowest value being 0.382 and the highest being 0.831, indicating that all items are valid.

2. K3 Behavior Scale

- **Reliabilitas:** Cronbach's Alpha for this scale was 0.832 with 6 items, indicating good reliability.
- **Validitas Item:** The Corrected Item-Total Correlation values for the items on this scale range from 0.535 to 0.700, indicating good item validity.

3. K3 Attitude Scale

- **Reliabilitas:** Cronbach's Alpha for this scale was 0.834 with 6 items, indicating good reliability.

- **Validitas Item:** All items on this scale have good Corrected Item-Total Correlation values, with the lowest value being 0.617 and the highest being 0.705.

Discussion

The results of the reliability test showed that the three scales had good internal consistency with Cronbach's Alpha values above 0.80. This indicates that the instrument used in this study is reliable for measuring the intended construct. In addition, the validity test through Corrected Item-Total Correlation shows that each item in the three scales is valid, because all correlation values are above 0.30. Thus, it can be concluded that this instrument is valid and reliable for use in further research.

4. DESCRIPTIVE STATISTIC TEST

Demographic Analysis

To get a clearer picture of the characteristics of the respondents in this study, the following is descriptive statistical data which includes the distribution of gender, age, and type of work of the respondents.

Tabel 1 .Karakteristik Responden

Kategori	Keterangan	Jumlah
Gender	Laki-laki	10
	Perempuan	33
Usia	Tertua	67
	Termuda	31
	Rata-rata Usia	50,38
Pekerjaan	Nelayan	8
	UMKM	35

Based on the descriptive statistics table, of the total 43 respondents, the majority were women (33 people) while only 10 were men. The ages of the respondents varied with the oldest being 67 years old and the youngest being 31 years old, with an average age of 50.38 years, indicating that most of the respondents were in the adult to elderly age range. In terms of employment, the majority of respondents worked in the MSME sector (35 people), while the rest worked as fishermen (8 people). These data show the dominance of female respondents working in the MSME sector with a fairly mature average age.

Discriptive Statistic Analysis

Descriptive statistical analysis provides a picture of power that can be seen from the minimum and maximum values, average, and standard deviation.

Tabel 2. Discriptive Statistic

	N	Max	Min	Rata-rata	STDEV
Sikap K3	38	24	11	19,24	3,752
Perilaku K3	38	24	11	17,42	3,922
Produktivitas Kerja	38	12	32	22,50	5,290

Sumber: Hasil penelitian, diolah dengan SPSS v.25, 2024

The descriptive statistics result shows that the respondents' OHS Attitude has an average score of 19.24 with a maximum score of 24 and a minimum score of 11. The standard deviation of 3.752 indicates moderate variation among respondents in their attitudes towards OHS. Meanwhile, OHS Behavior has a slightly lower average score of 17.42, with a maximum score of 24 and a minimum score of 11. The standard deviation for OHS behavior of 3.922 indicates greater variation than OHS attitude. Work Productivity shows the highest average score among the three variables, namely 22.50, with a maximum score of 32 and a minimum score of 12. However, the variation in work productivity among respondents is also the largest, as reflected by the standard deviation of 5.290. This variation indicates a significant difference in the level of work productivity among respondents. Overall, these data illustrate the tendency of positive OHS attitudes and behaviors among respondents, although with varying levels of variation, and indicate that work productivity is at a relatively high but variable level.

5. ASSUMPTION AND HYPOTHESIS TESTING

Introduction

This study aims to analyze the influence of K3 attitudes and K3 behavior on work productivity. Before conducting a regression hypothesis test, an assumption test is first conducted to ensure that the regression model meets classical requirements such as normality, linearity, heteroscedasticity, multicollinearity, and autocorrelation.

Methods

The assumption tests carried out include:

- **Normality test using Kolmogorov-Smirnov and Shapiro-Wilk.**
- **Linearity test using ANOVA analysis for the relationship between dependent and independent variables.**

- **Heteroscedasticity test using the Glejser method.**
- **Multicollinearity test by looking at the Variance Inflation Factor (VIF) value.**
- **Autocorrelation test using Durbin-Watson.**

Multiple regression tests were conducted to see the simultaneous and partial influence of K3 attitudes and K3 behavior on work productivity.

Results

1. Assumption Test

- **Normality Test:** Based on the results of the Kolmogorov-Smirnov test, the Sig. value for K3 attitude is 0.011, K3 behavior is 0.030, and work productivity is 0.200. Meanwhile, the Shapiro-Wilk results show a Sig. value greater than 0.05 for all variables, indicating that the data is normally distributed.

Tabel 3 Test of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	N	p(sig.)	Statistic	N	p(sig.)
Sikap K3	0,164	38	0,011	0,932	38	0,211
Perilaku K3	0,151	38	0,030	0,943	38	0,354
Produktivitas Kerja	0,117	38	0,200	0,973	38	0,477

Sumber: Hasil penelitian, diolah dengan SPSS v.25, 2024

- **Normality Test:** Based on the results of the Kolmogorov-Smirnov test, the Sig. value for K3 attitude is 0.011, K3 behavior is 0.030, and work productivity is 0.200. Meanwhile, the Shapiro-Wilk results show a Sig. value greater than 0.05 for all variables, indicating that the data is normally distributed.

Tabel 4 Test of Linearity

	F - value	P - value	Results
Produktivitas Kerja * Sikap K3	1,445	0,000 (< 0,05)	Linier
Produktivitas Kerja * Perilaku K3	0,879	0,000 (< 0,05)	Linier

Sumber: Hasil penelitian, diolah dengan SPSS v.25, 2024

- **Heteroscedasticity Test:** Based on the regression results on the absolute residual value, the Sig. value is 0.407, which indicates that there is no heteroscedasticity.

Tabel 5 Test of Heteroskedastisitas

	Sum of Squares	Mean Squares	F - value	P - value
Abs_Res * Independent	5,238	2,619	0,923	0,407 (> 0,05)
Residual	99,335	2,838	-	-

Sumber: Hasil penelitian, diolah dengan SPSS v.25, 2024

- **Multicollinearity Test:** The VIF values for K3 attitudes and K3 behavior are each 2.641, which is still within the tolerance limit (<10), so there is no multicollinearity.

Tabel 6 Test of Multikolinearitas

	Tolerance	VIF
Sikap K3	0,379	2,641
Perilaku K3	0,379	2,641

Sumber: Hasil penelitian, diolah dengan SPSS v.25, 2024

- **Autocorrelation Test:** The Durbin-Watson value is 1.883, which is close to 2, indicating no autocorrelation.

Tabel 7 Test of Autokorelasi

Model	N	Std. Error of the Estimate	Durbin-Watson
Regression	38	2,996	1,883

Sumber: Hasil penelitian, diolah dengan SPSS v.25, 2024

1. Uji Hipotesis Regresi

- **Model Summary:** The R Square value of 0.697 indicates that 69.7% of the variation in work productivity can be explained by OHS attitudes and OHS behavior.
- **ANOVA:** The F-test value is 40.187 with a Sig. value of 0.000, indicating that the regression model used is statistically significant.

Tabel 8 Test of Modelling Statistic

Model	N	F - test	R Square
Regression	38	40,187	0,697

a. Predictors: (Constant), Perilaku K3, Sikap K3

b. Dependent Variable: Produktivitas Kerja

Sumber: Hasil penelitian, diolah dengan SPSS v.25, 2024

- **Regression Coefficient:**
 - K3 Attitude has a regression coefficient of 0.586 with a Sig. value of 0.009, which means it has a significant effect on work productivity.
 - K3 Behavior has a regression coefficient of 0.630 with a Sig. value of 0.004, which also means it has a significant effect on work productivity.
 - K3 Attitude & K3 Behavior simultaneously have a regression coefficient of 0.835 with a Sig. value of 0.000, which means it has a significant effect on work productivity.

Tabel 9 Test of Hypothesis

Hypothesis	R - value	P - value	Results
H1 Sikap K3 → Produktivitas Kerja	0,586	0,009	Supported
H2 Perilaku K3 → Produktivitas Kerja	0,630	0,004	Supported
H3 Sikap K3 & Perilaku K3 → Produktivitas Kerja	0,835	0,000	Supported

Sumber: Hasil penelitian, diolah dengan SPSS v.25, 2024

Discussion

The results of the assumption test indicate that the regression model meets all the necessary classical requirements, so that the results of the regression test can be trusted. K3 attitudes and K3 behavior significantly affect work productivity. This shows that increasing K3 attitudes and behavior will have a positive impact on increasing employee work productivity.

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