Effect of Safety Induction, Reward, and Punishment on K3 Discipline (Case Study: USM Tower Project)

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Abstract: Occupational safety and health issues in general in Indonesia are still often overlooked, this is indicated by the increasing number of work accidents every year, this study is to determine the Discipline of K3 in the USM Tower Construction Project.

K3 discipline in the USM Tower Construction Project can be identified by identifying Safety Induction, Reward, and Punishment. This study describes and analyzes the Safety Induction, Reward, and Punishment policies that have been applied atUSM Tower Construction Project. This type of research is a case study using quantitative, data collection techniques used are questionnaires, and the analytical method used is SPSS 21.

Implementation of K3 on The USM Tower Construction Project can be seen from the existence of occupational health and safety regulations, employee awareness to implement existing regulations, personal protective equipment has become a mandatory part of employee work.

The consultant has a Safety Induction, Reward, and Punishment policy related to the application of K3 in the company. The determination of Safety Induction, Reward, and Punishment related to K3 involves the HSE division. The HSE Division is tasked with providing an assessment of OSH practices that have been carried out by employees every month, then the results of this assessment will determine the type of reward and punishment that will be given to workers.

Keywords: Safety induction, Reward, Punishment, K3 Discipline

A. Preliminary

Efforts to increase labor productivity are by providing Safety induction, rewards, and punishment to workers. By providing an introduction and training in occupational safety and health (K3) to workers is expected to reduce the number of work accidents. Reward that is often given to workers is in the form of bonuses for workers who are able to work well and can achieve or even exceed the targets set by the company. In addition to reward, giving punishment aims to make the workforce continue to be motivated to work better and more productive. With this, there must be a minimum standard of output that must be produced by each workforce. This standard is the lowest achievement that must be produced by the workforce.

In this research, the writer tries to do Occupational Safety and Health (K3) study on a construction project. The method used by the authors in collecting data is by distributing questionnaires to several construction project workers. The results obtained from the questionnaire are then analyzed and conclusions will be obtained regarding safety induction, rewards, and punishment for Occupational Safety and Health (K3) in a construction project.

B. Literature Review

Safety induction

*Safety induction*is an introduction to the basics of occupational safety and health (K3) to workers, visitors (guests), and carried out by the supervision of the K3 / safety division, safety induction to control work accidents. (Silalahi: 1995). The purpose of safety induction is to communicate about occupational safety and health hazards that occur during work / visit, so workers / guests can be aware and can take control measures against these hazards

Safety induction goals and benefits:

- Provide an understanding of the importance of occupational safety and health (K3) in the project. Provide the latest information about conditions in the project because the conditions in the project can change every day.
- Provide understanding of the applicable regulations and what sanctions are given if they violate the rules in the project.
- Provide information about work procedures in the work environment.

As for the benefits of *safety induction*, among others;
- Someone better understands the importance of occupational safety and health (K3) while in the work environment.
- Get the latest information about conditions in the work environment.
- Better understand the potential hazards that may occur in the work environment and understand how to overcome them.
- Minimize the possibility of accidents when in the work environment.
- And some other benefits that I might not know about.

Reward

Appreciation or *reward* is the remuneration provided by the company to its employees for the time, energy and thought that employees have provided to the company (Sutrisno, 2009).

Gift *reward*not only to retain workers, but also to motivate workers to work better. By giving rewards can encourage workers to have more positive behaviors and attitudes at work, in addition to providing rewards can increase loyalty so as to increase productivity

Rewards are given to satisfy the needs of employees and encourage their productivity. According to (Karlins: 1981) types of rewards that can be given such as: Praise, public recognition, job security (insurance, health benefits), incentive money, promotion.

Purpose of rewards:
- Attract qualified people.
- Keep workers coming and working
- Motivate workers to achieve high performance.

Punishment

Punishment is a threat of punishment aimed at improving worker behavior, maintaining applicable regulations, and giving lessons to workers so that they are deterrent (Mangkunegara, 2000)

Imposing sanctions or *punishment*kapada workers in the form of reprimands, warning letters, scrorsing and even termination or termination of employment. Punishment to workers will cause unpleasant feeling, this is so that workers do not make the same mistakes.

Punishment function:
- Limiting behavior, preventing repetition of unexpected behavior
- Educating
- Strengthen motivation to avoid unexpected behavior

K3 Discipline

Discipline is needed in the world of work because it is seen as a binding and integration factor and is a force that can force individuals to comply with rules and work procedures that have been determined. Discipline affects work safety and health so that employees can carry out work safely and healthily. For this reason, knowledge and understanding of occupational safety and health (K3) must be applied and given to each employee. According to the Big Indonesian Dictionary, discipline is an inner exercise and character with the intention that all his actions always obey the rules.

Research methods

A study must be carried out systematically and in a clear and orderly order, so that results will be obtained as expected. Therefore, the implementation of this research is divided into several stages, namely:

Stage 1: Preparation, Before conducting research it is necessary to conduct a literature study to deepen the knowledge related to the research topic. Then the problem formulation is determined until the data compilation
Stage 2: Data Collection, Project data needed for report generation and data analysis.
Stage 3: Data Analysis, the analyzed data are related to the Effect of Safety Induction, Reward, and Punishment on K3 Discipline using SPSS 21.
Stage 4: Conclusions, conclusions are also called decision making. At this stage, the data that has been analyzed make a conclusion related to the research objectives.

Validity test

According to Azwar (1986) Validity comes from the word validity which means the extent to which the accuracy and accuracy of a measuring instrument in carrying out its measurement function.

A scale or measuring instrument can be said to have high validity if the instrument performs its measurement function, or provides a measurement result in accordance with the purpose of the measurement. Whereas tests that have low validity will produce data that is not relevant to the measurement objectives.

The validity test used is to choose the relevant question instrument to be analyzed. The validity test is done by looking at the correlation between the scores of each question instrument with the total score. The validity calculation is done by using the correlation technique formula *product moment*(Sugiyono, 2000).

Reliability Test

According to Masri Singarimbun, reliability is an index that shows the extent to which a measuring instrument can be trusted or reliable. If a measuring device is used twice - to measure the same symptoms and the measurement results obtained are relatively consistent, then the gauge is reliable.

In other words, reliability indicates the consistency of a measuring device within the same symptom measure.

According to Brennan (2001: 295) reliability is a score characteristic, not about the test or the form of the test. According to Sumadi Suryabrata (2004: 28) reliability shows the extent to which the measurement results with the tool can be trusted. The measurement results must be reliable in the sense that they must have a level of consistency and stability .

Hypothesis testing

Hypothesis testing is used to establish a basis so that it can gather evidence in the form of data in determining the decision whether to reject or accept the truth of the statements or assumptions that have been made. Hypothesis testing can also provide confidence in making objective decisions. Hypothesis testing in this study uses the t test.

T test is used to determine whether the independent variables partially have a significant effect on the dependent variable. The significance level used is 0.05. If the significant value is less than the degree of trust, we accept an alternative hypothesis, which states that a variable is independently independentpartial affect the dependent variable. The testing steps are as follows:
1. Determine the H0 and H1 formations
    - Ha: bi = 0, meaning that there is no partial effect of the independent variable on the dependent variable.
    - Ha: bi ≠ 0, meaning that there is a partial effect of the independent variable on the dependent variable.
2. Determine testing criteria
    - Sig <(0.05): means there is no influence between the independent variable (X) partially on the dependent variable (Y).
    - Sig> (0.05): means there is an influence between the independent variables (X) in a manner partial to the dependent variable (Y).

C. DISCUSSION
1. Research Object.

This research was carried out at the USM Tower Construction Project, with the object of the construction work involved in the process of the USM Tower Construction Project in this case being personnel of construction service providers in the USM Tower Construction Project.

The number of personnel of construction service providers in the USM Tower Construction Project as respondents in this study was 40 (forty) people. To find out the characteristics of the respondents, a descriptive analysis was carried out on the identity of the respondents which included the respondent's position, the age of the respondent, the level of education and length of work.

2. Test Validity

Validity test is used to measure the validity of a questionnaire. A questionnaire can be said to be valid if the questions contained in the questionnaire are able to reveal something that will be measured by the questionnaire. If R arithmetic> R table then the indicator is declared Valid, the level of confidence of this study is 95% or sig (0.05).

1. Validity test results on variable X1 (safety induction)

In the X1 variable validity test results obtained on the instrument:

X1P1: Obtained 0.612 results. In this case X1P1 is considered valid because the calculated R value is 0.612> 0.304 R table.

X1P2: Obtained 0.563 results. With this case X1P2 is considered valid because the calculated R value is 0.573> 0.304 R table.

X1P3: Obtained 0.313 results. With this case X1P3 is considered valid because the value of R count is 0.313> 0.304 R table.

X1P4: Obtained 0.707 results. In this case X1P4 is considered valid because the value of R counts 0.707> 0.304 R table.

X1P5: Obtained 0.549 results. With this case X1P2 is considered valid because the calculated R value is 0.549> 0.304 R table.

It can be concluded that the validity test on variable X1 is valid, because the instrument (question) questionnaire variable X1 gets valid results.

2. The results of the validity test on the X2 variable (Reward)

In the X2 variable validity test results obtained on the instrument:

X2P1: Obtained 0.331 results. With this case X1P1 is considered valid because the calculated R value is 0.331> 0.304 R table.

X2P2: Obtained 0.155 results. In this case X1P2 is considered invalid because the calculated R value is 0.155 <0.304 R table.

X2P3: Obtained 0.469 results. With this case X1P3 is considered valid because the value of R counts 0.469> 0.304 R table.

X2P4: Obtained 0.618 results. With this case X1P4 is considered valid because the calculated R value is 0.618> 0.304 R table.

X1P5: Obtained 0.574 results. With this case X1P5 is considered invalid because the calculated R value is 0.574> 0.304 R table.

Because the calculated R value at X2P2 is invalid, X2P2 is eliminated.

In the second X2 variable validity test results obtained on the instrument:

X2P1: Obtained 0.408 results. In this case X1P1 is considered valid because the value of R counts 0.408> 0.304 R table.

X2P3: Obtaining 0.512 results. With this case X1P3 is considered valid because the calculated R value is 0.512> 0.304 R table.

X2P4: Obtained a result of 0.726. With this case X1P4 is considered valid because the calculated R value is 0.726> 0.304 R table.

X1P5: Obtained 0.527 results. In this case X1P5 is considered invalid because the calculated R value is 0.527> 0.304 R table.

It can be concluded that after the second validity test on variable X2 is valid, because the instrument (question) questionnaire variable X2 after X2P2 is removed gets valid results.

3. The results of the validity test on the X3 variable (Punishment)
In the X3 variable validity test results obtained on the instrument:
X3P1: Obtained 0.408 results. In this case X1P1 is considered valid because the value of R counts 0.408> 0.304 R table.

X3P2: Obtained 0.618 results. With this case X1P2 is considered valid because the calculated R value is 0.618> 0.304 R table.

X3P3: Obtained 0.493 results. With this case X1P3 is considered valid because the calculated R value is 0.493> 0.304 R table.
X3P4: Obtained 0.616 results. With this case X1P4 is considered valid because the calculated R value is 0.616> 0.304 R table.

It can be concluded that the validity test on variable X3 is valid, because the instrument (question) questionnaire variable X3 gets valid results.

4. The results of the validity test on the variable Y1 (K3 Discipline)
In the Y1 variable validity test results obtained on the instrument:

Y1P1: Obtained 0,800 yield. With this Y1P1 is considered valid because the value of R counts 0.800> 0.304 R table.

Y1P2: Obtained 0.703 results. With this Y1P2 is considered valid because the value of R counts 0.703> 0.304 R table

It can be concluded that the validity test on variable Y1 is valid, because the instrument (question) Y1 variable questionnaire gets valid results.

3. **Reliability Test**
Reliability test is an index that shows a reliable or reliable measuring device, according to the nunnaly criteria if the Cronbach alpha value is greater than 0.6 or 60% then the variable is said to be reliable

The reliability test results with the help of SPSS 21.00 can be seen in the following table:

Variable	Cronbach's Alpha	Threshold (Nunnaly criteria)	Information
X1 (Safety induction)	69%	60%	Reliable
X2 (Reward)	63.1%	60%	Reliable
X3 (Punishment)	61.6%	60%	Reliable
Y1 (K3 Discipline)	78.4%	60%	Reliable

4Hypothesis Test (t test)

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6,356	2,241		2,836	.007
	SUM X1	.062	.076	.140	.819	.418
	SUM X2	.068	.088	.131	.770	.447
	SUM X3	-018	.93	-,034	-.199	.843

a. Dependent Variable: SUMY1

1. Effect of independent variable X1 on the dependent variable Y1
   From testing the effect of Safety induction on K3 Discipline, obtained t count of 0.819 and a significance of 0.418. Therefore, the significance value is greater than α = 0.05. Then Safety induction has a partial effect on K3 Discipline
2. Effect of independent variable X2 on the dependent Y1
   From testing the effect of Reward on K3 Discipline, obtained t count of 0.770 and a significance of 0.447. Therefore, the significance value is greater than α = 0.05. Then Reward has a partial effect on K3 Discipline
3. Effect of independent variable X3 on the dependent Y1
   From testing the effect of Punishment on K3 Discipline, obtained t count of 0.199 and a significance of 0.843. Therefore, the significance value is greater than α = 0.05. Then Punishment has a partial influence on K3 Discipline

D.   DISCUSSION

Y (K3 Discipline) = 0.418 X1 + 0.447 X2 - 0.843 X3 + 0.007 C

X1 = Safety induction
X2 = Reward
X3 = Punishment
C = Constant

From the above equation it can be concluded that K3 Discipline has a Constant value and is influenced by variables X1, X2, and X3. The most significant influence is on variable X3 namely Punishment, after that the second significant effect is variable X2 namely Reward, the smallest influence is variable X1 namely Safety induction, and variables X1 and X2 have relatively the same value.

E.   CONCLUSION

From the results of the research that has been done, the following conclusions can be drawn:
1. It is proven that the Safety induction variable (X1) has a positive and significant effect on the Work Safety and Discipline of the USM Tower Construction Project.
2. It is proven that the Reward variable (X2) has a positive and significant effect on the Work Safety and Discipline of the USM Tower Construction Project.
3. It is proven that the Punishment variable (X3) has a negative effect on the K3 Discipline of workers on the USM Tower Construction Project.

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