



## Analysis of Theory of Planned Behavior (TPB) in Disobedience Behavior towards Occupational Health and Safety (K3)

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### ARTICLE INFORMATION

### ABSTRACT

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Work accident is one of problems which often occurs to workers at company. This accident usually happens because of the employee itself and working environment factors, especially entrepreneur factors. Occupational health and safety is one of protection aspects for labor which has arranged on the law of Republic Indonesia number 13 in 2003. Not a slight, the work accident is caused by Behavioral Disobedience against occupational health and safety. The aim of this research is to know and analyze Behavioral Disobedience against occupational health and safety by Analysis of Theory of Planned Behavior (TPB).

Sample in this research is an employee who has region of work around Surabaya City, man/woman 17-55 years old. This research uses the technique of sampling about 104 respondents. The data analysis technique in this research uses Partial Least Square (PLS).

The result of this research concludes that (1) attitude influences significantly positive effect to intention, (2) Subjective norm influences significantly positive effect to intention, (3) perceived behavioral control influences significantly positive effect to intention, (4) intention influences significantly positive effect to behavior, (5) perceived behavioral control influences significantly positive effect to behavior.

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## INTRODUCTION

Work accidents are one of the problems that often occur in workers in companies. Work accidents usually occur due to factors from the workers themselves and the work environment, in this case, the employer. Occupational Safety and Health (K3) is one of the aspects of labor protection regulated in Law Number 13 of 2003. By applying occupational safety and health control technology, it is hoped that workers will achieve physical endurance, work power, and a healthy level of health. high. Besides that, work safety and health can be expected to create high work comfort and safety. So, the elements that exist in occupational safety and health are not fixed on physical factors, but also mental, emotional and psychological factors (Hadiguna, 2009).

The rate of work accidents in Indonesia has remained high in recent years. According to data from the Employment Social Security Administration (BPJamsostek), the number of work accident cases from 2016 to date has increased. However, in 2019 there was a decline from 2018, the figure was still very large.

Table 1 Work Accident Data

Year	number of cases	number of claims
2016	101368	Rp. 833.44 billion
2017	123041	Rp. 971.62 billion
2018	173415	Rp. 1.22 trilion
2019 (jan-sep)	130923	Rp. 1.09 trilion

Source: data Badan Penyelenggara Jaminan Sosial Ketenagakerjaan (BPJamsostek)

As of September 2019, the sectors that contributed to the relatively large number of work accidents were the processing industry with 50,358 cases, wholesale trade 9,559 cases, transportation and warehousing 2,694 cases, and so on. With this there is a conclusion that work accidents are also influenced by behavior, behavior that does not comply with K3 will have a greater chance of accidents occurring.

Based on the explanation above, before giving rise to non-compliance behavior with Occupational Safety and Health (K3), a person is assumed to have the intention to display this

behavior. In this case, behavioral intentions can be formed through several beliefs or beliefs. The first is beliefs about negative or positive consequences if they lead to non-compliance with Occupational Health and Safety (K3). Examples of negative consequences of non-compliance behavior with Occupational Safety and Health (K3) are work accidents that can cause death. Meanwhile, the positive consequence is that there is no need to bother workers and do not need to cost a lot for the company. A person has one or many beliefs regarding non-compliance behavior with occupational safety and health (K3), but only a few are beliefs that play a role in the formation of attitudes. (Cornner and Norman, 2005). The second thing that affects the behavior of non-compliance with Occupational Safety and Health (K3) is a belief about the other significant expectations or people who play a role in the emergence of non-compliance behavior with Occupational Safety and Health (K3). This belief will provide pressure or encouragement in forming intentions for someone. Then the last one is a person's belief in the existence of factors that support or hinder the emergence of non-compliance behavior with Occupational Safety and Health (K3). Both of these factors directly affect the intention, while the perceived behavioral control factor affects the intention of non-compliance behavior with Occupational Health and Safety (K3).

From the explanation above, it can be interpreted that the more confident a person is in the other significant expectations to bring up the behavior, the stronger it is so that the tendency for non-compliance with Occupational Safety and Health (K3) to appear even greater. Researchers found several phenomena, namely workers and companies realizing that non-compliance with Occupational Safety and Health (K3) is a wrong act, but there are still some workers and companies who still practice non-compliance with Occupational Safety and Health (K3) consciously and deliberately.

Based on the description above, it is important for researchers to raise this problem, therefore researchers want to examine how much their intention is to display non-compliance behavior with Occupational Safety and Health (K3) which will affect what attitudes are owned by workers and how subjective norms are in view these behaviors and what makes it difficult and

makes it easier for them to behave disobediently to Occupational Safety and Health (K3). So the researchers set the research title as follows: "Analysis of Theory of Planned Behavior (TPB) in Disobedience Behavior on Occupational Safety and Health (K3)".

## LITERATURE REVIEW

### Intention

Intention according to Corsini (2002) is a decision to act in a certain way, or an urge to take an action, whether consciously or not.

### Attitude

Ajzen (2005) states that attitude is a disposition to respond positively or negatively to a behavior.

### Subjective Norm

Ajzen (2005) states that subjective norms are a function based on beliefs called normative beliefs, namely beliefs about agreement and / or disagreement originating from referents or people and groups that affect individuals (significant others) such as parents, spouses, close friends, co-workers or others about a behavior.

### Perceived Behavioral Control

Perceived behavioral control is an individual's perception of the ease or difficulty of carrying out certain behaviors (Ajzen, 2005).

### Behaviour

Behavior is all human activities or activities, either directly observed or not observable by outsiders (Notoatmodjo, 2003).

## RESEARCH HYPOTHESIS

Based on the theoretical description of the conceptual framework described above, it can be used as a reference in proposing the following research hypothesis:

H1 = There is an effect of Attitude on Intention of non-compliance with Occupational Health and Safety (K3).

H2 = There is an influence of the Subjective Norm variable on Intention of non-compliance with Occupational Health and Safety (K3).

H3 = There is an effect of the variable Perceived Behavioral Control on Intention of non-compliance with Occupational Health and Safety (K3).

H4 = There is an influence of the Intention variable on the behavior of non-compliance with Occupational Health and Safety (K3)

H5 = There is the influence of the Perceived Behavioral Control variable on non-compliance with Occupational Health and Safety (K3).

Tabel 2 Indikator Variabel

No	Peneliti	Variabel	Indikator
1	Edmund Goh, Brent Ritchie, Jie Wang. 2017.	<i>Attitude</i>	<i>Desirable</i>
			<i>Good</i>
			<i>Wise</i>
			<i>Favourable</i>
2	Rudy Setiawan, Wimpy Santosa, Ade Sjafuruddin. 2013	<i>Subjective Norm</i>	Orang tua
			Saudara
			Pacar (pasangan) / sahabat
			Teman
3	Edmund Goh, Brent Ritchie, Jie Wang. 2017.	<i>Perceived Behavioral Control</i>	<i>Confident</i>
			<i>Complately up to me</i>
			<i>Easy</i>
4	Mohammad I. Ahmad. 2014	<i>Intention</i>	Minat
			Efektivitas
			Efisiensi
			Kinerja
5	Osly Usman. 2018.	<i>Behaviour</i>	Frekuensi
			Faktor sosial
			Perasaan (affect)
			Tingkat kepuasan

Source: Primary data processed, 2020

**METHOD**

This type of research is viewed from the way it is processed using structural research. While the type of research in terms of its method uses survey research. The research approach used in this study uses a quantitative approach. The data analysis technique and hypothesis testing in this study used the Structural Equation Model - Partial Least Square (SEM-PLS) method.

**Population and Sample**

The population in this study were employees who implemented K3 in their work in the Surabaya area with an indefinite population. To take the number of samples, in this study is a non probability sampling. The number of samples taken in this study were 104 respondents with guidelines because the population was unknown, it was 5-10 times the number of parameters estimated. The number of samples is 5-10 times the number of indicators (Ferdinand, 2005). If the number of indicators is 19 and the number of variables is 5, then the minimum sample size is  $19 \times 5 = 95$  samples.

This research used purposive sampling technique. Purposive sampling is a sampling

technique with certain considerations (Sugiyono, 2019).

The questionnaire was distributed through the help of google doc. The process of distributing questionnaires was carried out using social media. Then the questionnaire is sent to respondents who happen to be suitable and willing to become respondents.

In this study, the sample criteria determined by the researcher are as follows:

- 1) A worker / employee
- 2) The company area in the city of Surabaya.
- 3) Male / female aged 17 - 55 years.

**RESULT AND DISCUSSION**

**Outer Model**

**a. Convergent Validity**

Loading factor is the correlation between the indicator and the variable, if it is greater than 0.5, then the indicator is valid and is an indicator / measure of the variable. The following is a table of loading factor values in this study:

**Table 3 Loading Factor Value**

	Attitude	Subjective Norm	Perceived Behavioral Control	Intention	Behavior	Type (a	SE	P value
X1.1	<b>0.801</b>	-0.167	-0.038	0.069	0.033	Reflect	0.079	<0.001
X1.2	<b>0.801</b>	0.110	0.055	-0.194	0.098	Reflect	0.079	<0.001
X1.3	<b>0.849</b>	0.099	-0.227	0.217	-0.176	Reflect	0.078	<0.001
X1.4	<b>0.852</b>	-0.045	0.211	-0.099	0.052	Reflect	0.078	<0.001
X2.1	-0.009	<b>0.944</b>	-0.036	-0.080	0.001	Reflect	0.076	<0.001
X2.2	0.052	<b>0.954</b>	0.009	-0.091	0.028	Reflect	0.076	<0.001
X2.3	-0.016	<b>0.966</b>	0.000	-0.031	0.035	Reflect	0.076	<0.001
X2.4	-0.029	<b>0.882</b>	0.029	0.217	-0.070	Reflect	0.078	<0.001
X3.1	0.031	0.043	<b>0.878</b>	-0.113	0.133	Reflect	0.078	<0.001
X3.2	-0.025	-0.050	<b>0.894</b>	0.052	-0.151	Reflect	0.077	<0.001
X3.3	-0.006	0.008	<b>0.890</b>	0.059	0.021	Reflect	0.077	<0.001
Z1.1	-0.161	0.023	-0.035	0.690	0.070	Reflect	0.082	<0.001
Z2.2	0.108	-0.017	0.059	<b>0.887</b>	-0.109	Reflect	0.077	<0.001
Z1.2	0.111	0.026	0.161	<b>0.905</b>	-0.042	Reflect	0.077	<0.001
Z2.3	-0.233	-0.064	-0.474	<b>0.365</b>	0.234	Reflect	0.089	<0.001
Y1.1	0.142	-0.054	0.298	-0.223	<b>0.823</b>	Reflect	0.079	<0.001
Y2.2	-0.152	0.133	0.036	0.006	<b>0.836</b>	Reflect	0.078	<0.001
Y1.2	-0.239	0.005	-0.543	0.299	<b>0.578</b>	Reflect	0.084	<0.001
Y2.3	0.220	-0.104	0.058	0.009	<b>0.674</b>	Reflect	0.082	<0.001

Source: Primary data processed, 2020

Based on the loading factor value table above, the indicator on the variable Attitude, X1.1 = 0.801; X1.2 = 0.801; X1.3 = 0.849; X1.4 = 0.852; > 0.5 then it fulfills convergent validity. The results of the analysis in the table above show that all indicators in the research variables, namely variable Attitude, Subjective Norm, Perceived Behavioral Control (PBC), Intention, and Behavior, have a

loading factor of > 0.5, so these indicators meet convergent validity.

**b. Discriminant Validity**

If the root of AVE is greater than the correlation of these variables, the discriminant validity is fulfilled. The cross loading value can be seen in the table below:

**Table 4 Cross Loading Value**

*****					
* Correlations among latent variables and errors *					
*****					
Correlations among l.vs. with sq. rts. of AVEs					
-----					
	Attitude	Subjective Norm	Perceived Behavioral Control	Intention	Behavior
Attitude	<b>0.826</b>	0.358	0.375	0.398	0.419
Subjective Norm	0.358	<b>0.937</b>	0.306	0.316	0.362
Perceived Behavioral Control	0.375	0.306	<b>0.887</b>	0.682	0.481
Intention	0.398	0.316	0.682	<b>0.744</b>	0.567
Behavior	0.419	0.362	0.481	0.567	<b>0.736</b>

Source: Primary data processed, 2020

The table above shows that the square root value of AVE is greater than its correlation value with other variables. For example, for the variable Attitude with 4 indicators (X1.1 to X1.4), the root AVE = 0.826 is greater than the correlation value with other variables of 0.358; 0.375; 0.398; 0.419 as well as for other variables so that the variable Attitude is met with the discriminant validity. Overall, it shows that all research variables, namely Attitude, Subjective Norm, Perceived Behavioral

Control (PBC), Intention, and Behavior, have a square root value of AVE greater than their correlation value with other variables, so discriminant validity is met.

**c. Composite Reliability**

The reliability of constructs is measured by the value of composite reliability, if the construct is reliable, if the value is above 0.70, the indicator is said to be consistent in measuring its latent variables.

**Table 5 Composite Reliability Value**

Composite Reliability Coefficients		
-----		
	Composite Reliability Coefficients	Cronbach's Alpha Coefficients
Attitude	0.896	0.844
Subjective Norm	0.966	0.953
Perceived Behavioral Control	0.917	0.865
Intention	0.820	0.700
Behavior	0.822	0.708

Source: Primary data processed, 2020

The test results show that the construct (variable) has a composite reliability value greater than 0.7, so it is reliable.

**Inner Model**

The inner model test is seen from the R-square value in the inter-variable variance equation.

**Table 6 R-Square Value**

R-squared coefficients	
-----	
	<b>R Square</b>
Attitude	
Subjective Norm	
Perceived Behavioral Control	
Intention	0.496
Behavior	0.439

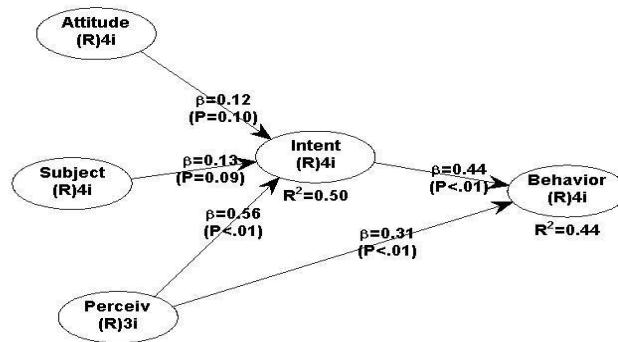
Source: Primary data processed, 2020

Value R2 (Intention) = 0.496. It can be interpreted that the model is able to explain the phenomenon / problem of Intention by 49.60%. While the rest (50.40%) is explained by other variables (other than Attitude, Subjective Norm,

and Perceived Behavioral Control (PBC)) which have not been included in the model and error. It can be concluded that the variable is moderate because the value is close to 0.50.

Value R2 (Behavior) = 0.439. It can be interpreted that the model is able to explain Behavior phenomena / problems. Behavior of 43.90%. While the rest (56.10%) is explained by other variables (besides Attitude, Subjective Norm, and Perceived Behavioral Control (PBC)) which have not been included in the model and error. It can be concluded that the model is moderate approaching strong because the value is close to 0.50.

Analysis and evaluation of the structural model (inner model) can be seen in the figure below:



**Pict 1** Structural Model (*Inner Model*)

**Hypothesis Testing Results**

Decision making on acceptance of the hypothesis uses a significance value  $\alpha = 0.10$  or 10%. If the

P-Value <0.10, it can be concluded that the hypothesis is accepted or significant. The following is a table of the results of hypothesis testing:

Table 7 Hypothesis Testing Results

*****			
* Path coefficients and P values *			
*****			
	Path Coefficients	Standard Error for Path Coefficients	P-Values
Attitude -> Intention	0.122	0.095	0.100
Subjective Norm -> Intention	0.129	0.095	0.088
Perceived Behavioral Control -> Intention	0.560	0.084	<0.001
Perceived Behavioral Control -> Behavior	0.312	0.090	<0.001
Intention -> Behavior	0.439	0.087	<0.001

Source: Primary data processed, 2020

Based on the table above, the results of hypothesis testing in this study show that all p-values are <0.10, it can be concluded that hypothesis 1 to hypothesis 5 is accepted.

**CONCLUSION**

Based on the results of the above tests, several conclusions can be formulated as follows:

1. In this study, employees who have a good attitude will also have good intentions. However, when the employee's attitude is bad, there will be an intention not to apply K3 at work.
2. In this study, employees who have a good people environment will also have good intentions. However, when people around employees are bad, there will be an intention not to apply K3 at work.
3. In this study, employees who have strong self-control will have good intentions. However, when employees have weak self-control, there will be an intention not to apply K3 at work.
4. In this study, employees who have good intentions will have good behavior. However, when employees have bad intentions, behavior will appear not to apply K3 at work.
5. In this study, it is concluded that employees who have strong self-control will have good behavior. However, when employees have weak self-control, behavior will emerge not to apply K3 at work.

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