The Effect Of Self Efficacy And Hope On Occupational Health Behavior In East Java Of Indonesia

Hamidah Nayati Utami, Samingun Handoyo, Sandra

Abstract: The high number of sick workers both physically and psychologically raises concerns that cannot be considered ordinary because they can have systemic effects. Therefore, the purpose of this article is directed at assessing the effect of social content (self-efficacy and hope) on occupational health behavior. The method used is exploratory with the aim of finding causal relationships between variables. The unit of analysis of this research is employees at three electric power companies in East Java. The research sample technique was determined using a proportional random sampling method with a total sample of 117 employees. Data collection techniques using questionnaires and interviews which are then analyzed with a simple correlation test. The results show that, 1) self efficacy (X1) correlates significantly with occupational health behavior variables (Y); 2) self efficacy (X1) correlates significantly to the expectation variable (X2); and 3) expectations (X2) correlate significantly with occupational health behavioral variables (Y). Thus, recommendations that can be given to policy makers in the internal scope of the company as well as suggestions for stakeholders are that a breakthrough or written policy is needed that specifically addresses issues related to occupational health, with the hope that various health problems can be suppressed, and foster workplace health behavior in the work environment. To improve the quality and quantity of work for both individuals and companies.

Index Terms: correlation, government policy, hope, indicators, latent variables, Self-efficacy, work health behavior

1 INTRODUCTION

Occupational safety and health are two main components that must be taken seriously in business development. A survey conducted by the International Labor Office (ILO) explained that every year there are more than 250 million accidents at work and more than 160 million workers become sick because of hazards at work. Moreover, 1.2 million workers die as a result of accidents and illness at work [1]. From the survey, it is understood that both safety and health have the same weight if it is related to the impact that will have on the smooth running of the business. However, there are no articles in detail that examine the field of occupational health as an independent part. Even though health is a major factor in the implementation of safety and success of the work itself. In an effort to overcome public concerns, the government of the Republic of Indonesia issued a health policy which also regulates health in the workplace. The policy in question is Law number 36 of 2009 concerning health. In Article 165 paragraph (1) it is stated that “The workplace manager is required to carry out all forms of health efforts through efforts to prevent, enhance, treat and restore labor for the workforce”; Paragraph (2) contains "Workers must create and maintain a healthy workplace health and comply with regulations that apply to the workplace". These two verses provide evidence that all business units are officially registered by the Indonesian government should be of good quality in the field of good occupational health management because there are already binding regulations. The company is obliged to examine the physical health, mental conditions and physical abilities of new workers and those who will be transferred to new workplaces, according to the nature of the work provided to the workers, as well as periodic checks. In fact, the laws and regulations that have been set by the government have not been perfectly practiced by the company and the individual business actors. This condition can be seen from the occupational health data presented by the Information Center of the Ministry of Health of the Republic of Indonesia in 2016 [2], namely 26.7% of the Indonesian population who work have complaints about health problems that indicate a behavior towards occupational health is still faced with complicated problems. When viewed from the type of work, the highest percentage of health complaints was found in agricultural work with 29.27% followed by the hotel & restaurant trade 27.88%, while the manufacturing industry had complaints of 24.84%. In another sense, evaluation and improvement of occupational health behavior in work environments in Indonesia must be done seriously. For example, in jobs in the manufacturing industry such as the location of this study, PJB (Java Bali Power Plant) is a company with a category of health risk that is quite high. Both companies have hydrogen plant units that use to function to produce hydrogen gas by the process of electrolysis, but because the operation process has a high risk, so since 2007 the hydrogen plant is now a hydrogen storage that only functions as a storage place for hydrogen gas in vessels. Potential fire hazards and explosions in hydrogen storage tanks can occur if there is a leak in a storage vessel, a leak in a relief valve or a leak in a hydrogen gas pipeline. These risks will ultimately have an impact on the occupational health of employees who work in them if not managed properly. This kind of data shows that there is still a real threat to occupational health. If you see the potentials that result in tank leakage, fire and explosion will result in various health risks such as respiratory problems, burns, physical disability, to the loss of a person’s life. In addition, other health threats such as injuries from sharp objects, falling from a height caused by not using the specified safety standards or respiratory disorders caused by dust. Also a real threat to workers. Based on the various problems experienced by workers, the company provides a strict policy regarding occupational safety and health, so that there are no more work accidents and health problems even in the mild category. Therefore health awareness can be realized through understanding the importance of occupational health behavior. This is important because if employees experience health problems, they cannot work optimally, and will certainly have an impact on their productivity at work, both in quality and quantity. In addition there will be more costs to restore health. Based on the various problems experienced by workers, the company
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2. LITERATURE REVIEW

Conner and Norman Apply social cognition models to predicted the performance of health behavior. Social cognition models start from the assumption that an individual's behavior is best understood in term of his or her perceptions of social environment [3]. Long term sickness absence (LTSA) is a major public health problem. Christensen, et al. examined the impact of four, potentially modifiable, health behaviors, such as smoking, alcohol consumption, leisure time physical activity, and the associated variable of body mass index on the risk of subsequent LTSA. In women, ex-smokers and heavy smokers had an increased risk of LTSA of 1.61 and 2.05 respectively after adjustment for age, family status, socio economic status, school education, physical and psychosocial work environment exposures and diagnosed disease. In men, effect estimates were smaller and only borderline significant in the fully-adjusted model. The etiologic fraction of smoking was 17.4% in men and 25.5% in women [4]. Kelly and Barker suggested that six common errors made by policy makers prevent the successful implementation of health-related behaviour change caused the extensive body of evidence of how to bring about behaviour change is consistently ignored. The automatic and reflective systems described in psychology and social practice theory described in sociology are particularly important new areas for developing ideas about behaviour change [5]. To realize occupational health, of course, can not be separated from the factors that influence and support the realization of work safety behavior. Bandura [6] argues that self-efficacy is a major factor that influences both directly and indirectly by influencing other determinants of occupational health behavior. Self-efficacy can be understood as the perception of a person's ability to perform certain behaviors, this has been widely used in the field of psychology to understand and predict various behaviors [7]. Bandura's opinion is similar to Luthan, et al [8] whose define self-efficacy as a belief or self-confidence about one's ability to direct motivation, sources of cognition, and take a number of actions needed to achieve success in carrying out tasks in a particular context. When seen from the understanding and the relationship of self-efficacy to work behavior, it can be understood that with the confidence possessed in carrying out health behaviors will be able to trace the way a person applies work health behavior properly and correctly. This is supported by the results of research conducted by Hevey, et al [9] showing that self-efficacy is a fundamental variable in understanding and predicting health behavior. In addition, self-efficacy is also understood as an important determinant of occupational health behavior. This is because self-efficacy plays an important role in starting, maintaining, controlling, choosing to stop, and avoiding a number of health behaviors. Hevey, et al [9] also mentioned self-efficacy plays an important role not only in the formation of intentions but also in determining the actual health behavior. Self efficacy is not only one important determinant for the realization of occupational health behavior, but also affects other factors that can shape occupational health behavior. One of them is hope. In the opinion of Snyder [10] in Bernardo [11], hope is understood as a state of positive motivation and one's ability to achieve goals. As with optimism, expectations involve expectations of achieving goals, but expectations also involve a cognition of one's determination and commitment to achieve goals, and plans and strategies to achieve those goals. Hope and optimism have been suggested as an important component of psychological well-being and as a factor that can contribute to good physical health. Furthermore, the link between self-efficacy and expectations is then explained by Magaletta and Oliver (1999) in Sullivan [12] which states that self-efficacy and expectations are interrelated but are not identical. Both are connected by core expectations and are conceptualized as sets of cognitive that (a) relate to individual outcomes (b) relate to the future and (c) strong determinants of behavior”. Therefore self-efficacy is described as having a correlation to expectations . In addition to self-efficacy, hope is one of the factors also related to occupational health behavior. This is because mental processes are related to expectations that have a contribution to overall individual health, produce positive emotions, and influence behavior related to preventing negative effects both primary and secondary causes of stressors [13-17]. In the opinion of Synder [10] Expectations relating to mental health, physical health, and well-being. Therefore the realization of occupational health behavior arises due to the hope to realize or achieve the desired goals, in this case, occupational health. Referring to the discussion and elaboration of the problems that have been elaborated as far as possible about the concepts of self-efficacy, expectations, and behaviors of occupational health, it can be seen that all three have interrelationships with each other. So that in this article will be discussed and presented further research results.

3. RESEARCH METHOD

This research is an explanatory research with the aim to find causal relationships between variables. The unit of analysis of this research is employees at three electric power companies in East Java, Indonesia. The research sample technique was determined using a proportional random sampling method with a total sample of 117 employees from three power plants in Probolinggo, East Java. Data collection techniques used questionnaires and interviews in 2017. Respondents in this study were asked to show approval of each statement measured on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire in this study was further tested and revised before and then tested on the entire study sample. The questions in the study were targeted at previous research and discussions with experts. 27 items from 3 variables were selected to compile the questionnaire and then the data from the answers to the questionnaire were analyzed with a simple correlation test.

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics of research variables

Distribution of respondents' answers in this study were obtained through recapitulation of the results of the questionnaire presented and filled out by 117 respondents.
Furthermore, these results can be seen from the data presented in Table 1.

**TABLE 1**

**SUMMARY STATISTICS OF RESEARCH INDICATOR VARIABLES**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Indicator Variables</th>
<th>Mean of indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Efficacy (X1)</td>
<td>Magnitude (X11)</td>
<td>4.14</td>
</tr>
<tr>
<td></td>
<td>Strength (X12)</td>
<td>4.09</td>
</tr>
<tr>
<td></td>
<td>Generality (X13)</td>
<td>4.11</td>
</tr>
<tr>
<td>Hope (X2)</td>
<td>Goals (X21)</td>
<td>4.08</td>
</tr>
<tr>
<td></td>
<td>Pathways (X22)</td>
<td>4.12</td>
</tr>
<tr>
<td></td>
<td>Agency (X23)</td>
<td>4.03</td>
</tr>
<tr>
<td>Work Health Behavior (Y)</td>
<td>Occupational health (Y1)</td>
<td>4.19</td>
</tr>
<tr>
<td></td>
<td>Healthy living patterns (Y2)</td>
<td>4.23</td>
</tr>
<tr>
<td></td>
<td>Maintain personal health (Y3)</td>
<td>4.28</td>
</tr>
<tr>
<td></td>
<td>Maintain a healthy work (Y4)</td>
<td>4.01</td>
</tr>
<tr>
<td></td>
<td>Support efforts (Y5)</td>
<td>4.04</td>
</tr>
<tr>
<td></td>
<td>Periodic health checks (Y6)</td>
<td>3.96</td>
</tr>
<tr>
<td></td>
<td>Occupational health reports (Y7)</td>
<td>4.26</td>
</tr>
</tbody>
</table>

Table 1 describes the statistics of latent variables and their indicators. The latent variable self-efficacy has an average level of 4.09 to 4.14. From overall, magnitude is an indicator with the highest average value. Magnitude is the level of difficulty that is believed by individuals to be resolved. Confidence in resolving various levels of difficulty shows that there is a positive impetus that will have an impact on behavior in solving various problems related to employee health at work. While the second highest average value is generality which is understood as how widespread the behavior will succeed. And finally, strength indicator is understood as confidence to achieve certain performance. If seen from the average overall self-efficacy variable shows a good value of 4.11. The average value of all indicators of the Hope latent variable has an average range of 3.95 to 4.28. If seen in Table 1, the average value of the highest indicator is shown by the indicator of having an attitude of maintaining personal health, this illustrates that the respondent reflects the positive attitude of maintaining personal health as an occupational health behavior in the work environment. This condition will certainly minimize the occurrence of health problems at work. The second is shown by indicators providing data on occupational health reports and third are indicators that show that employees have knowledge of healthy lifestyles. The average value on the variable health work behavior shows a good value that is equal to 4.13.

4.2. The hypothesis test results

Based on the empirical model that was compiled and proposed in this study, as well as conducted using the simple correlation method. Then the results of hypothesis testing are done by looking at the significant value that yields from the data processing. Furthermore, to see the magnitude of the value of the influence of each hypothesis can be seen through the value of arithmetic or person correlation on each relationship between variables arranged in a hypothesis. To find out the results of the next hypothesis testing process is presented in Table 2.

**TABLE 2**

**HYPOTHESIS TEST RESULTS FOR THE RELATIONSHIP BETWEEN LATENT VARIABLES**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>r_stat</th>
<th>r_table</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Self Efficacy -&gt; Hope</td>
<td>0.793</td>
<td>0.151</td>
<td>0.000</td>
</tr>
<tr>
<td>H2</td>
<td>Self Efficacy -&gt; Work Health Behavior</td>
<td>0.437</td>
<td>0.151</td>
<td>0.000</td>
</tr>
<tr>
<td>H3</td>
<td>Hope -&gt; Work Health Behavior</td>
<td>0.387</td>
<td>0.151</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 2 shows some results which are a. self-efficacy has a significant positive correlation with expectations indicated by the sig. 0.000 <0.05 with r count value of 0.793 > r table of 0.151. The first person correlation value (H1) is included in the strong category, b. self-efficacy has a significant positive correlation with work health behavior as indicated by the sig value. 0.000 <0.05 with a calculated r-value of 0.437 > r table 0.151, the value of the second hypothesis correlation (H2) is categorized as moderate, and c. hope is significantly positively correlated with work health behavior, which can be seen from the sig value. 0.000 <0.05 with a calculated r-value of 0.387 > 0.151. The value of the third hypothesis person correlation (H3) is relatively weak. Based on the elaboration of the three results of this research hypothesis test, it can be concluded that:

1. Model 1: Self Efficacy is positively and significantly correlated with Hope
2. Model 2: Self Efficacy is positively and significantly correlated with occupational health behavior
3. Model 3: Expectations are positively and significantly correlated with occupational health behavior

The results of hypothesis testing described in Figure 1.

![Figure 1. Work Health Behaviour Improvement Model](image_url)

4.3. The Effect of Self-Efficacy on Hope

The results of the first hypothesis test of this study indicate
that there is a positive and significant correlation between the Self Efficacy variable (X1) and the Hope variable (X2). The result shows a strong correlation between both variables. The strong correlation means that describes what a person’s confidence in his ability to master the situation and produces something that is expected or can be called self-efficacy can affect expectations. It can also be interpreted when one’s self-efficacy is fairly high then one’s expectation is high. The relationship between these two variables (self-efficacy and hope) is then explained by (Magaletta and Oliver 1999), Sulivan (2010) stated that self-efficacy and hope are interrelated but are not identical. Both are connected by core expectations and are conceptualized as sets of cognitive that relate to individual outcomes, the future, and strong determinants of behavior. Through Self-Efficacy which is understood as the perception of a person’s ability to perform certain behaviors is expected to bring up actions from within employees which are then understood as expectations. Through encouraging, employee confidence will create a thought towards a goal by involving a motivation to achieve the goals in ways that are believed to succeed to make it happen.

4.4. The Effect of Self-Efficacy on Work Health Behaviors

The resulting test of the second hypothesis indicates that the Self Efficacy variable (X1) has a significant positive correlation to the health behavior variable (X2) that is a correlation with the medium category. It can further be understood that if the employee’s self-efficacy is in the high category, their work health behavior will also be high. The result confirms the opinion stated by Hevey et al., (1998) which showed that self-efficacy was a fundamental variable in understanding and predicting health behavior. Thus it can be stated that self-efficacy is important for occupational health behavior because self-efficacy plays an important role in starting, maintaining, controlling occupational health behavior. In addition, with the emergence of confidence supported by the ability of cognition related to work safety, employees will tend to be motivated to maintain and implement various efforts to realize occupational health and avoid anything that harm themselves and others in terms of occupational health in the work environment. The results of research conducted by Hevey et al. (1998) showed that self-efficacy is a fundamental variable in understanding and predicting health behavior. In addition, self-efficacy is also understood as an important determinant of occupational health behavior. This is supported by the opinion of Hevey et al. (1998) which also stated that self-efficacy plays an important role not only in forming intentions but also in determining the actual health behavior. Therefore it is important for companies to encourage employees to have positive perceptions in order to build employee behavior to continue to maintain health. This can be instilled either in writing through regulations by applying reward and punishment to anyone who implements or violates the rules. In addition, it is necessary to create positive habits by providing continuous understanding through seminars, counseling about health and the potential problems that will occur if you do not maintain health at work. So that these habits will lead to health care behaviors that will be entrenched in the company.

4.5. The Effect of Hope on Work Health Behavior

The result of the third hypothesis test showed a positive and significant correlation between the hope (X2) variable and occupational health behavior (Y) variable. It shows a correlation with the weak category if it is viewed from the point of view of the relationship. it can be understood when a person’s expectations of health are high it will correlate to one’s behavior in realizing health in the workplace. Because mental processes are related to expectations that have a contribution to overall individual health, produce positive emotions, and influence behavior related to preventing negative effects both primary and secondary causes of stressors (Snyder & Feldman, 2000; Stajkovic, 2006; Valle, Huebner & Suldo, 2006) in Wandeler et al (2011). Besides someone with high expectations for health, they will tend to have strong physical, mental and emotional health. In line with the opinion of Synder (2002) which stated that expectations are related to mental health, physical health and well-being. Therefore the realization of occupational health behavior arises due to the hope to realize or achieve the desired goals, in this case, occupational health. Hope is important for occupational health behavior. Employees with high expectations to always maintain health while working will prepare themselves and strive to make it happen continuously. They will tend to fight obstacles related to bad behavior toward health. So the goal for healthy behavior at work will be accomplished.

5. CONCLUSION

Based on the analysis of test results of the study, the following conclusions can be drawn

1. The results of the study indicate that the self-efficacy variable (X1) correlates significantly with the occupational health behavior variable (Y) with the Pearson correlation value of 0.793, with a significance value (0.000) <0.05.
2. The results showed that the self-efficacy variable (X1) correlated significantly with the expectation variable (X2). These results indicate a person correlation value of 0.437, with a significance value (0.000) <0.05.
3. The results of the study indicate that the expectation variable (X2) correlates significantly with the occupational health behavior variable (Y). These results indicate a person correlation value of 0.387, with a significance value (0.000) <0.05.

Recommendation

a. For further research, it is expected to review in more depth the factors that shape occupational health behavior in addition to the two variables that have been discussed in this study. One example is optimism and many other variables that are related to the context of this research.
b. Realizing the creation of occupational health behavior requires confidence and the ability of employees' cognition in dealing with various problems that are being faced, especially those related to health. Building self-efficacy can encourage occupational health behavior and will reduce the occurrence of problems related to health.
c. Expectations need to be built so that employees are able to have a positive motivation and the ability to realize work health goals. Due to the encouragement of hope, someone will be younger in constructing goals and will realize them with a stronger push. If the
problems in this study are related to the fact that there are still employees who do not comply with health procedures, it is necessary to instil expectations that can change their mindset and behavior in maintaining health while working.

d. For policymakers in the internal scope of the company as well as suggestions for stakeholders that is needed a breakthrough or written policy that specifically regulates and overshadows issues related to occupational health, with the hope that various health problems can be suppressed, and foster occupational health behavior in the work environment. To improve the quality and quantity within

6 REFERENCES