# Level Of Education, Training Experiences and Level of Knowledge as a Determinant of the Implementation of Ship Fumigation

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#### Abstract

This study aimed to analyze the effect of the level of education, training experience, and knowledge level on the implementation of the fumigation of ships. The research subjects were the implementers of fumigation at The Ship "Perintis" in the Yos Sudarso Port, Ambon, Maluku Province, Indonesia. Data were collected through questionnaires, then analyzed by using path analysis. The results of data analysis showed that the level of education and training experiences, indirectly affect the implementation of the fumigation of ships, by the level of knowledge as an intermediate variable. Thus, the level of knowledge directly affect the implementation of the fumigation of ships.

Key words: Education, Training, Knowledge, Ship Fumigation.

## I. INTRODUCTION

Efforts have been made by the government of the Republic of Indonesia in order to eradicate rats on the ship, is through fumigation. With these efforts, Indonesia is expected to be freed from the the bubonic plague, given in African countries such as Congo, Madagascar, Malawi, Mozambique, Namibia, Tanzania, Uganda, Zambia, and Zimbabwe; and American countries such as Bolivia, Brazil, Ecuador, and Peru; also Vietnam in Asia is endemic of bubonic plague (Suryawan, 2013).

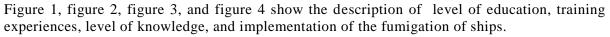
Based on the above background, it is necessary to do research on the factors that affect the implementation of the fumigation of ships, particularly the factors that come from implementers fumigation. Thus, the purpose of this study was to analyze the effect of the level of education, training experience, dann level of knowledge, on the implementation of the fumigation of ships.

#### II. RESEARCH METHOD

The following was a description systematically about the implementation of the methods used in the study:

1.	Type of research	:	Survey (non experimental)		
2.	Design	:	Cross sectional		
3.	Location	:	Working area of Port Health Office (KKP) Class II, Ambon,		
			Maluku Province, Indonesia		
			(The Ship "Perintis" at Yos Sudarso Port, Ambon)		
4.	Time	:	2016		
5.	Variables	:	<ol> <li>Independent variables: 1) level of education, 2) training experiences</li> </ol>		
			2) Intermediate variable: Level of knowledge		
			3) Dependent variable: implementation of the fumigation of ships		
6.	Data collection	:	Data were collected by using questionnaire about the level of		
			education, training experiences, and level of knowledge		
7.	Data analysis	:	Data were analyzed by using path analysis		

## III. RESULTS



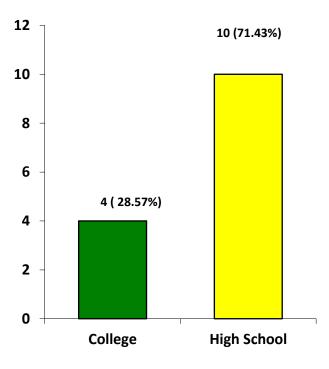


Figure 1: Distribution of the level of education

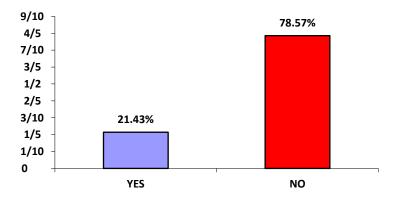


Figure 2: Distribution of the training experiences

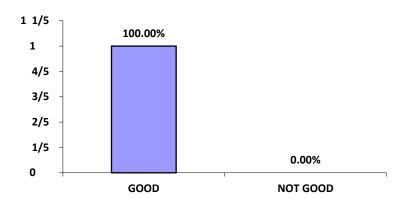
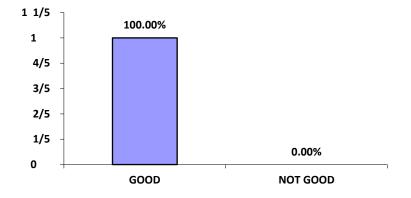
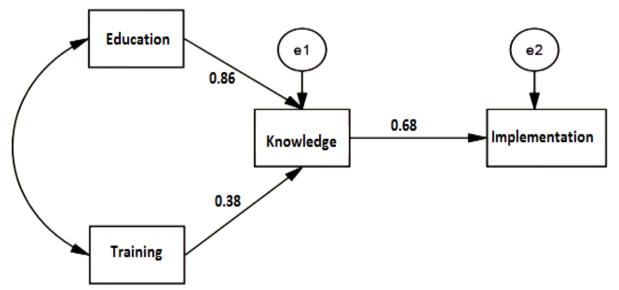


Figure 3: Distribution of the level of knowledge



**Figure 4: Distribution of the implementation of fumigation** 

Figure 5 show and table 1 show the results of hypothesis testing.



#### Figure 4: The results of path analysis

No	Path	Path coefficients			
No	Fau	Direct effects	Indirect effects	Total effects	
1	Education> knowledge	0.856	-	0.856	
2	Training> knowledge	0.383	-	0.383	
3	Knowledge> implementation	0.679	-	0.679	
4	Education> implementation	-	0.582	0.582	
5	Training> implementation	-	0.260	0.260	

Table 1: Path coefficients at the direct effects, indirect effects, and total effects

# IV. DISCUSSION

The results of path analysis showed that the level of knowledge of the implementers of fumigation, directly affect the implementation of the fumigation, with a strong degree of influence, with the direction of influence was positive. It can be said that the better the level of knowledge of the implementer, it will be better the implementation of the fumigation by him/her. The results of this study in accordance with the statement delivered by Morissan (2010) that humans have the ability and capacity to understand an object and using it as a symbol that allows human beings to store, process and transforms the experience into various cognitive models that will guide them in performing various actions or make decisions in the future.

The results of data analysis showed that the level of education of the implementers of fumigation, indirectly affect the implementation of the fumigation, by the level of knowledge as an intermediate variable. The degree of influence was moderate, with the direction of influence was positive. It can be said that the better the level of education of the implementer, it will be better the implementation of the fumigation by him/her. According Entjang (2000), the level of education of a person can affect the way he/she thinks. If a person has a high level of education, the way of thinking is becoming more widespread. This is demonstrated by the various activities carried out daily.

The results of study showed that the training experiences of the implementers of fumigation, indirectly affect the implementation of the fumigation, by the level of knowledge as an intermediate variable. Although the degree of influence was weak, but the direction of influence was positive. It can be said that the better training experience of the implementer, it will be better the implementation of the fumigation. Training is a medium for the community to improve their knowledge, attitudes, and skills about certain objects, including fumigation of ships. Therefore, in order that the implementers of fumigation of ship has adequate knowledge and skills, we need to hold training programs, either inside or outside the workplace. Referring to the PP RI No. 31 In 2006, the training program can be administered by a government agency or non-governmental organizations.

# V. CONCLUSION

Based on the results of the study concluded that:

- 1) The level of education indirectly affect the implementation of the fumigation of ships, by the level of knowledge as intermediate variable.
- 2) The training experiences, indirectly affect the implementation of the fumigation of ships, by the level of knowledge as intermediate variable.
- 3) The level of knowledge directly affect the implementation of the fumigation of ships.

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