# Validation of The Mobile Training Management to Improve The Quality Results Training

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| Sections Info | ABSTRACT |
|---|---|
| | The success of the training can be seen from how the activation process takes place. One of them is by designing an innovative training model. This research aims to analyze results validation of the mobile training management model. This research uses descriptive quantitative analysis in determining the level of validation of research instruments. This research method uses descriptive quantitative research to assess the level of validation of the research instrument. The sample of this research is the participants of basic level seafaring training at the Surabaya Shipping Polytechnic, the Director of the Surabaya Shipping Polytechnic, and local government employees related to mobile training activities. The research was analyzed based on results validation of the training and education management experts. The results reserach show that the mobile training model instrument is declared valid. Results of expert assessment from training management and managing education are categorized as good. This shows that the mobile training development model in improving the quality of education and training is worthy of further research. |

## INTRODUCTION

The increasing number of fleets in sea transportation modes aligns with Indonesia's vision as the world's maritime axis. The government has created a sea toll program that is manifested in increasing the construction of piers on every island in Indonesia. It increased the demand for the number of Indonesian seafarers. To overcome these problems, each UPT under the auspices of the BPSDM for Sea Transportation organizes a basic training program for prospective seafarers (Malau et al., 2019). The basic training program for future seafarers aims to educate and train every Indonesian citizen who wants a career as a seafarer (Gupron et al., 2021).

It is essential to have work safety awareness. Shipowners need to provide passenger safety facilities. And seafarers who have basic safety skills for crew members can do their job. So that if there is a ship accident, the victim can be avoided as early as possible (Wang et al., 2018; Kurniawan et al., 2021). This essential ability is obtained through training for prospective seafarers who have several specifications according to the ship to be used (Prayogo, 2021; Rachman and Simanjuntak, 2019).

One of the efficiency measures is a need for development research related to mobile training or mobile training (Anh et al., 2019; Chin et al., 2016; Bas & Sarigöz, 2018; Gloria and Oluwadara, 2016). The virtual training team for prospective seafarers from Poltekpel Surabaya visited future seafarers in each area. The mobile training research method will facilitate the training process (Kononets and Nestulya, 2020) and reduce training costs. The training was conducted at Poltekpel Surabaya using the mobile training method so that the quantity of budget needed to be improved. There

must be prepared in terms of budget management, management of training facilities (Butler et al., 2021), management of human resources involved (Gumilar and Taufiq, 2016), management of operational strategies for training prospective seafarers at the basic level (Prayogo, 2020).

Before conducting training, innovation is needed to improve the quality of training results. Preparation is required before training is given. One of the preparations for implementing mobile training model training is compiling instruments or devices to develop mobile training models. The model that has been designed needs to be assessed by experts (Wulandari and Ernawati, 2019). The assessment was conducted to determine the level of validity and reliability of the developed model. So this research aims to analyze the results of the validity of the mobile training management model. This research will be used as a reference in testing the application of the mobile training management model.

## RESEARCH METHOD
### General Background
This research uses descriptive quantitative analysis in determining the level of validation of research instruments. This type of research is development research that aims to develop mobile training management for coastal communities in East Java at the Surabaya Shipping Polytechnic. This research requires instrument validation before implementing the mobile training management model.

### Sample research
The sample of this research is the participants of the basic level seafaring training of the Surabaya Shipping Polytechnic, the head of the navigational skills training, the Director of the Surabaya Shipping Polytechnic and local government employees related to mobile training activities. And the sampling of data sources is done by purposive sampling.

### Instrument
This assessment instrument includes an expert assessment instrument for training management and an expert assessment instrument for education management. The training management expert assessment instrument has several components: material coverage, training processes/activities, presentation, linguistic and instructional. And the expert assessment instrument of education management consists of 2 (two) aspects: the feasibility of the content and the feasibility of presentation. The content feasibility aspect has 4 assessment components: material coverage, material accuracy, compliance with laws and regulations, and skills dimensions. The presentation feasibility aspect has a presentation technique component and supports the material presented.

### Procedures
The first time researchers analyzed research problems related to the implementation of basic seafarer training. Then explore the coupled model used. Next, compose a validation sheet instrument. The instrument validation sheet is prepared based on the expert assessment of training and education management. Next, determine the experts in assessing the model used. Processing data and analyzing validation results from training and education experts.
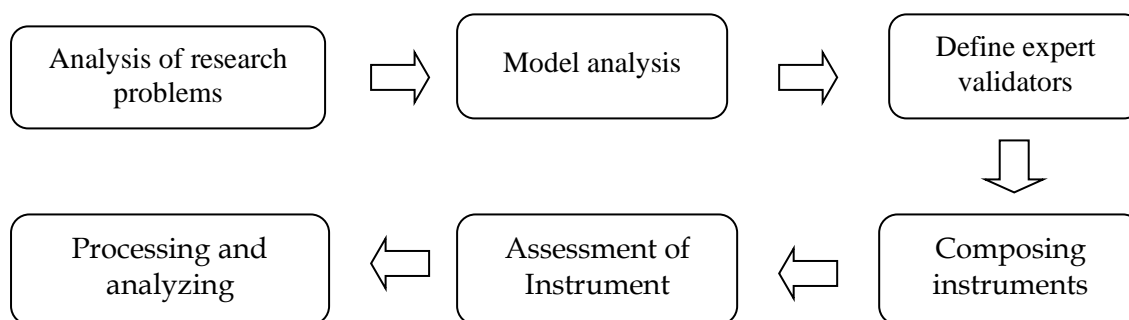
**Figure 1.** Flowchart of research procedure.

### Data Analysis

Validator analysis is carried out based on two things: 1) analysis of the calculation of the validation of the training management expert; 2) the analysis of the calculation of the validation of the expert on the validation of the education management. Analysis of the assessment of training experts by giving points of value from each aspect. Aspects that have been assessed can be further tested by revising or maybe not, depending on the range obtained in this research. The scoring criteria for each component are presented in Table 1 below.

**Table 1.** Assessment criteria score calculation validation expert training management.

| No | Range | Criteria | Information |
|----|-------|----------|-------------|
| **Assessment criteria score component of the training process/activity** | | | |
| 1 | 1-5 | Very low | Revised |
| 2 | 6-10 | Low | Revised |
| 3 | 11-15 | Medium | No revision needed |
| 4 | 16-20 | Good | No revision needed |
| **Presentation component score assessment criteria** | | | |
| 1 | 1 - 2 | Very low | Revised |
| 2 | 3 - 4 | Low | Revised |
| 3 | 5 - 6 | Medium | No revision needed |
| 4 | 7 - 8 | Good | No revision needed |
| **Criteria for assessment of language and instructional component scores** | | | |
| 1 | 1 - 4 | Very low | Revised |
| 2 | 5 - 8 | Low | Revised |
| 3 | 9 - 12 | Medium | No revision needed |
| 4 | 13 - 16 | Good | No revision needed |

Table 1 shows that each indicator consists of 4 categories. The categories are 1) Very low, 2) low, 3) medium, and the last is 4) Good categories. Revision should do if the category is deficient and low. However, no correction is required if it is categorized as medium and good. The assessment of education management experts consists of 2 (two) aspects, namely, the feasibility of the content and the feasibility of presentation. Analysis of the assessment of education management experts by giving points of value from each aspect. Aspects that have been assessed can be further tested by revising or not, depending on the range obtained. The criteria to evaluate the score of education management experts are presented in Table 2, which name assessment criteria score calculation validation of education management experts

**Table 2.** Assessment criteria score validation of education management experts.

| No | Range | Criteria | Information |
|---|---|---|---|
| **Criteria for Scoring Component Coverage and Accuracy of Materials and Skill Dimensions** | | | |
| 1 | 1 - 3 | Very low | Revised |
| 2 | 4- 6 | Low | Revised |
| 3 | 7 - 9 | Medium | No revision needed |
| 4 | 10 - 12 | Good | No revision needed |
| **Criteria for Scoring Component Compliance with Laws and Regulations** | | | |
| 1 | 1 - 2 | Very low | Revised |
| 2 | 3 - 4 | Low | Revised |
| 3 | 5 - 6 | Medium | No revision needed |
| 4 | 7 - 8 | Good | No revision needed |
| **Assessment Criteria for Presentation Technique Components and supporting materials** | | | |
| 1 | 1 - 3 | Very low | Revised |
| 2 | 4- 6 | Low | Revised |
| 3 | 7 - 9 | Medium | No revision needed |
| 4 | 10 - 12 | Good | No revision needed |
| **Aspects of Language Presentation and Motivation** | | | |
| 1 | 1 - 2 | Very low | Revised |
| 2 | 3 - 4 | Low | Revised |
| 3 | 5 - 6 | Medium | No revision needed |
| 4 | 7 - 8 | Good | No revision needed |

After the assessment score is obtained, it is analyzed using the percentage agreement equation, namely: agreement percentage = (validator score / maximum score) x 100%. The instrument is declared valid if the percentage score obtained is more than equal to 60% (Monalisa & Trapsilasiwi, 2016).

## RESULTS AND DISCUSSION
Results of products that have been developed, the next step is to validate the experts. Expert validators who provide assessments are design experts, training management experts, and education management experts.

*Assessment Results of Training Management Experts*
The results of the expert assessment of training management have several assessment components, namely material coverage, training processes/activities, presentation, linguistic and instructional. After validating the research instrument, the training management expert assessment score is obtained in Table 3.

**Tabel 3.** Score validation aspects of training management expert assessment.

| No | Rating Points | Score |
|---|---|---|
| **Components Coverage** | | |
| 1 | Preliminary | 3 |
| 2 | Scope and scope of material | 3 |
| 3 | The suitability of the material with the training | 3 |
| 4 | Materials Process/training activities | 3 |
| **Components of the training process/activity** | | |
| 1 | Ability to develop models to explain in detail the duties and responsibilities | 3 |
| 2 | The influence of the development of the Mobile Training model on work attitudes | 3 |
| 3 | The effect of developing the Mobile Training model on knowledge | 3 |
| 4 | Effect of Mobile Training model development on training management | 3 |
| 5 | Availability of training media | 2 |

| No | Rating Points | Score |
|---|---|---|
| **Components of Serving** | | |
| 1 | Training flow consistency | 3 |
| 2 | Clarity of committee's duties is presented in SOP | 3 |
| **Language and instructional components** | | |
| 1 | Ability to explain information to the Mobile Training implementation committee | 3 |
| 2 | Can encourage the committee to imagine the training | 3 |
| 3 | Correct sentence structure | 3 |
| 4 | Standard use of the term | 3 |

Table 3 shows that the validation score on the assessment aspect of training management experts gets an average score of 3. The average score of 3 in the analysis calculation is a good category that does not require revision. It shows that mobile training model development instrument in the management aspect of training is declared valid and feasible to be tested on research respondents. The mobile training model has been feasible to be tested during the training. Table 3 shows one aspect of the process component with a score of 2 moderate categories. The element of the availability of training media requires a minor revision. Overall, the management of mobile training is declared valid. This is in line with Liliarti and Kuswanto (2018), which states that an instrument declared valid is feasible to be tested in a broader range of respondents. A good management model through assessment in the scope of material, process, presentation, and language (Mabruri et al., 2019).

To find out the percentage of each score from the assessment component of the training management validation score, the graph in Figure 2 below is obtained.
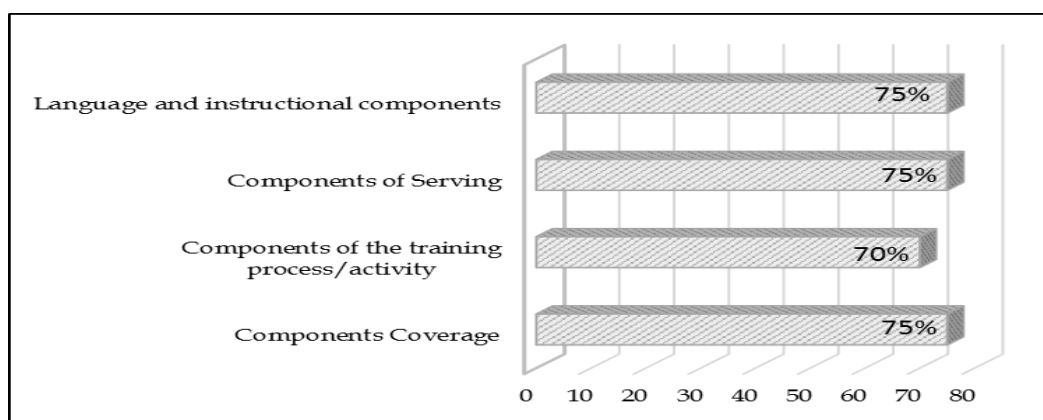


**Figure 2.** Graph of percentage validation score of training management component.

Figure 2 shows that the percentage of training management component validation scores is in a good category. Both the introduction and the material in delivering the training activities have been well prepared in terms of material coverage. During the training, the material available in implementing the mobile training model must be carefully crafted. The mobile training model requires careful preparation both in material and non-material (Gloria & Oluwadara, 2016). Well-prepared material will make it easier for respondents to understand the concept (Turan & Uzunboylu, 2019). Figure 1 shows the results that the material coverage component obtained a percentage of 75% so that the instrument was feasible to be tested on research respondents.

In the process component of training activities, the percentage is in a good category. In this case, it shows that in addition to the material for the preparation of activities, it is necessary to pay attention to the success of the training. Based on the validator's

assessment, it shows that a detailed explanation of the tasks given to the respondents is good. This is in line with Damopolii & Kurniadi, (2019) that media is needed in conducting mobile training. During a mobile training, attitudes, knowledge, and media are needed during the training process (Marliana et al., 2021; Sumiati et al., 2020).

Then the results of the presentation component validator score obtained 70%. In this component, the consistency of the training flow and the clarity of the task become the judging factors. The mobile training instrument has presented clear material and task flow according to SOP standards. The clarity of the tasks given will focus on the trainees. while the language and instructional components have been well designed. Starting from the ability to explain information to the committee and the use of good and clear language. The accuracy in composing sentences during the training will attract the attention of participants (Vaganova et al., 2019). As well as the preparation of the right language and different intonations encourage participants to be more motivated. Thorough material preparation will improve the quality of the training results.

*Assessment Results of Education Management Experts*
Hasil penilaian ahli manajemen pendidikan terdiri atas 2 (dua) aspek yaitu kelayakan Content and appropriateness of presentation. The content feasibility aspect has four assessment components: material coverage, material accuracy, legal compliance, and skills dimensions. The aspect of presentation feasibility has parts of presentation techniques and supporting material presentation The several assessment components: material coverage, training processes or activities, presentation, language, and instructional. From the assessment by experts, the instrument validation scores in developing education management mobile training are obtained in Table 4 below.

**Table 4.** Validation score of the assessment aspect of education management experts.

| No | Item of evaluation | Skor |
|---|---|---|
| **Content Feasibility Aspect (Component Coverage material)** | | |
| 1 | Completeness of materials in the Mobile Training Model | 3 |
| 2 | The breadth of material in the Mobile Training Model | 3 |
| 3 | Depth of material in the Mobile Training Model | 3 |
| **(Material Accuracy Component)** | | |
| 1 | Image usage accuracy | 3 |
| 2 | Explanation of educational management materials | 3 |
| 3 | Clarity of educational management material flow | 3 |
| **(Component Compliance with Laws and Legislation)** | | |
| 1 | Compliance with intellectual property rights in the mobile training model | 3 |
| 2 | SARA-free mobile training model, pornography | 3 |
| **(Skill Dimension Component)** | | |
| 1 | The linkage of training to the skills aspect | 3 |
| 2 | Clarity of workflow in the Mobile Training Model | 3 |
| 3 | Activity characteristics refer to the approach to achieving the training objectives | 3 |
| **Aspects of Feasibility of Presentation (Components of Presentation Techniques)** | | |
| 1 | Systematic presentation in the Mobile Training Model | 3 |
| 2 | Consistent presentation in the Mobile Training Model | 3 |
| 3 | Presentation Logical | 3 |
| **(Supporting Components of Material Presentation)** | | |
| 1 | Suitability and accuracy of illustrations | 3 |
| 2 | *Advance organizer (generating work motivation) morning field implementer* | 3 |
| **(Design Expert Assessment)** | | |
| 1 | Validity eligibility | 3 |

| No | Item of evaluation | Skor |
|---|---|---|
| 2 | - Presentation technique<br>- Supporting material presentation.<br>Language presentation<br>- compatibility component with students<br>- motivating ability component. | 3 |

Table 4 shows that the validation score for the educational management aspect, on average, gets a score of 3. These results indicate that the educational management instrument in implementing the mobile training model is valid and can be tested on the respondents. Feasibility of content and feasibility of instrument presentation is in a good category, and no revision is required. In educating respondents, preparation is needed in compiling materials, preparing media, and presenting easy-to-understand language. Instruments that have been designed well will make it easier for respondents to understand the material (Alimin & Effendi, 2020; Wulandari, 2019) so that it will affect the results of the training performance of participants. Furthermore, the percentage of graphs for each aspect of the feasibility of the content and the feasibility of the presentation will be presented in Figure 3.
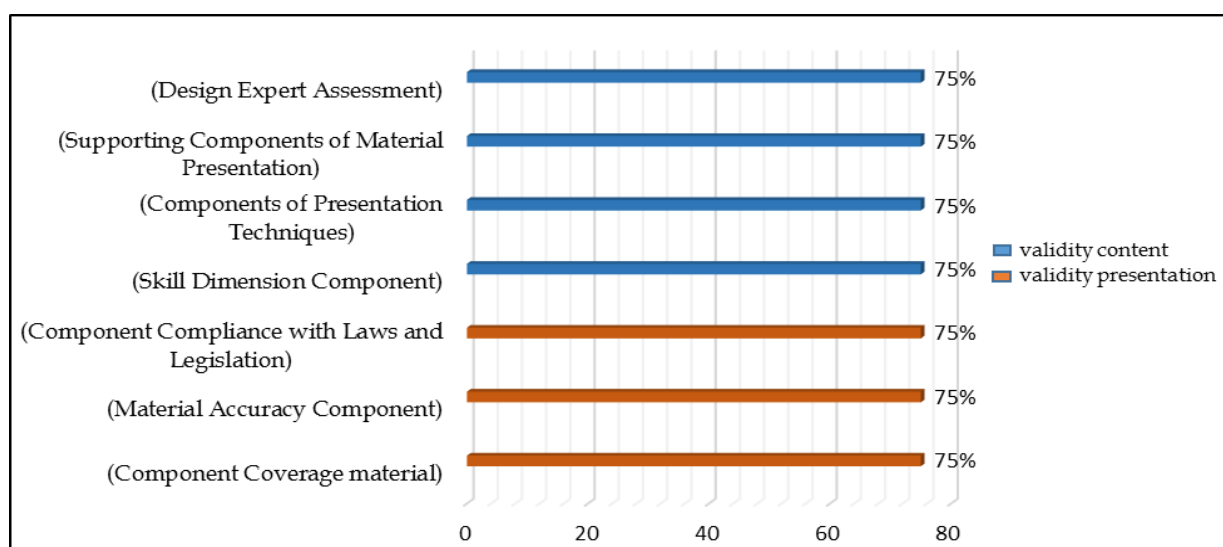


**Figure 3.** Graph of percentage score validation of the education management component.

Figure 3 shows that the validation score for the education management component has a good theory with a percentage of 75%. The blue graph shows the percentage of content validity, while the brown graph shows the validity of the presentation. In this component, the validity content is in a good category, and the validity presentation is in a good category. Content validity in the material coverage component has included the completeness of the material, the flexibility of the material, and the depth of the material. The material presented by the resource person must be deep and broad; this will add insight to the participants. If participants have a general knowledge of the material, it will improve the quality of education and training. Kononets & Nestulya (2020) stated that the quality of education and training would be successful if it uses an approach strategy according to the condition of the participants' initial abilities. So that participants will find it easy to understand the material when the mobile training model takes place.

The validation results obtained a good category score on the components of obeying the law and legislation. In the validation results, the material submitted does not contain SARA and obeys IPR. From the research results, the material presented during training using mobile training needs to pay attention to existing regulations. Selecting and sorting materials is very necessary during training to not violate the rule of law (Woodall et al., 2018). then the feasibility of the content also includes the dimensions of skills. In the research results, aspects of training skills have been included in developing a mobile training model. This can be seen from the results of the skill component aspects that are categorized as good. One of the skills that need to be trained in the skill of communicating while explaining the workflow (Skalka et al., 2017). And the material delivered still refers to the training objectives. (Frolova et al., 2017) explains that focusing on goals will make participants motivated in realizing targets.

Then in addition to the feasibility of the content, the feasibility of the presentation also obtained a good category validation score. The feasibility of this presentation is related to the process during the training. In the development of the mobile training model in improving the quality results of the training, participants have included a coherent and logical presentation system. This is by the score from the expert validator. while delivering the material, timeliness and illustrations are also needed. If the resource person provides pictures that match the material, it will be easier for participants to understand the training (Yulianti et al., 2021). In addition, the accuracy in providing illustrations will make it easier for participants to construct their knowledge. Conveying the material attraction to motivate participants is also needed. So an advance organizer is required during the training. Advance organizers improve the quality outcomes of trainees (Sulianto et al., 2019; Harjono et al., 2018). Based on the research results, a good instrument will facilitate the training process so that experts are needed in correcting the performance of researchers.

## CONCLUSIONS

Research shows that the instrument validation in developing model mobile training is valid. The results assessment validation of the training management expert and the assessment education management expert were categorized as good. This shows that the mobile training development model in improving the quality of education and training is feasible to be tested further. Both the feasibility of content and the feasibility of presentation get a good score. The implications of this research are to find out that the instrument developed is worthy of being tested. This research cannot only examine the validation results of the instrument's validation for developing the mobile training model. Further research is needed to analyze the quality training results after being given the application of the mobile training model.

## ACKNOWLEDGEMENTS

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