# The Disaster: Soldiers Proficiency Operational Tasking

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*ABSTRACT*

Losses in the non-material and material sectors even to death due to natural disasters occurred 87% or 383 districts in Indonesia due to Indonesia's geographical location techtonic, plates: the Indo-Australian plate, the Eurasian plate and the Pacific plate. Consequently the techtonic forces results in mountainous morphology and relatively rough reliefs, and Indonesia is also traversed by two active mountain paths in the world. The newly established 18 National Disaster Management Agency and the Indonesian National Army can assist when they are needed.

Researchers will conduct a survey of Battalion Zeni soldiers non-commissioned officer and enlisted ranks using probability sampling.

An increase in the skill of the Zeni Battalion soldiers significantly influence the operational readiness or in other words an increase in the skill to form the professionalism of the Zeni Battalion so that they are ready to carry out natural disaster relief operations.

## 1. Introduction.

According to the Asian Disaster Reduction Center (2003) that a disaster is a serious disruption to society that causes widespread and perceived harm to both society, various materials and the environment (nature), where the impact exceeds human ability to cope with existing resources. Furthermore, a disaster is an event caused by nature and human actions, including to provide broad enthusiasm (Parker, 1992).

Natural disasters in Indonesia are caused by the geographical location of Indonesia, which is located between three confluence plates, namely the Indo-Australian plate that moves north, the Eurasian plate that moves south, and the Pacific plate that moves from east to west. As a result of the confluence of the three plates, there was an emphasis on the underground layer which resulted in the territory of the Indonesian archipelago having mountainous morphology and relatively rough reliefs, and Indonesia was also traversed by two active mountain paths in the world, the Pacific Circum and the Mediterranean Circum.

A Commander must be able to foster and maintain the professionalism of his soldiers so that they are ready to face the task according to their duties and responsibilities. Professionalism concerns the compatibility between the capabilities possessed by the bureaucracy and the needs of the task, the compatibility between the capabilities and the needs of the task fulfilled is a prerequisite for the formation of a professional apparatus. This means that the expertise and ability of the apparatus reflects the direction and goals to be achieved by an organization (Kurniawan & Agung, 2005).

According Ma'arif (2014) professional military are soldiers who have the expertise, and specific skill in the field, so it has a responsibility to the community as a client and has a corporateness among the different members of the profession lay. Soldiers' skill greatly affect the level of professionalism of soldiers to carry out the assignments given.

In line with this, Hadi Purnomo and Ronny Sugiantoro stated that 87% of Indonesia was prone to natural disasters, 383 regencies or municipalities were prone to natural disasters from 440 regencies or municipalities throughout Indonesia. Due to human helplessness and poor management in dealing with emergencies, it causes losses in the material and non-material fields, even to death. The concept of disaster resilience is an evaluation of the ability of systems and infrastructure to detect, prevent and

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handle serious challenges that exist.

According to Kuntjoro and Jamil (2010) regarding Indonesian government policies; regional and provincial officials are required to be at the forefront in natural disaster management, while the BNPB and the TNI can help when they are needed. However, the policy has not yet created systematic changes at the regional level. Regional Disaster Management Agencies (Indonesian: *Badan Penanggulangan Bencana Daerah*, BPBD) are planned in all provinces but have only been established in 18 regions. In addition, the weakness of disaster management in Indonesia is one of them due to the lack of resources and skill of Regional Governments that still depend on the Central Government.

The main tasks of the TNI are to uphold the sovereignty of the State, defend the territory of the Republic of Indonesia based on the Pancasila and the 1945 Constitution of the Republic of Indonesia, and protect the entire nation and the whole of Indonesia's blood from threats and disruption to the integrity of the Nation and State. A Commander must be able to foster and maintain the professionalism of his soldiers so that they are ready to face the task according to their duties and responsibilities.

Soldiers' skill greatly affect the level of professionalism of soldiers to carry out the assignments given. The internal evaluation of the Zeni Battalion on the implementation of tasks in the context of disaster response operations following the earthquake followed by the tsunami in Aceh in 2004, there were obstacles in the appointment of personnel to be dispatched in the assignment because they had to prepare a task organization according to the orders from the top command, namely by appointing personnel who have special qualifications such as heavy equipment operators and field workers in the field of building construction, while the conditions at that time were not all personnel had that ability. The number of assignments carried out by Battalion Zeni soldiers does not have a significant effect in producing professional soldiers, because in the assignment not all skill are obtained correctly according to existing knowledge or obtained in education or courses so that it is not optimal. This can occur due to the influence of the lack of education or specialized courses in construction and heavy equipment operators, causing a decline in professionalism, especially in the field of construction knowledge and skill in heavy equipment operations so that it affects the readiness of the Zeni Battalion soldiers in carrying out tasks or operations.

## 2. 2. Literature Review .

### 2.1. Professional.

Professional means expert in the particular field. If a manager claims as a professional, he must be able to show that he is the expert in his field. He must have special knowledge and skill in their fields in an important field which is hard work of humans, so as to be able to show high quality in their work (Huntington, 2003).

The term professional applies to all officers from the top level to the bottom level. Professionalism can be interpreted as a

person's abilities and skills in doing work according to their respective fields and levels. Professionalism concerns the compatibility between the capabilities possessed by the bureaucracy and the needs of the task, the compatibility between the capabilities and the needs of the task fulfilled is a prerequisite for the formation of a professional apparatus. This means that the expertise and ability of the apparatus reflects the direction and the goals that have to be achieved by an organization (Harefa & Andrias, 2004).

According to Harefa & Andrias (2004) the first professionalism is a matter of attitude. Then he said there were a number of things that could be considered to represent professionalism, namely, high skill, service delivery oriented to the public interest, strict supervision of work behavior and a reward system which was a slowing of work performance.

Agung and Harsiwi (2005) the professionalism characteristics of the apparatus is in accordance with the demands of good governance, including:

a. Equality, it is based on the type of behavior of rational bureaucracy that consistently provide quality service to all parties without looking at political affiliation or social status.

b. Equity, for a pluralistic society, sometimes it is needed fair treatment and equal treatment.

c. Loyalty, this type of loyalty is related to one another and no loyalty is absolutely given to one particular type of loyalty regardless of the others.

d. Accountability, every government official must be prepared to accept responsibility for whatever he does.

The first step that must be taken so that someone can be a professional is to have sufficient intellectual ability, which is an ability in the form of being able to easily understand, understand, learn and explain a phenomenon. This means that the level, degree, quality and quantity of professionalism in Indonesia can be seen from how much and how high the quality of the intellectual community that exists to support such professionalism (Siagian, 2000).

Professionals are measured by the dexterity of how one is carrying out the functions and is referring to the already simplified procedures. According to this opinion, the professional concept in the apparatus is seen in terms of:

a. Creativity, the ability of the apparatus to face obstacles in providing services to the public by innovating. This needs to be taken to end the community's skewed assessment of the public bureaucracy which is considered rigid at work. The formation of a creative apparatus can only occur if: there is a conducive climate that is able to encourage government officials to look for new ideas and new concepts and apply them innovatively; the willingness of the leader to empower subordinates through participation in decision making concerning work.

b. Innovation, the embodiment is in the form of desire and determination to seek, find and use new methods, new work methods, in the implementation of their duties. The most basic obstacle of innovative behavior is the feeling of quickly satisfied with the work that has been achieved.

c. Responsiveness, the ability of the apparatus in anticipating and facing new aspirations, new developments, new demands, and new knowledge, the bureaucracy must respond quickly so as not to lag behind in carrying out its duties and functions. According to Robbins (2000) in developing professionalism in the bureaucracy in Indonesia consists of two aspects, namely:

d. Educational aspects for professionals, namely a form of education that can prepare students to handle what is called professional workers. So, there is a relationship between the work held by someone with education chosen or prepared.

e. There is a planned recruitment process, supported by a career system and its development. Recruitment of employees in the Indonesian bureaucratic apparatus is not really oriented towards work professionals. That is because in the bureaucratic system has not been completely and innovatively arranged or inventoried various kinds of jobs that are clearly determined to require or be carried out by certain professions.

## 2.2. Theory of Skill.

The word skill is the same as the word dexterity. Being skillful means the cleverness to do things quickly and correctly. Someone who can do something quickly, nevertheless, is incorrect, cannot be said to be skilled. Similarly, if someone can do something right but is slow, also can not be said to be skilled (Robbins, 2000).

Many activities are considered as skill, consisting of several skill and degrees of mastery achieved by someone describing the level of skill. This happens because of the generally accepted habit of stating that one or several extended behaviors can be called skill, for example working, making something that is object and so on. If this is used, then the word "skill" in question is a noun (Fauzi, 2011).

Skill (skill) is the ability to operate work easily and carefully. While the term skilled is also interpreted as an act or task, and as an indicator of a level of proficiency (Amirullah, 2003).

Ma'mun and Saputra (2000) describe skill as the degree of success that is consistent in achieving a goal effectively, moving skill based on genetic and environmental factors can be divided into two, namely:

a. Phylogenetic skill are skill that are carried from birth, which can develop along with the age of the child.

b. Ontogenetic skill are skill that result from training and experience as a result of environmental influences.

Judge (2017) explains that basically skill can be categorized into four, namely:

a. Basic literacy skill, it is the skill that are uncertain and must be owned by most people, such as reading, writing and listening.

b. Technical skill, technical skill is an individual's expertise in the development of techniques that are owned, such as measuring accurately, operate the computer.

c. Interpersonal skill, interpersonal skill are the ability of a person to effectively interact with others and with colleagues, such as good listeners, express opinions clearly and work in a team.

d. Problem Solving Skill, problems solving is the process of activities to sharpen logic, argument and problem solving as well as the ability to find out the cause, develop alternatives and analyze and choose a good solution.

Skill in this context can be measured by several indicators such as the following:

a. The ability to determine how to complete a task/work;

b. The ability to determine the best procedures for carrying out a task/work;

c. The ability to complete tasks well;

d. The ability to determine the size/volume of the best tasks that can be completed;

e. The ability to determine the quality of the task/work best that can be completed.

f. The ability to predict the outcome of the task/work.

Thus, from the above opinion it can be concluded that in order to achieve a good level of skill, it is necessary to pay attention to individual/personal factors namely the willingness and seriousness of the individual himself with his motivation to master the taught skill, the method and technique factors of the practice or practice that is carried out, teaching and learning process factors point to how the conditions of learning and the environment are very instrumental in mastering skill.

## 2.3. Operational Readiness Theory.

According to Holden (2007) readiness is the ability to provide oneself spontaneously for unplanned opportunities. Readiness is based on the assumption that organism's satisfaction comes from the use of conduction units, where these units create tendencies that encourage organisms to do something (Yudhawati and Dany, 2011).

Slameto (2010) factors that affect readiness include three aspects, namely:

a. Physical, mental and emotional condition.

b. Needs, motives and goals.

c. Other skill, knowledge and understanding that have been learned.

Readiness is also described as the level of ability and willingness to accomplish a specific task. Readiness is not a characteristic of a person but rather a person's readiness to perform special tasks (Paul et al, 1996). Ability and willingness are factors that are related and affect the level of readiness of a person so that if one of these factors experiences a change it will affect the whole.

Based on some of the above understanding a soldier's readiness can be interpreted the ability to complete a task given to him in accordance with the objectives to be achieved, without experiencing difficulties and maximum obstacles.

## 3. Hypothesis.

The hypothesis is a temporary answer to the formulation of a research problem; therefore the formulation of a research problem is usually arranged in the form of questions. It is said temporarily, because the answers given are only based on relevant theories, not yet based on empirical facts obtained through data collection. So the hypothesis can also be stated as a theoretical answer to the formulation of a research problem, not yet an empirical answer (Sugiyono, 2010). The hypothesis proposed in this study is as follows:

Ho = There is no influence of the skill of the zeni battalion soldiers on the readiness of natural disaster management operations.

Ha = There is an influence of the skill of the battalion of the engineer on the readiness of natural disaster management operations.

Figure 1: Research Framework.

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┌─────────────────────┐        ┌─────────────────────────┐
│ Zeni Battalion      │        │ Natural Disaster        │
│ Soldier Skill (X)   │───────▶│ Mitigation Operational  │
│                     │        │ Readiness (Y)           │
└─────────────────────┘        └─────────────────────────┘
```
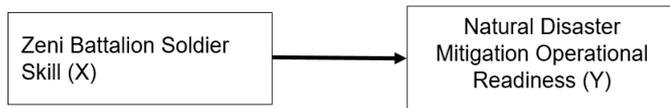
Source: Authors.

## 4. Research Method.

The research method used was a survey method by collecting data through research instruments, and distributing questionnaires to soldiers, the results of which were then processed through the SPSS program to determine the Effect of Professionalism of the Zeni Battalion Soldiers, which was limited in the area of skill (X) to readiness (Y) in operations natural disaster management. The population in this study were 27 soldiers from Battalion Zeni Battalion and Tamtama. In this study researchers used the probability sampling method, while the method of sampling used was simple random sampling.

Sugiyono (2013) stated "probability sampling is a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a sample". While the definition of simple random sampling is "sampling from a random population without regard to strata that exist in that population".

This research was conducted in the Zeni Battalion with the aim of finding out the extent of the influence of skill on the readiness of Operations. Researchers collected data through distributing questionnaires to research subjects, in this case the soldiers of the Zeni Battalion. The total population of the research subjects was 271, then the population of the population took 75 samples as samples using the Slovin formula (Neoloka, 2014).

$$n = \frac{N}{1 + (N.e^2)}$$

$$n = \frac{271}{1 + (271.(0, 10^2))}; n = 73,04 \approx 75.$$

N = The amount of population
n = The amount of samples
e = Error or inaccuracy rate is 10%

Based on the above calculation, then a sample of 73.04 people was obtained which was subsequently rounded up by 75 researchers with an error rate of 10%. The process of analyzing the respondent's answer data for the Skill variable is carried out using an interval approach with an interval of 60 as obtained by the calculation as follows:

Index value Min (Nmin) = Min Score x Sample Values = 1 x 75 = 75 x 75
Index value Min (Nmin) = Min Score x Sample Values = 5 x 75 = 375
Interval Range = (Nmax - Nmin)/rating values = 5 = 60 x 75

### Validity Test

Validity test is used to measure the validity or validity of a questionnaire. Valid means that the instrument can be used to measure what is being measured (Sugiyono, 2012). A questionnaire is said to be valid if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire. In this study, the instrument used to collect data must be able to measure what it wants to measure.

Validity test is done by comparing the value of r arithmetic with r table for a significance level of 5 percent of degree of freedom (df) = n-2, in this case n is the number of samples. If r arithmetic> r table then the question or indicator is declared valid, and vice versa if r count <r table then the question or indicator is declared invalid.

### Reliability Test

Reliability is a tool to measure a questionnaire which is an indicator of variables. A questionnaire is said to be reliable or reliable if a person's answer to a question is consistent or stable from time to time. Reliability measurement in this study was carried out by means of a one-shot measurement. Measurement in this way is only done once and then the results are compared with other questions or measure the correlation between answers to questions. This method can be done with the SPSS program with the cronbach alpha ($\alpha$) statistical test. A construction is said to be reliable if the Cronbach alpha value>0.70.

### Data Analysis Technique

Data analysis techniques are used as a tool to answer problems and prove hypotheses using the SPSS (Statistical Package for the Social Sciences). In addition to statistical analysis, data management and data documentation are also featuring of the basic SPSS software. The SPSS method has its own advantages. The SPSS data processing program has been used in various problem areas such as market research, quality control and improvement, and scientific research. The SPSS program is very popular because it is often used as a tool to facilitate data processing, where the statistical method used is a simple regression method.

## 5. Data Analysis.

### Validity Test and Reliability

This study uses Primary data by testing 30 respondents to measure the reliability and validity of the measuring instrument.

### Validity Test

From table r, for df = number of cases, or for this case df = 75 and a 5% significance level found the value of 0.191 where r counts for each item (variable) can be seen in the Corrected Item - Total Correlation column. If r results are positive, and r count> r table, then the item or variable is valid. If r arithmetic is not positive, and r arithmetic <r table, then the item or variable is invalid. The validity test results of each variable can be seen in the table 1 and 2:

From the table of validity test results above it can be seen that all items have r counts of positive values and greater than 0.191 so they can be said to be valid.

### Reliability Test

The reliability test is related to the consistency, accuracy and predictability of a measuring instrument that usually uses a questionnaire with a Likert scale and the Cronbach alpha method. If Cronbach alpha > 0.70 then it is reliable, conversely If Cronbach alpha <0.70 then it is not reliable (Jaya, 2018). The results of the reliability test of each variable in this study can be seen in the table 3 and 4:

Based on the table 3 and 4, it can be seen that the Cronbach alpha value of all variables is greater than 0.70, thus, all items in the measurement instrument can be stated as reliable.

### Classic assumption test
### Test for normality with Kolmogorov-Smirnov

Normal data distribution test is done with one sample Kolmogorov - Smirnov Test. Decision-making:

1. If Asymp. sig. < 0.05 then the regression model is not normally distributed.
2. If Asymp. Sig. > 0.05 then the regression model is normally distributed.

From the statistical table above, it can be seen that the regression model for the variable Skill is normally distributed with Asymp. Sig. (0.200) > 0.05 for the variable Soldier Readiness normally with Asymp. Sig. (0.078) > 0.05.

### Linearity Test

Linearity Testing aims to determine the linearity of data, i.e. whether the independent variable (X) with the dependent variable (Y) has a linear relationship or not. This test is a requirement in linear regression analysis.

Based on the significance value (Sig) from the above output, the deviation from linearity Sig value is 0.150 greater than 0.05. It can be concluded that there is a significant linear relationship between the Skill variable (X) and the Operational Readiness variable (Y). Based on the F value of the above output, the calculated F value is 1.530 <F table 1.98 which means that the F calculated value is smaller than the F table value, so it can be concluded that there is a significant linear relationship between the Skill variable (X) with the Operational Readiness variable (Y).

### Multicollinearity Test

Multicollinearity testing is also often called the independence test. This test will see whether between predictors have a large relationship or not. If the relationship between predictors is strong then the predictors are not independent.

Multicollinearity testing is known from the VIF value of each predictor. If the VIF predictor value does not exceed 10, then we can say that our data is free from multicollinearity problems. In the table above, the VIF value is 4.406 which means it does not exceed 10, so it can be concluded that this model is not subject to multicollinearity problems.

### Heteroscedasticity Test

Heteroscedasticity testing is also often called homogeneity test. In this description, heteroskedasticity testing is performed using the Scatter Plot residual value of the dependent variable. The conclusion is taken by paying attention to the distribution of data plots.

From the Figure 2 it can be seen that the data points spread above and below or around the zero, do not gather just above or below it, do not form a wavy pattern of widening, narrowing and widening again, and do not form special patterns. Based on the above data plot, we can draw the conclusion that there is no heteroskedasticity problem. This means that the data we have is homogeneous data.

### Autocorrelation Test.

Autocorrelation test aims to determine whether there is a correlation between observational data or not.

Hypothesis

H0 : There is no autocorrelation between observational data

Ha : There was an autocorrelation between the observational data

If the Durbin-Watson statistical value approaches number 2, then no autocorrelation occurs; conversely, if the Durbin-Watson statistical value moves away from number 2, autocorrelation occurs.

Based on the results of the analysis shows that the Durbin-Watson value of 2.059. Thus, H0 can be accepted which concludes that there is no autocorrelation between observational data.

### Hypothesis Testing Results

In testing this hypothesis, the researcher describes the results of the questionnaire data processing that has been distributed to respondents using the help of the SPSS program, with the following description:

Effect of Skill (X) on Operational Readiness (Y).

From the results of statistical calculations using SPSS.25 for the relationship of Skill as an independent variable with Operational Readiness as the dependent variable obtained as follows:

Table 1: Skill Variable Validity Test Results.

| Number | r-count | r-table | Note |
|---|---|---|---|
| I can determine the method of completing the assignment/work | 0.243 | 0.191 | Valid |
| I executing the work, I follow good work procedure | 0.221 | 0.191 | Valid |
| I have the skill and it is benefitting to my work | 0.533 | 0.191 | Valid |
| By the application of the technology, it will help me finishing my work | 0.536 | 0.191 | Valid |
| I repair the broken tools, thus, finish the work faster | 0.325 | 0.191 | Valid |
| I can operate the tools that belong to my responsibility | 0.294 | 0.191 | Valid |
| I can work in a team to finish a work | 0.434 | 0.191 | Valid |
| Exchanging information to solve problems | 0.549 | 0.191 | Valid |

Source: Researcher?s processed table.

Table 2: Operational Readiness Variable Validity Test Result.

| Number | r-count | r-table | Note |
|---|---|---|---|
| I always try to finish the assignment given to me. | 0.504 | 0.191 | Valid |
| I have the confidence in executing every assignment. | 0.586 | 0.191 | Valid |
| I always know the technicality of completing the assignment in accordance to my position | 0.531 | 0.191 | Valid |
| I always execute my work in accordance with the existing procedure | 0.492 | 0.191 | Valid |
| I make work plan before executing my work | 0.362 | 0.191 | Valid |
| I always try to be able to preserve physical health | 0.307 | 0.191 | Valid |

Source: Researcher?s processed table.

Table 3: Soldier Skill Variable Test Results.

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| 0.702 | 8 |

Source: Table of results of primary data processing by SPSS 25.

Table 4: Operational Readiness Test Variable Results.

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| 0.728 | 6 |

Source: Table of results of primary data processing by SPSS 25.

Figure 2: Heteroscedasticity Test Result.
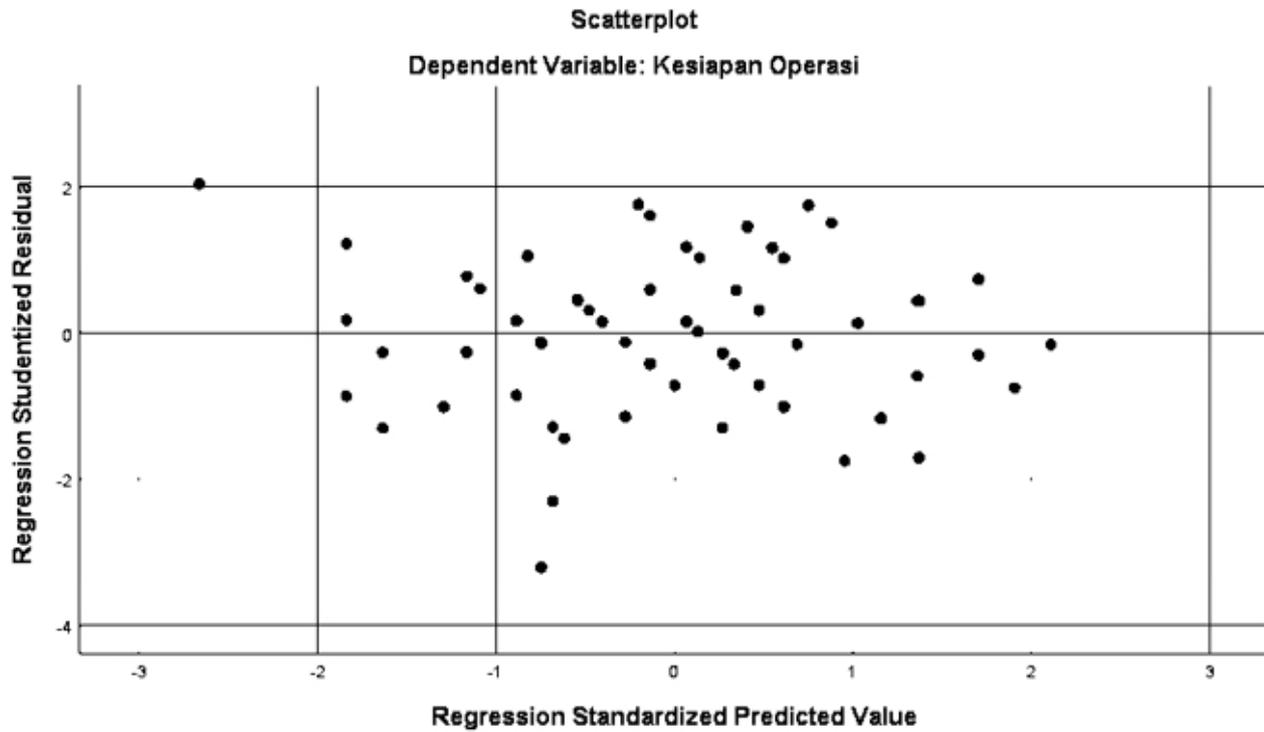


Source: Table of results of primary data processing by SPSS 25.

Table 5: One-Sample Kolmogorov-Smirnov Skill Variable Test (X).

| One-Sample Kolmogorov-Smirnov Test | | |
|---|---|---|
| | | Skill |
| N | | 75 |
| Normal Parameters[a,b] | Mean | 34.1600 |
| | Std. Deviation | 2.61513 |
| Most Extreme Differences | Absolute | 0.089 |
| | Positive | 0.084 |
| | Negative | -0.089 |
| Statistic Test | | 0.089 |
| Asymp. Sig. (2-tailed) | | 0.200[c,d] |
| a. Test distribution is Normal. | | |
| b. Calculated from data. | | |
| c. Lilliefors Significance Correction. | | |
| d. This is a lower bound of the true significance. | | |

Source: Authors.

Table 6: One-Sample Kolmogorov-Smirnov Operation Readiness Variable Test (Y).

| One-Sample Kolmogorov-Smirnov Test | | |
|---|---|---|
| | | Operational Readiness |
| N | | 75 |
| Normal Parameters[a,b] | Mean | 25.7067 |
| | Std. Deviation | 2.32363 |
| Most Extreme Differences | Absolute | 0.097 |
| | Positive | 0.076 |
| | Negative | -0.097 |
| Statistic Test | | 0.097 |
| Asymp. Sig. (2-tailed) | | 0.078[c] |
| a. Test distribution is Normal. | | |
| b. Calculated from data. | | |
| c. Lilliefors Significance Correction. | | |

Source: Authors.

Table 7: Skill Linearity Test (X).

| ANOVA Table | | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|---|
| Operational Readiness * Skill | Between Groups | (Combined) | 240.386 | 11 | 21.853 | 8.650 | 0.000 |
| | | Linearity | 201.733 | 1 | 201.733 | 79.851 | 0.000 |
| | | Deviation from Linearity | 38.653 | 10 | 3.865 | 1.530 | 0.150 |
| | Within Groups | | 159.161 | 63 | 2.526 | | |
| | Total | | 399.547 | 74 | | | |

Source: Table of results of primary data processing by SPSS 25.

Table 8: Multicollinearity Test.

| Coefficients[a] | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|
| Model | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | 1.413 | 1.589 | | 0.889 | 0.377 | | |
| Skill | 0.293 | 0.093 | 0.329 | 3.158 | 0.002 | 0.227 | 4.406 |
| a. Dependent Variable: Operational Readiness | | | | | | | |

Source: Authors.

Table 9: Autocorrelation test results.

| Model Summary[b] | | | | | |
|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | 0,907[a] | 0.822 | 0.817 | 0.99289 | 2.059 |
| a. Predictors: (Constant), Skill | | | | | |
| b. Dependent Variable: Operational Readiness | | | | | |

Source: Table of results of primary data processing by SPSS 25.

Table 10: Relationship of X to Y.

| Correlations | | Skill | Operational Readiness |
|---|---|---|---|
| Skill | Pearson Correlation | 1 | 0.711** |
| | Sig. (2-tailed) | | 0.000 |
| | N | 75 | 75 |
| Operational Readiness | Pearson Correlation | 0.711** | 1 |
| | Sig. (2-tailed) | 0.000 | |
| | N | 75 | 75 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

Source: Table of results of primary data processing by SPSS 25.

From the correlation data in table 10 it is known that the correlation coefficient between the Skill variable as the independent variable and the Operational Readiness variable as the dependent variable is 0.711. This value reflects that between the two variables there is a strong relationship. A positive correlation value can be interpreted that as Skill increase, Operational Readiness will also increase, this correlation applies vice versa.

### Regression Coefficient Analysis

Regression Coefficient Analysis is a method to analyze the effect of Skill (X) on Operational Readiness (Y) and to find out whether the regression coefficient is significant or not. The hypothesis proposed in this analysis is:

Ho = Skill (X) does not improve Operational Readiness (Y)

Ha = Skill (X) increases readiness for Operation (Y)

Determination of the significance of this hypothesis test by comparing

Significance value (sig.) With a probability of 0.05. The basis for making decisions by looking at the significance value is:

1. If the significance value (sig.) Is smaller than probability 0.05, it means that Skill (X) increases Operation Readiness (Y).
2. If the significance value (sig.) Is greater than probability 0.05, it means that skill (X) does not increase Operation Readiness (Y).

Based on the results of data processing in the table 11, the significance value (sig.) Of 0.000 is smaller <probability 0.05 so that it can be concluded that Ho is rejected by Ha, which means Skill (X) increases Operational Readiness (Y) of Battalion Zeni soldiers.

From the results of the data processing in the table above also obtained a regression equation that is Y = 4.139 + 0.631 X, meaning that if Skill (X) has increased by one unit, then the Operational Readiness (Y) variable will experience an increase of 0.631 units, assuming the independent variable others are of constant value. If Skill (X) is omitted (1 = 0), Operational Readiness (Y) is only 4.139.

### Skill T Test (X).

T test is a test used to test how the influence of independent variables namely Skill (X) independently of the dependent variable, namely Operational Readiness (Y). The basis for decision making with comparison of t arithmetic and t table is:

1. (a) If the value of t arithmetic greater than t table means that Skill (X) increases Operational Readiness (Y).
   (b) If the t value is smaller than t table means that Skill (X) does not increase Operational Readiness (Y).

T test results using SPSS version 25 for the Skill variable (X) in the regression coefficient table shows the t value of 8.628, which means that the t value is greater than t table 1.666 with an alpha value of 0.05 and the number of samples 75 (free degrees worth 72). On the basis of this comparison, H0 is rejected and

Ha is accepted or means Skill (X) increases Operation Readiness (Y) of Zeni Battalion Soldiers.

### Coefficient of determination analysis.

Analysis of the coefficient of determination is an analysis used to find out how much the contribution of Skill (X) to the increase in Operational Readiness (Y).

From the results of the analysis of the determination analysis using SPSS version 25, in the table 12 obtained R square value of 0.505 based on these values, it can be seen the value of the coefficient of determination based on the formula (KD) = R 2 X 100% ie 0.505 X 100% = 50.5% it can be stated that Skills (X) have an influence contribution to the increase in Operation Readiness (Y) Zeni Battalion Soldiers by 50.5%.

Based on the analysis of "Coefficient Analysis" the correlation between (X) and (Y) is positive (0.711) which means it has a strong relationship, so that the increase in X1, then Y is increasing and vice versa. The Regression Equation Y = 4.139 + 0.631 X1 which means that if (X) increases by one unit, then (Y) will increase by 0.631 units, assuming the other independent variables are of constant value. If (X = 0), then (Y) is only 4,139. Also based on the T Test it was found that t count was 8,628> t table 1,666 which meant that Skills (X) had an influence in improving Operational Readiness (Y). Based on the results of the Regression Coefficient of data processing to analyze the effect between Skills (X) on Operational Readiness (Y) obtained a significance value (sig.) Of 0,000 smaller <probability 0.05 so it can be concluded that Ho is rejected with Ha accepted which means Skills (X ) significantly influences Operation Readiness (Y) of Battalion Zeni soldiers. Determination Coefficient Analysis Results explain that the Determination Coefficient/KD = R2 X 100% = 0.505 X 100% = 50.5% which means Skill (X) has an influence contribution of 50.5% to increase Operational Readiness (Y), while 49, The other 5% is influenced by other factors not included in this study such as training, budget and infrastructure.

## 6. Discussion.

Based on the analysis of "Coefficient Analysis" the correlation between (X) and (Y) is positive (0.711), which means it has a strong relationship, so that the increase in X, then Y increases and vice versa. The Regression Equation Y = 4.139 + 0.631 X1 which means that if (X) increases by one unit, then (Y) will increase by 0.631 units, assuming the other independent variables are of constant value. If (X = 0), then (Y) is only 4,139. Also based on the T Test it was found that t count was 8,628> t table 1,666 which meant that Skills (X) had an influence in improving Operational Readiness (Y). Based on the results of the Regression Coefficient of data processing to analyze the effect between Skills (X) on Operational Readiness (Y) obtained a significance value (sig.) Of 0,000 smaller <probability 0.05 so it can be concluded that Ho is rejected with Ha accepted which means Skills (X ) significantly influences Operation Readiness (Y) of Battalion Zeni soldiers. Determination Coefficient Analysis Results explain that the Determination Coefficient/KD = R2 X 100% = 0.505 X 100% = 50.5% which means Skill (X)

Table 11: Simple regression analysis skill (X).

| **Coefficientsª** | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 4.139 | 2.507 | | 1.651 | 0.103 |
| | Skill | 0.631 | 0.073 | 0.711 | 8.628 | 0.000 |
| a. Dependent Variable: Operational Readiness | | | | | | |

Source: Table of results of primary data processing by SPSS 25.

Table 12: Skill determination coefficient analysis (X).

| **Model Summary** | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | 0.711ª | 0.505 | 0.498 | 01.64614 |
| a. Predictors: (Constant), Skill | | | | |

Source: Table of results of primary data processing by SPSS 25.

has an influence contribution of 50.5% to increase Operational Readiness (Y), while 49, The other 5% is influenced by other factors not included in this study such as training, budget and infrastructure.

The results of this study prove that skills have a positive and significant effect on readiness to carry out operations, which means increasing skills in forming the professionalism of Zeni Battalion Soldiers so that they are ready to carry out natural disaster management tasks or operations. Furthermore, according to the theory of Judge skills in his book explains that basically skills consist of Basic Skills (Basic literacy skills), Technical Skills (Technical skills), Interpersonal Skills (Interpersonal skills), and Problem-Solving Skills (Problem solving). This theory can be proven by the results of this study which explains that by having skills, a soldier becomes a professional so that he is willing and able to carry out the tasks given to him.

This is also in accordance with research by Gayoni, Taqwaddin, and Yanis with the title "Optimization of Kodim Soldier Preparedness 0101/BS in Disaster Management in Banda Aceh".

Based on the analysis of researchers, it can be explained that the preparedness of the KODIM 0101/BS Banda Aceh soldier in natural disaster management must be prepared, where a very influential factor originates from the KODIM 0101/BS soldier himself that is must have special skills or expertise so that he knows how and what which must be done by his soldiers in facing and overcoming natural disasters in their working area.

## Conclusions.

Based on the results of the analysis using SPSS 25 for windows and discussion of the results of this study, it was concluded that the research on the influence of the Battalion Zeni

soldier's professionalism on the readiness of operations is a significant and significant positive effect variable on the readiness of natural disaster relief operations so that with an increase in the skills of Battalion soldiers The engineer significantly influences the Operations Readiness or in other words the improvement of skills in forming the professionalism of the Zeni Battalion Soldiers so that they are ready to carry out the natural disaster relief operations. .

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