



Differences In Digital Literacy Of Fishermen Using Online Meeting Applications Before And After Teaching And Mentoring

Hendra Poltak¹, Ismail Ismail², Muhamad Ali Ulat³, Muhfizar Muhfizar⁴

¹Teknik Budidaya Perikanan, ^{2,3}Teknik Penangkapan Ikan, ⁴ Mekanisasi Perikanan
^{1,2,3,4}Politeknik Kelautan dan Perikanan Sorong, Suprau, Kota Sorong, 98411, Indonesia

E-mail: hendra.poltak@polikpsorong.ac.id,

ismailabdullahumum@gmail.com, alipoltek12@gmail.com, muhfizar@gmail.com

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ABSTRACT

The application of digitalization that has been developed massively has constraints, especially in human resources that have weaknesses in digital literacy and technical skills, as well as underdeveloped digital infrastructure. This makes the digital divide between regions, professions, social status, education and age, exacerbating inequality. As a result, the ease of the digital age such as work efficiency and effectiveness, increased economic productivity cannot be enjoyed which gets the digital divide. The study sample was 30 fishermen maladum Mes regency. The research method used is a pseudo-experimental method with the design of one group pretest-posttest. The results showed that there were differences in knowledge and skills of digital literacy practices after getting the intervention.

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1. Introduction

Covid-19 has changed the current state of human life. Humans who before the pandemic were free to move and interact with others, forced to come to terms with the situation and undergo activities in *the new normal* following health protocols in every activity. Every effort is made to be able to interact and connect with each other by utilizing technological advances. The existence of the Covid-19 pandemic accelerated digitization and how important information system technology knowledge is to all occupations[1],[2], including fishermen.

The adoption of digitalization that has massively developed has obstacles, especially to human resources that have weaknesses in digital literacy and technical skills, as well as less developed digital infrastructure. This makes the digital divide between regions, professions, social status, education and age, exacerbating inequality[4]. As a result, the conveniences of the digital age such as efficiency and effectiveness of work, increased economic productivity cannot be enjoyed that get the digital gap.

Fishermen are one of the professions contributing to the national economy, impacting the digital divide. Digitalization should be used to increase knowledge, exchange of current data and business activities. However, geographical distance from urban, literacy levels, *smartphone* ownership, low internet network infrastructure are not utilized to welcome the digital era. Maladum Mes region, Sorong City, is a region that is directly opposite the Pacific Ocean. The livelihoods of the inhabitants of this region are mostly traditional fishermen who use handline fishing gear. Fishermen do not use digitalization much. However, the help of *mobile phones* makes it interesting for researchers to know knowledge and skills using digital applications.

Previous research has been conducted by [6] which aims to find out the difference in digital literacy in the learning process with the intervention of project *citizen*. The study [7] also concluded that there were differences in digital literacy skills after getting training in teachers and students in Malang Regency.

The formula of the problem in this study is whether there is a difference in average knowledge before and after teaching. Is there a difference in average practice skills before and after mentoring fishermen in Maladum Mes District.



2. Research Method

The type of research used to gain an understanding of the knowledge and skills of handline fishermen using digital applications is *quasi experiment* research. The design used is "one group pretest-posttest" with one group of objects being treated over a period of time [8]. Researchers pretested participants to find out the level of knowledge of the cloud meeting zoom application. Furthermore, given a post test after the introduction of the cloud meeting zoom application, the implementation of the post test is no different from the pretest steps. The study was conducted on a group of saoka district handline fishermen, consisting of 30 people. The sample was selected based on the group of fishermen who received mobile phone assistance for sea activities. Research instruments to measure knowledge are given about multiple choices related to the knowledge to be tested. To measure skills using observations of cloud meeting zoom practices conducted by respondents. Knowledge is measured before and after the provision of materials and skills measured through mentoring done three times. Data processing uses statistical software program assistance tools.

3. Result and Analysis

3.1 Overview of research respondents

Data from questionnaires provided by respondents, characteristic respondents consist of age, gender, and education last. The respondent's characteristic details are presented in table 1. Next:

TABLE 1.
OVERVIEW OF RESPONDENTS

Information	Frequency	%
Age	Frequency	%
21-30 Years	3	10
31-40 Years	9	30
41-50 Years	7	23
>51 years	11	37
Gender		
Man	28	93
Woman	2	7
The Last Education		
SD	6	20
SMP	17	57
SMA	7	23

Source: Processed Data (2021)

Characteristic respondents based on the age of the majority aged >51 years. The majority respondents were 11 people (37%), followed by respondents aged 31-40 years amounting to 9 people (30%), and respondents 41-50 years of 7 people (23%). The composition showed that fishermen respondents still fit into the productive and young age group [9]. The gender of respondents was dominated by 28 men (93%), while women were 2 (7%). This composition shows that the profession of fishermen is majority and dominantly pursued by men. The level of education of the dominant respondents educated junior high school amounted to 17 people (57%), high school amounted to 7 people (23%), and elementary school as many as 6 people (20%). This composition shows that the majority of fishing communities are poorly educated [10],[11].

3.2 Data normality test results

The results of the knowledge-varied normality test showed a pretest result of 0.005 below 0.05 and a posttest test result of 0.007 below 0.05 so that both data are not normally distributed. While for the test of normality variable skills showed a pretest result of 0.094 above 0.05 and a posttest result test of 0.205 above 0.05 so that both data can be concluded normal distribution.

TABLE 2.
DATA NORMALITY TEST

	<i>Shapiro-Wilk</i>		
	Statistic	Df	Itself
Knowledge			
Pretest Results	0,896	30	0,005
Posttest Results	0,891	30	0,007



Skills			
<i>Pretest Results</i>	0,941	30	0,094
<i>Posttest Results</i>	0,953	30	0,205

Source: Processed Data (2021)

3.3 Digital Literacy Knowledge online meeting application

To get the results of teaching influence on increasing knowledge zoom cloud meeting used up Wilcoxon. The Wilcoxon test is used to test hypotheses for data that are not normally distributed. Test results to see differences in pretest results and posttest results with wilcoxon tests obtained the following results:

TABLE 3.
UJI RANKING UJI WILCOXON SIGNED RANKS

	Variable	N	Mean Rank	Sum of Ranks	With	Asymp.Sig. (2-tiled)
Posttest Results	Knowledge Reduced	1	2	2		
Pretest Results	Knowledge Increases	29	15,97	463	-4,771	0,000
	Remain	0				
	Total	30				

Source: Processed Data (2021)

The Wilcoxon test conducted with the help of SPSS obtained that there was a difference in pretest results with posttest respondents before training and after training. Table 3 of the Wilcoxon test showed that there was 1 sample of respondents who experienced a posttest value lower than the pretest value, while 29 sample respondents experienced a rise in posttest values higher than pretest values. The Z value of the test result is - 4,771 and the Asymp value. Sig (2-tiled) 0.0000 is smaller than the alpha level of 5% (0.05) so reject Ho, it can be concluded that there is a difference in the value of knowledge zoom cloud meetings before and after teaching.

3.4 Online Meeting Practice Skills

The results of the paired sample t test the effect of mentoring on the ability to practice using cloud meeting zoom can be seen in table 4. next:

TABLE 4.
UJI PAIRED SAMPLE T TEST

	Mean	N	Std. Deviation	Std Error Mean
Pretest	39,33	30	16,802	3,068
Posttest	52,67	30	18,742	3,422

Source: Processed Data (2021)

TABLE 5.
UJI PAIRED DIFFERENCE

Paired Difference								
95% Confidence Interval of the difference								
Pair 1	Mean	Std.Deviasi	Std.Error Mean	Lower	Upper	t	Df	Sig.(2-tailed)
Pretest- Posttest	-13,333	11,842	2,162	-17,755	-8,912	-6,167	29	0,000

Source: Processed Data (2021)

The calculated t value for skills using cloud meeting zoom is 6,167 with a probability (Sig) of 0.000. The decision-making provisions are based as follows:

Hypothesis:

H₀= there is a difference in average skills before and after mentoring

H₁= no difference in average skills before and after mentoring

Decision criteria: accept H₀ if probability (Sig.) >0.05

Based on the criteria that have been determined, H₀ is accepted. This means that there is a difference in average skills before and after mentoring. So that conclusions can be drawn mentoring can improve skills using zoom cloud meetings. The results are in line with research[6] that there are differences in digital literacy in the learning process with interventions. The same is well in the study[7] that interventions can improve digital literacy in teachers and students in Malang Regency.

4 Conclusion

Results from the wilcoxon test showed differences in the value of knowledge zoom cloud meetings before and after teaching. Likewise, in the paired sample t test there is a difference in the value of cloud meeting zoom practices before and after mentoring. This means that providing interventions in the form of teaching and mentoring can improve knowledge and skills using the cloud meeting zoom application.

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