

Impact of Human Resources Competency on Productivity: The case of SME's in Timor-Leste

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Abstract

Small and medium enterprises are one of the business groups that have high contribution to the national economy. Even with the development of the number of SME units able to generate jobs opportunity. Nevertheless, in term of quality SME's are still considered lower than large companies therefore to improve the working quality, its necessary to solve human resources competence such skills, knowledge and abilities issues to improve the Productivity. This research was carried out aimed to know how the influence of skills, knowledge, abilities on the productivity is. This research was conducted with a quantitative approach. The population in this study was small and medium enterprises domiciled in Dili capital and the sampling technique used was simple random sampling. Data collection is done by distributing questionnaires to 250 units of small and medium-sized business owners. The measurement was using a Likert scale. And the data was analyzed using SPSS 23 version with simple and multiple regression analysis method. The results of the analysis conclude that skills(X1), knowledge(X2) and working ability(X3) are positive and significantly effect on labor productivity (y).



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1.0 Introduction

In today's world, the business industry is experiencing rapid improvement day by day; from large companies to small and medium-sized enterprises, uncountable of new companies have emerged, and business competition has progressively become dynamic and because of the economic circumstances, some countries has been consider SME's as way to stimulate economic growth. However, due to the limitations of technology, products, capital, and human resources capabilities, only innovate and good product quality of SMEs that able to grow and conquer market (Dharma, 2010).

In order to reach high employee productivity, companies are obligated to pay attention to issues such as knowledge, skills, abilities, attitudes, and behaviors. These issues are the driving characteristics of achieving productivity, since high productivity ensured the survival of the company. However, lack of competency is remaining as problem and an obstacle to increasing productivity, meaning that the employee with the low level of competence, tend to show low performance, (Moheriono, 2009). Beside that unskilled workers do not increase labor productivity significantly (Rehman and Mughal 2013).

Productivity and work skills are two different things that are closely related, Employees with good work skills will definitely understand the work philosophy (Latifah, 2020) but the lack of professional knowledge and skills of employees will have a negative impact to company and education level may be one of the factors that affect employees' job skills (Davis et al, 2007). To reach high employee productivity, companies need to pay attention to issues such as knowledge, skills, abilities, attitudes, and behaviors, service, leadership, management, thinking and effective personality, productivity (Mulyadi, 2010). Since it's able to boost high productivity able to ensure the survival of the company. However, due to the low level of skills, abilities and knowledge, the gap between goals and job achievement is not effective (Rodlial and Abubakar at el, 2018). In any organization, employees with sufficient work ability will improve organizational performance, whether it is intellectual or physical ability (Robins and Stephen, 2006), it is an asset that brings added value to the company, but employees with low ability unable to complete the assigned responsibilities as much as possible, and ultimately hinder the organization's goals. In addition, because the placement of employees does not match the work area, employees are unable to perform their duties and even lack attention to the importance of skills and knowledge hence most of the productivity cannot be achieved (Khoiriyah, 2012).

Skills, knowledge and abilities are the main capital that must be owned by each employee in order to provide good quality for the company (Ardiana, et al, 2010). The progress of a company is determined by the quality of its human resources namely employees. Quality of Human Resources certainly have a positive influence on the company however many employees do not work in accordance with their competencies which hinder the production process (Wahyudiati, 2017). Moreover there are various factors that affect the ability and competitiveness of SMEs, namely professionalism, productivity, creativity and innovation. If SME owners apply these factors in their SME business, certainly the business is able to compete in the global market. However, many SME's have difficulty in competing with quality of imported products. And with the weak competencies such as skills, knowledge and abilities (Ardiana, 2010) makes the employees unable to create benefit for the company, and employees with low performance become a burden for the company due to then number of uncompleted task on time.

Competence problems in Timor-Leste are one of the issues that need extra attention. In fact, many employees not work in accordance with the area and affect work productivity and give

negative results to the company. Moreover, in the process of improving the quality of work productivity, various obstacles were found, such as ways of working that were not in accordance with company standards and other problems that could reduce the achievement of company goals. Especially in market competition that requires companies to be careful in providing goods and service in accordance with market demand with satisfactory quality. Without the work productivity of employees as the main actors in production activities, this is impossible to achieve. Hence it is necessary to pay attention to several factors that support the level of work productivity of employees in the company in achieving the expected target. And until now there are almost no researchers who conduct research in this sector with quantitative research methods, especially in Timor-Leste. Based on the background of the problem above, the author is interested in conducting a research entitled Impact of Human Resources Competency on Productivity: The case of SME's in Timor-Leste.

2.0 Literature Review

It is well known that human resources play an important role in a company's and productivity has regard as one of the determinants of a company's success. research conducted by Alvin at el. (2018) using work environment variables and work skills on work productivity found that skill variables have the most dominant influence on productivity, but job training, especially for employees, still needs to be improve.

There are many factors affecting productivity of employees and one of them is job skills (Panji pandji at el, 2000). From the results of research conducted by Afrinda at el. (2019) also can be concluded that job skills have a significant effect on productivity employees and as a result the development of micro, small and medium-sized enterprises continues to grow, and of course it will be able to open up large employment opportunities. However, this small business is still regarded as an underperforming business and to overcome its performance, small and medium-sized enterprises need to develop high-quality human resources. The quality needs to be improved, especially in terms of entrepreneurial skills, knowledge and abilities. Research conducted by (Viviani at el, 2020) provides results that support and accept the hypothesis of human resource skills, knowledge, and ability has a positive effect on the performance of SMEs. Asmuni (2012) found that level employees knowledge, skills, abilities, attitude and behavior having a huge contributions on productivity hence it's suggest to increase intelligence and knowledge since the employment skills have significant effect on employee productivity. According to Rehman and Mughal (2013), despite a skilled employee increase overall work productivity positively and unskilled labor does not increase labor productivity whole. Nurhasanah (2019) used multiple regression analysis to test the hypothesis of the study such job skills, work facilities and productivity. Partial test results on skill variables and work facilities have a significant effect on work productivity and when the variable work skills, work facilities simultaneously test are having a significant effect on work productivity. Nasron at el. (2011) described and showed that entrepreneurial skills give significant effect on business success however, the variable entrepreneurial skills shows the lowest indicator in engineering and computer operating and its due the education qualifications and age factor. Via this research it's understood that human resource having a crucial role not only business industry but also in government agency since skilled human resources supports organizations in achieving its goal optimally.

On the other hand, government agencies are required to have resources humans who have a good performance and achieve that good performance since the higher the skill, the better the work is done. The statement is reinforced by Syartini (2014), which showed there is an influence on skills on performance partially. If existing employees are not sincere about their

work, then their productivity is not optimal. Therefore, the company needs an excellent employee to have the skills to work in their respective fields, because skills can encourage productivity and are an important means to achieve productivity. Therefore, every employee must improve their skills in order to provide the industry with the best skills. The findings of Pitriyani and Halim (2020) showed that some (t-test) work attitudes have a positive and significant impact on work productivity. Job skills have a positive and significant impact on job productivity.. Work attitude and work skills can have a positive and significant impact on work productivity, which shows that labor productivity can be explained by work experience, work attitude and work skills. A research of Setiawan (2015) on internal factor such skill variables have a significant impact on productivity. The results of this study are also consistent with the study conducted by Handoko (2015), which pointed out that internal factors have a great influence on work productivity. Therefore, it is necessary to conduct good management of internal factors in order to continuously improve labor productivity. The higher the skill of the employee at work, more productivity will produce.

Based on the analysis and discussion, the research results can be concluded that changes in productivity are affected by changes in motivation, skills and knowledge of marketing. Changes in knowledge marketing are directly affected through changes in motivation and skills. Therefore, the productivity can be improved by increasing marketing knowledge, motivation and skills. This can be achieved through a plan to increase marketing knowledge based on design-based learning (Nani, 2019). Research conducted by Megantoro (2015) supports this statement, and concluded that knowledge has a positive and significant impact on the performance of SME's and the knowledge and skills that are the foundation of productivity. Asmuni and Tantri (2012) is obtained conclusion that knowledge of employees significant effect on employees productivity.

Competence is one of the foundations for human resources to perform their duties. Sulistyani and Ambar (2003) highlighted that true knowledge and skills are the foundation of productivity. With outstanding capabilities, employees will bring good performance and thereby increase productivity. The results of research conducted by (Abubakar,2018) state that competence include skill, knowledge and ability has a significant effect on employee productivity In line with this, the results of other studies conducted by (Satria and Kuswara,2013) states that competence has a positive and significant effect on employee work productivity. The results of other studies that conducted by Widodo (2016) and stated that competence has a positive effect and significant to the productivity the Indicator of competence according to Spencer, (1993) in Wibowo (2016) are as follows: motives, traits, self-concept, knowledge, and skills. The success or failure of company regulations depends on the success or failure of employees in performing their duties. The success of employees in fulfilling their obligations depends on the willingness of employees to make sacrifices and work hard by keeping away from personal or group interests. Therefore it is essential that employees have high knowledge and understanding and mentally determined to be able to work well. Then here it will be easy to understand that employees are the main factor determines the success or failure of work in the company. Thus between knowledge and understanding of employees have a close relationship with work productivity.

If there is a lack of awareness of employees to fulfill their obligations in the company and employees' understanding and understanding of the company's mission, it will lead to a decline in productivity. On the contrary, if employees have a high awareness of fulfilling their obligations, and employees have a high level of knowledge and understanding of company regulations, then employees' work efficiency will also be high. The results of this research by

Mustikorini (2000) clearly prove that the level of knowledge and employees' understanding of the company's mission have a significant impact on employee's productivity. If the management devotes more energy to improving work standards, the effect will be better. The conclusion of Supriyanto and Tri bodroastuti (2012) showed that knowledge; skills, Ability, attitude and behavior have a significant and positive impact on productivity. To improve employees' knowledge and employee practical skills is through regular employee training and development. The short productivity of employees is affected by many factors, and one of them is low management competency. This research also examines the impact of management knowledge on employee productivity. Data analysis shows that knowledge management having significance on productivity. From the hypothesis test of study, knowledge management has a positive impact on the employee's productivity. An employee with high job knowledge will show good performance. the results of this study it can be concluded that knowledge, skills, abilities, attitudes, behaviors partially has a significant effect on productivity (Amarsyah, 2020), Research results from Abubakar (2018) showed that, that employee competence has a positive effect on employees work productivity. Overall Competence has been implemented and run according to work productivity factors. However one of the factors that can be increase employee work productivity According to Edy Sutrisno, (2015) is training. The purpose of vocational training is to add-on employees' ability to use work equipment through appropriate skills and means; not only need to supplement vocational training, but also need to provide a basis for knowledge, because through meaningful training, employees can learn to sort out the right thing, and able to reduce errors. If there is no training in the company, then this will directly affect the work productivity of employees. Training is the process of shaping and equipping employees with other skills, abilities, knowledge and behaviors (Kasmir, 2017).

In order to increase productivity and obtain good work results, employees must have expertise, abilities and knowledge in their respective fields of work. The factors that can increase employee productivity are job training and knowledge as well as salary. Productivity is what is ultimately can improve employee performance, the study concluded that training and knowledge have an important impact on productivity, and productivity can improve employee performance. Wibowo (2014) added that training is an investment organization that is vital to human resources. Competent training can increase the knowledge and skills of employees, so that the company can obtain human resources that meet the company's standards. Dewi & Gede (2005) stated that training is a designed to help employees learn skills, knowledge or new attitudes. As a result, these employees will make changes or conversions to improve performance. These improvements ensure that employees and organizations can complete their work better, faster and easier, and achieve higher quality and better return on investment. If there are employees who work in the company every day and have good working ability, it definitely has a positive impact on employee productivity, and of course these employees will also perform well, because the ability itself has a positive impact on employee performance. According to Hutajulu (2009), in his research stated that employees must work hard and maximize their abilities with the support of available facilities and infrastructure if the company its self-want to achieve the designed goals. And employees ability such as resources that able to support the efficiency of the company this idea was support by Wahyuningrum (2013) said that Personal ability and good organizational structure will have a positive impact on organizational performance, it also can be concluded that the ability of employees will determine the performance of the organization. Therefore, the higher the employee's ability to perform works, the higher the employee's performance.

In addition, the research results of Wasti (2017). Proves that variable abilities have a positive effect on productivity, in her research, she also outlined that the influence produced by sub variable personal ability, change management ability and work culture management ability

holds a small number effect hence In order to achieve the goals set by the company, effective work productivity and efficient employees are essential to the company. However improving the quality and productivity of employee is the main such a challenge for every company.

3.0 Theory and Hypothesis

3.1 Conceptual framework

3.1.1 Labor Productivity

The performance of small and medium-sized enterprises is not only influenced by HR competency but is also influenced by productivity (Nuraeni, 2009). According to Hasibuan in (Busro, 2018), productivity is the comparison between output or result and inputs. If productivity increases, it will increase efficiency such time, material, labor, work systems, production techniques and an increase in the skills of the workforce. (Sutrisno, 2017), suggests that productivity is a comparison between the results achieved with the participation of the employee per hour in use the use of resources with effective and efficient way. According to Busro (2018), work productivity is the ability of a person or group of people to produce goods and services within a certain time that has been determined or in accordance with the plan. According to Marwansyah (2016) Work Productivity can be interpreted as a concrete result (product) produced by individuals or groups, especially in terms of quantity. In this case, the higher the product produced in a shorter time, will achieve high productivity value. Another definition according to (Yusuf, 2016) work productivity is a measure that shows consideration between inputs and outputs issued by the company and the role of the workforce per unit of time, or in other words measuring efficiency requires identifying the results of performance. According to Sutrisno (2011) to measure work productivity, needed an indicator such; Ability, effort, work Spirit, Self-development, Quality and Efficiency and there more indicator of Productivity according to (Pandi Afandi, 2018), such as work quantity, Quality of work and punctuality. While According to Sulistiyani and Rosidah (2009), there are several factors that determine the size of productivity, including: Knowledge, Skills, Abilities, Attitude, Behaviors and labor productivity is influenced by several factors, both related to energy and other factors such as: Education and skills, physical skills, production facilities, managerial (Sinungan, 2012).

3.1.2 Human Recourses Competency

Human Resource Competence is the ability and characteristics possessed by a person in the form of knowledge, skills, behavioral and attitudes in carrying out duties at work environment. The level of competence is needed in order to know the expected level of performance for the good or average category. The definition of competence according to Hutapea at el. (2008), namely: as the capacity that exists in someone who can make that person able to fulfill what is required by work in an organization to achieve the expected results. Becker at el. (2012) added that: competency refers to an individual's knowledge, skill, ability or personality characteristics that directly influence job performance". The right competence is a factor that determines the superiority of achievement that can be owned by the organization if the organization has a strong foundation, which is reflected in all processes that occur within the organization. In general, the competency system used by the company consists of: Knowledge, skills, and behavior, which is applied to the human resources in achieving the goals of the organization. Judisseno and Rinsky (2004) said, organizational performance is largely determined by the work productivity of the human resources used by the organization, and the work productivity of human resources is closely related to the competencies possessed by these human resources, where the better the competencies possessed by human resources will certainly produce higher productivity. Productivity in the work environment can be measured from the KSAs (knowledge, skills and abilities) proposed by Slocum and Hellrigel (2009). Furthermore human resource competency indicators in this study were taken based on

research by (Ardiana, 2010), namely; Knowledge, Skills and Ability. Sudarmanto (2012) added that competence is a person's knowledge, skills, and abilities, as a part of human been in perform certain cognitive, affective, and psychomotor behaviors. Wirawan (2009) defined competence of human resources is a set of interrelated knowledge, skills, and attitudes that affect most positions roles or responsibilities, correlates with performance in those positions, and can be measured by acceptable standards, and can be improved through training and development efforts. Basically, there are many indicators that affect the competence of a company's employees, according to Fadillah et al. (2017), competency indicators are: Personal character (traits), Self-concept, Knowledge, Skills and Work motivation. on the other hand the indicators of competency according to Mulyadi (2010) Communication skills (verbal, written, report writing and presentation), Able to identify problems and the ability to provide solutions, And According to Wibowo (2016), the factors that influence competence are ; Trust and Value, Skills ,Experience, Personal Characteristics, Motivation, Emotional Issues, Intellectual Capacity. With all the statement above the Conceptual framework can be drawn as following

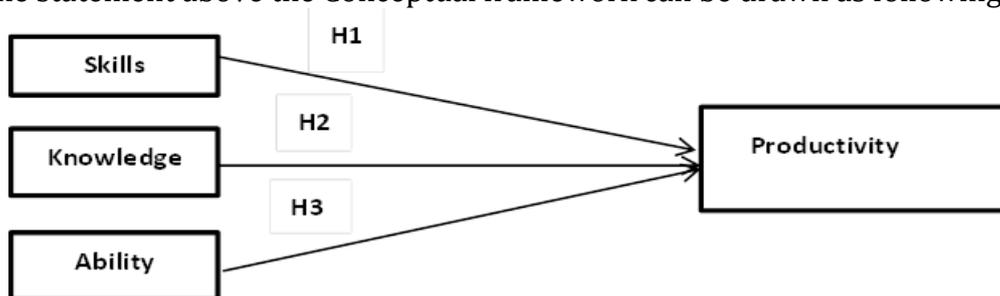


Figure.1 Conceptual model showing the hypothesized relationship between human resources competency and productivity

3.2 Hypothesis

3.2.1 The Skills and Productivity

Work productivity is a measure of the extent to which personnel or labors are properly used in the production process to achieve the desired output. The skill level is determined by formal education and informal education and employee with high educated and trained will have the potential to improve productivity (Sedarmayanti, 2011). Ridwan at el. (2019) found in their research that Skills have a positive and significant impact on productivity. Sukirman (2007) pointed out that learning skills have an impact on productivity .This means that by improving employee skills and then increasing productivity, According to the research conducted by Subandowo (2009), the results of the research shows a person with high-level skills will improve the quality of work, thereby increasing work output (productivity). Sedarmayanti (2010) pointed out that technical and management skills factors largely determine the level productivity. However, the low level of skills, the gap between goals and job achievement is not effective (Ramdhan and Abubakar, 2018) Hence it's hypothesized that;

H1. *The Employee Skills is positively effect on the Productivity.*

3.2.2 The Knowledge and Productivity

Companies performance rate can be measured by productivity of each individual who work in company, where individual productivity is used to measure of productivity of the company as a whole (Becker at el, 2001) stated that job competence includes knowledge, ability and expertise (skills). (Abubakar, 2016) said the knowledge component has a positive effect on work productivity. (Samsul, 2016) Based on the research results, were also found that career development has Influence and significant on productivity moreover job competence (skills, knowledge, abilities) is influential and significant on productivity. Siswandy (2017) found that competence is having influential and significance on work productivity. And the longer

employees work at the company the more knowledge will be acquired. Mardiana (2019) said employee knowledge determines the success or failure of the implementation assigned responsibilities, and employees with sufficient knowledge will improve the efficiency of the company. However, for employees who do not have sufficient knowledge, it will interrupt productivity. Sulistyani and Rosidah (2003) stated that "knowledge and skills are the basis for achieving productivity. Andi and Novita (2017) studies indicated that competence, motivation and Job satisfaction simultaneously has a significant effect on employee productivity. The research results of Abubakar (2018) also confirmed this point, that knowledge has a significant impact on employee productivity, but it is different from Wasti (2017). who showed that knowledge does not affect the work efficiency of employee's productivity. With this argument hence it's hypothesized that;

H2. *The Employee Knowledge is positively effect on the Productivity*

3.2.3 The Ability and Productivity

Competition in the business world is fierce, requiring companies to be competitive and efficient. The company's progress depends on the quality of its human resources. Therefore, in this case, it is very important for the company to attach importance to the quality of its employees. The most important resource in an organization is human resources, which can express their energy, talents, creativity and efforts to the organization so that the organization can continue to exist (Dian at el 2016). Tettie Setiyarti at el. (2020) concluded that variable Knowledge, Skills, and Ability, has a positive effect and significant to employee productivity. This is consistent with the views of Solihat (2008) showed that the working ability of employees have an impact on the productivity of employees, because the work of employees competent is a factor that affects the productivity of employees. Furthermore the results of study indicate that there is a positive and significant effect on the ability of the employee's work productivity (Hasanah, 2020). This research had the same results as Aisha's et al. (2003), research, which state that competence in the form of abilities, expertise, and work experience has a significant effect on labor productivity. While Silfa Rino (2015) found that based on the results of research, known ability variables have a partial impact on productivity. Therefore highly talented human resources are very helpful to realize the vision and mission of the organization, and support the rapid development. Hence it's hypothesized that;

H3. *The Employee Ability is positively effect on the Productivity*

4.0 Methodology

4.1 Research Approach

This research is using a quantitative approach. Quantitative is an approach that emphasizes testing theories or hypothesis by measuring the research variables in numbers and performs data analysis with static procedures and systematic modeling. By using this quantitative approach, is to be able to collect and process data in the form of numbers, formulas, and tables to make it easier to understand because of the large population.

4.2 Research Population and Sample

The research populations that tested in this study are small and medium enterprises (SME's) located in Dili city and around 250 small and medium enterprises in the product and service creation sector was tested. In addition, the research sample is part of a number of characteristics possessed by the population used by the research the sampling technique used in this study is to use the purposive sampling method .

4.3 Research Data

4.3.1 Types of Data

The type of data used in this study is data from local small and medium enterprises and analyzed using the purposed method and acquired final result

4.3.2 Data Sources

Some of the data sources used in this research are:

- a. Primary data, namely data obtained directly through questionnaire that distributed to Small and medium enterprises (SMEs) who engage business in Dili, Timor Leste
- b. Secondary Data, in this study secondary data sources are books, literature, articles, journals, and websites on the internet related to the research being carried out.

4.3.3 Data Collection Techniques

The data collection methods used in this study includes:

•Questionnaire

Data Collection is done by spreading out a questionnaire form which contains questions covering the human resources competencies on productivity of Small and medium business (SMEs) in Timor-Leste. The answer to each instrument item uses a Likert scale with a grade from very positive to negative started from Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly Disagree (SD)

Each answer point has a different score, namely: for SA's answer has a score of 5, A's answer has a score of 4, N's answer has a score of 3, the D answer has a score of 2, and the SD answer has a score of 1.

4.4 Research Variables

This study uses four variables includes the independent variable, the dependent variable

4.4.1 The Dependent Variable

In this research the dependent variable is productivity(Y).

4.4.2 The Independent Variable

The independent variable is the variable that affects and which be the cause of the dependent variable in this study, the independent variables consist of: Skills(X1), Knowledge(X2), Ability(X3)

4.5 Data Analysis Method

4.5.1 Hypothesis Testing

•T test (partial test)

The T test is used to test the significance of the relationship between variable X and variable Y partially or it can be said that the t test basically shows how far the independent variable partially in affecting dependent variable.

•Coefficient of Determination (R^2)

The regression coefficient is used to measure to what extent the model explaining the variation of the dependent variable. The coefficient of determination is between zero and one .Once in the empirical test the value is obtained adjusted R^2 is negative, then the adjusted R^2 is considered zero. In mathematically if the value of $R^2 = 1$, then adjusted $R^2 = 1$, whereas if the value of $R^2 = 0$, then adjusted $R^2 = (1 - k) / (n-k)$. If $k > 1$, then Adjusted R^2 will be value positive.

5.0 Result and Discussion

5.1 Result of Regression Analysis Model

a. Partial Testing (t test)

Significance test of single parameters (t test)/Partial test are used to test the effect of skills (X1), knowledge (X2) and ability (X3) on productivity (Y1) partially. The partial test in this study was conducted to know the effect of each variable of skills, knowledge and abilities partially on productivity. The results of the t test statistical analysis can be seen as follows:

Table 1. Multicollinearity Test Results

Model	Coefficients ^a						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	7.123	1.423		5.006	.000		
Skills	.175	.076	.138	2.310	.022	.560	1.786
Knowledge	.208	.066	.237	3.155	.002	.354	2.822
Ability	.311	.051	.420	6.119	.000	.422	2.371

a. Dependent Variable: Productivity

Source: Data Processing Results of SPSS 23, using HR competency (skill, knowledge, ability) as dependent variable and productivity, primary data, 2021

Referring to the regression output in table 1 can be seen that the significance value of the two variables, namely Skill $X_1 = 0.022$, Knowledge $X_2 = 0.002$ and Ability $X_3 = 0.000$ is smaller than 0.05, this result concludes that the regression model X_1, X_2, X_3 is positive and has a significant effect on Y

b. The coefficient of determination (R²)

The coefficient of determination (R²) aims to know how much the skill variable (X1), Knowledge (X2) and ability (X3) simultaneously effect on productivity variable (Y) Coefficient and analysis results Determination can be seen as follows:

Table 2. Coefficient of determination (R²)test Results

Model Summary^{bn}

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.714 ^a	.510	.504		4.056	1.680

a. Predictors: (Constant), Ability, Skills, Knowledge

b. Dependent Variable: Productivity

Source: Data Processing Results of SPSS 23, coefficient of determination result (R²), 2021

The results of the SPSS model summary analysis show that the scale of R Square is 0.510 or 51 %. While the remaining $100\% - 51\% = 49\%$ influenced by other variables outside of this regression equation or variables that were not examined. this shows that the contribution of X_1, X_2 and X_3 on Y is 51 % while the rest of 49% is the contribution of other variables not included in the study, meanwhile for the value of e_1 it can find with the formula $e_1 = \sqrt{1 - 0.510} = 0.7$

5.2 Discussions

5.2.1 The effect of skills on productivity (H1)

Based on the results of on the first hypothesis testing it was found that the effect of skills has a positive effect on productivity. The results obtained are reinforced by the positive regression coefficient value, these findings indicate that the higher the skills of an employee has, productivity will be increased. And that productivity increases because workers or owners of SMEs have skills in managing their business such as: in organizing planning skills, skills in analyzing the external environment, fixing weaknesses skills, managing strategies skills, leading and communicating skills. With all these skills can support an employee to work and have good productivity. The results obtained in the first hypothesis are consistent with the research of (Hasibuan, 2000) which found skill level has a positive and significant impact on

productivity, which means that if skill level increases, work efficiency will increase. the skills here include technical skills, human skills, conceptual skills, such as the ability to take advantage of opportunities, accuracy, and use equipment owned by the company .More over the result was even aligning with (Setiawan, 2015) research that found positive and significant skills contributions to productivity.

5.2.2 The effect of Knowledge on productivity (H2)

Based on the results of the second hypothesis test it was found that knowledge has a significant and positive effect on worker productivity.. This finding further strengthens the theory that says the higher the knowledge, the higher the work productivity, the results obtained show that the employees has knowledge of the pioneered business, has business management knowledge and is able to see business opportunities in the context of small and medium enterprises. the results obtained in the second hypothesis testing are in line with the research results of (Dwi, 2000) that clearly prove the level of knowledge and employees' understanding of the company's mission have a significant impact on employees' productivity. If the management devotes more energy to improving work standards, the effect will be better. Increase employees' knowledge and understanding of the company's mission. Furthermore the research result also consistent with the conclusion of (Supriyanto and bodroastuti, 2018) which shows that knowledge, skills, Ability, attitude and behavior have a significant and positive impact on productivity and research also found that to improve employees' knowledge and employee practical skills is through regular employee training and development.

5.2.3 The Impact of Ability on Productivity (H3)

Based on the results of data processing, it can be seen that the ability has a significant positive effect on work productivity. Throughout the testing result, it can be seen that the higher a person's ability to carry out the tasks and work assigned to him/her and the higher work productivity will be, the increase in productivity due to knowledge and ability in accordance with the performed Job, having work experience, and with job training greatly supports workers being able to complete tasks on time and easily and accurately. The results obtained from the data processing stage are in line with (Ilianus, 2012) states that knowledge, skill, ability has an influence on employee work productivity the researchers pointed out that what needs to be done is to pay attention to the needs of employees, such as salary increases, and provide a relaxed working atmosphere to make them productive. Since work ability is formed by many abilities possessed by employees, it can be rewarded according to the quality of work. A person's ability is one of the factors that determine the productivity results in any work environment. Certain employees even though they are highly motivated, they still lack the necessary skills or abilities to carry out their duties properly. The research of study aligns with (Solihat, 2008) who found the work ability of employees affects their productivity. Employee whose ability is consistent with their work profession will be able to work well and able to reach targeted goals.

6.0 Summary and Recommendation

This study developed and empirically validated the hypothesized model of skill, knowledge, ability and productivity. And three conclusions can be drawn from the above finding and dissuasion. First, the skills variable shows a positive and significant effect on productivity, second, the knowledge variable shows a positive and significant effect on productivity, third ability variable shows positive and significant effect on productivity . This means that if the level of skills, knowledge and abilities of the SME's owner increases, the work productivity will automatically increase and conversely. This research results provide new and deep insight in explaining the Human Resources (HR) impact on productivity in the context of Timor-Leste

and proved the theoretical concept and hypothesis of the study. Moreover the research result is such as important findings that able to fill the gaps and proved that variable of skill, knowledge and ability has huge impact on productivity. Therefore it is need to the manager and the owner of SME's to develop its competency in all possible way to improve work productivity

Based on the conclusions from the results of the research above, the researchers provide several recommendations as follows:

(i). In order to well develop SMEs, and maintain its existence and be more competitive in both national and global level more attention should paid to the Human Resources competence variables. (ii). To increase the level of employee knowledge, skills, abilities, attitudes, and behaviors, companies should actively provide training programs, employee development in the production process so that employees can increase their productivity, (iii) For future research direction, this research can be carried out and extended by using other variables of motivation and behavior, and (iv) This study was conducted in Timor-Leste context; future studies should be conducted by using this model in other under developing countries to increase the findings generality.

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