



## The Influence Of Using Typing Master Application Media on 10 Finger Typing Skills in Office Technology Subjects at SMK Muhammadiyah 2 Sumberrejo Bojonegoro

Siti Fatimatuazzahroh<sup>1</sup>, Durinta Puspasari<sup>2</sup>

<sup>1,2</sup>Office Administration Study Program, Faculty of Economics, State University of Surabaya  
Jl. Ketintang No. 2., Ketintang, Kec. Gayungan, Surabaya Jawa Timur Indonesia

Email: [siti.17080314050@mhs.unesa.ac.id](mailto:siti.17080314050@mhs.unesa.ac.id)

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### ABSTRACT

*This research aims to analyze the effect of using typing master application media on 10 finger typing skill in Office Technology at SMK Muhammadiyah 2 Sumberrejo Bojonegoro. This research is a type of research with a quantitative approach. The population in this research is all students X grade of OTKP program which amounts 51 students. Data collection techniques in this research were closed questionnaires, interviews, and documentation. Instrument testing includes: instrument validity and instrument reliability. Data analyzed techniques used in this research include: classic assumption test includes normality test and heteroscedasticity test, and hypothesis test using simple linear regression test. The result of this research showed that the result of simple linear regression analysis for a significance value 0,000. Which the significance value is smaller or < 0,05. While the tcount value 7,707 and the ttable value 2,009. Which mean tcount > ttable or 7,707 > 2,009, can be concluded that the use of typing master application media has a significance effect on 10 finger typing skill.*

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## 1. Introduction

One of the most important factors in the progress of a country is education, which can create an independent and competitive nation. Basically education is one of the most important needs of every human being carried out with the aim of educating oneself, obtaining knowledge, adapting oneself to technological developments in order to struggle, adapt, and as self-defense to face life's tests in the future. With good and quality education, an individual can contribute to developing himself, the people around him, as well as the nation and homeland. Therefore, the quality of education will greatly affect the quality of human resources in a country as well as a measure of the progress of a nation.

The quality of human resources can be obtained from knowledge either from formal educational institutions such as schools, or from non-formal education such as courses and the surrounding environment. One of the formal institutions that provide education and have an important role in the development of education and human resources in Indonesia is Vocational High Schools (SMK). Based on PP RI Number 17 Year 2010 Regarding Procedures for Managing and Organizing Education Article 76 Paragraph 2 states if one of the benefits and objectives of Vocational High Schools is "to equip students with the skills of science and technology as well as vocational skills in the profession according to the needs of society, increasing physical readiness and mentally to live independently in the community and / or continue their education to higher education".

Learning at the level of Vocational High Schools (SMK) is encouraged to direct students in developing and shaping abilities in their fields of expertise. With the hope that students can immediately jump into the world of work with the knowledge and practices that have been learned in school. Matters regarding the National Education System are regulated in the Republic of Indonesia Law Number 20 of 2003, which states that "vocational education is secondary education that prepares students, especially to work in certain fields". Therefore, teachers at the SMK level must understand the changing needs of the world of work in order to prepare their graduates to become professional workforce (Wulandari et al, 2020).



## 2. Theoretical Review

### 2.1 Learn

Learning is defined as an activity or process to gain knowledge, increase skills, improve one's character, attitudes, and strengthen one's personality. The interaction between humans and the natural environment to gain knowledge is called experience. Knowledge (knowledge) comes from an experience that happens repeatedly to a person (Suyono, 2014)

### 2.2 Learning

RI Law Number 20 of 2003 concerning the National Education System defines learning as an activity in which there is interaction and communication between teachers, students and learning materials that occur in a learning area, namely schools. Meanwhile, Hanafy (2014) argues that learning is a process of gaining knowledge, proficiency, and the formation of properties obtained from the surrounding environment.

In essence, learning is a process of obtaining knowledge in which there is communication between students and teachers at a time, whether it is done face-to-face directly or remotely or indirectly using media or infrastructure. This interaction is an effort to change the attitudes of students from uneducated to more educated.

### 2.3 Learning Media

Learning media is a means of learning activities that are used as a tool for teachers in providing material or information as well as a means of interaction that makes it easier for teachers and students (Sumiharsono, 2017). Learning media according to Ibrahim & Syaodih (2003) is defined as encouraging and supporting the teaching and learning process, all things that can be useful as a channel for information or subject matter, provide a stimulus to the student's brain, provoke student attention, feelings and creativity. Meanwhile, according to Degeng (in Kustiono, 2010) explains that media is a complex part of the teaching system where the media will help students to understand the lesson material presentation, not just a tool used by teachers to teach.

### 2.4 Typing Master application

Typing master according to Puspitasari (2018) is an application that is useful for learning procedures and practicing typing with the 10 finger system correctly without having to look at the keyboard. Typing master is useful as a student learning guide in learning the 10 finger system typing material and teaches students about the correct hand and body position when typing, so learning outcomes in the form of 10 finger typing system skills can be achieved more effectively and efficiently. Typing master will immediately display the results of student typing after students do typing learning. So that students can see their typing ability from typing speed, typing accuracy or accuracy, and the duration of time used in typing practice. This will make it easier for teachers to see the progress of students in learning to type and make it easier for teachers to document the results of students' typing exercises.

Typing Master has 2 measurement scales for typing speed, namely KPM (Keystroke Per Minute) and WPM (Word Per Minute). KPM calculates the typing speed seen from the number of presses on the keys or the number of letters typed in one minute, while WPM calculates the typing speed seen from the number of words typed in one minute.

### 2.5 10 finger Typing System (Ten Fingers Touch System)

Rianggoro (2003) explains that the 10 finger typing system is a typing technique in which each finger has a task and its respective operating area that has been determined to perform a beat or pressure on the keys, the fingers perform automatic and regular beats on the keys. . This is in accordance with the opinion of Suratman (2001), namely "In the ten finger typing system, each finger has its own task in accordance with the provisions and has an operating area that has been defined its boundaries". In addition, Suratman (2001) also argues that a person can be said to have not mastered good and correct typing procedures, if that person cannot type based on modern typing techniques, namely the ten-finger typing technique.

Based on this opinion, it can be concluded that the 10 finger typing system is one of the keyboarding or typing techniques where each finger has its respective duties according to the area of operation and its provisions for pressing keys or keys on the keyboard. Following are the positions of the fingers on the 10 finger typing system.





**Fig 1.** Finger position on the keyboard

Source: Ministry of Education and Culture (2013)

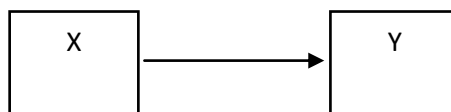
From the description of the theoretical study above, the following hypothesis can be formulated:

Ha: there is an effect of using master typing application media on 10 finger typing skills in Office Technology subjects at SMK Muhammadiyah 2 Sumberrejo Bojonegoro

H0: there is no effect of using the typing master application media on the 10 finger typing skills in the Office Technology subject at SMK Muhammadiyah 2 Sumberrejo Bojonegoro

### 3. Research Methods

This research is a research that uses a quantitative approach. Quantitative research can be interpreted as a research method that is guided by the positivist philosophy, research is carried out on a predetermined population or sample, with techniques to get samples mostly done randomly, choosing research instruments as data collectors, data and analysis have statistical properties that are useful for testing, against the predetermined hypothesis (Sugiyono, 2012). The population in this study were all students of class X OTKP expertise program as many as 51 students, with the number of class X OTKP 1 as many as 28 students, and class X OTKP 2 as many as 23 students. All subjects in the study are called the population (Suharsimi 2006). The use of sampling techniques in this study is a nonprobability sampling technique using a saturated sampling type. Saturated sampling is a technique for determining the sample to be used in research where the entire population is useful as a sample (Sugiyono, 2016). This technique is usually applied to research with a population that tends to be small or in research that wants novelty by minimizing the error rate in research. Because in quantitative research it is based on the belief that everything that happens must have a cause and effect or have a causal nature, research with this approach can focus research on certain variables or factors. Between one variable and another variable in a study has a relationship pattern called the research paradigm (Sugiyono, 2016). The paradigm of this research includes one independent variable (X), namely the use of the application media of typing master and the dependent variable (Y), namely the 10 finger typing skill. The description of the paradigm in this study is:



**Fig 2.** Research paradigm

Source: processed by researchers (2021)

### 4. Research Results and Discussion

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#### 4.1 Classic assumption test

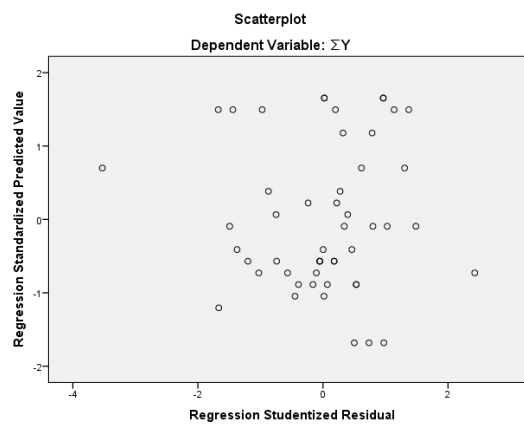
This study uses a classic assumption test that includes a normality test and a heteroscedasticity test. The normality test of this study was carried out by using the One-Sample Kolmogorov-Smirnov statistical test.

**Table 1**  
Kolmogorov-Smirnov One-Sample Statistical Test Results

One-Sample Kolmogorov-Smirnov Test			Unstandardized Residual
N			51
Normal Parameters <sup>a,b</sup>	Mean		.0000000
	Std. Deviation		4.36549767
Most Extreme Differences	Absolute		.127
	Positive		.055
	Negative		-.127
Kolmogorov-Smirnov Z			.906
Asymp. Sig. (2-tailed)			.385
a. Test distribution is Normal.			
b. Calculated from data.			

Source: data processed by researchers (2021)

Judging from table 1 which is carried out using the One-Sample Kolmogorov-Smirnov statistical test which is seen from the Asymp. Sig. (2-tailed) shows a value of 0.385, it means that the variable data of this study is normally distributed because the significance value is  $> 0.05$ . The lower limit of the true significance value is  $\text{sig} > \alpha (0.05)$ , so the data is normally distributed (Nurhasanah, 2019). While the heteroscedasticity test in this study was carried out by analyzing the scatterplot graph.



**Fig 3.** Scatterplot Graph  
Source: data processed by researchers (2021)

**Table 2**  
Simple Linier Regression Analysis Results

Model	Coefficients <sup>a</sup>			t	Sig.
	Unstandardized Coefficients	Standardized Coefficients			
	B	Std. Error	Beta		
1	(Constant)	11.056	5.343	2.069	.044
	$\Sigma X$	.763	.099	.740	.000

a. Dependent Variable:  $\Sigma Y$

a. Dependent Variable:  $\Sigma Y$

Source: data processed by researchers (2021)

Based on table 9, the results of simple linear regression analysis show a simple regression equation, namely:  
 $Y = 11.056 + 0.763 X$

Where Y is the 10 finger typing skill and X is the use of the master typing application media. The simple regression equation has the following meanings:

1. Constant = 11.056

This means that if the independent variable, namely the use of typing master (X) application media, has a value of 0, then the dependent variable is 10 finger typing skills (Y) = 11.056.

2. The X coefficient (using master typing application media) = 0.763



This means that every one-unit increase in the variable use of the typing master application media, then the 10 finger typing skill will experience an increase of 0.763 units.

Seen in table 2, simple linear regression analysis produces a significance value of 0.00. Where the significance value is smaller or  $<0.05$ . While  $t_{count}$  with a value of 7.707 and  $t_{table}$  with a value of 2.009. Which means  $t_{count} > t_{table}$  or  $7,707 > 2,009$ , so the conclusion is that the use of the typing master application media has a significant effect on the 10 finger typing skills. From the results of the analysis, Ha says "there is an effect of using the typing master application media on the 10 finger typing skills on the eye. Office Technology lesson at SMK Muhammadiyah 2 Sumberrejo Bojonegoro "was accepted.

This research is in line with previous research conducted by Wahyuni & Mardiyah (2017) at SMKN 4 Klaten Office Administration Department and research by Najihah & Marimin (2015) at SMK Palebon Semarang, the two studies above show that the media used in typing learning by eye teachers is in the form of A typing application called typing master has an effect on learning outcomes in the form of students' typing skills at the school, where this influence is positive and significant. Research results from Puspitasari, Rahmanto, & Widodo (2018) also explained that teachers at SMKN 1 Karanganyar who used typing master typing learning media when learning to type turned out to have a positive effect on the results of students' typing skills, at  $t_{count}$  (2.835)  $>$   $t_{table}$  (1.995) and significance equal to 0.006  $<$  0.05. This research is also in line with previous research conducted by Hidayati & Pramusinto (2017) at SMK PGRI Mejubo Kudus, the results of their research show that the typing speed with the 10 blind finger technique by class X students is influenced by the typing teaching media used by teachers in schools in the form of master typing software. . With a partial contribution value of 9.49% and a significance of 0.019  $<$  0.05.

The four previous studies are reinforced by the opinion of Kustandi (2011) which defines learning media as a means to improve teaching and learning activities in the form of student learning outcomes. The learning media referred to in this study is a master typing application that can improve students' 10 finger typing skills. Typing master is an application that is useful for training students in learning typing skills with 10 fingers, this application can stimulate students to be more interested and serious about learning typing with the 10 finger system. So that learning outcomes in the form of 10 finger typing skills can be achieved optimally.

Ikhsananto & Sutirman's (2018) research results also explain that the use of learning media in the form of typing software and typing modules has a significant and effective effect in improving typing skills. Typing skills are one of the important skills that everyone must have in the era of technological advancement and development. Therefore, it must be emphasized on computer users, especially students, to develop skills (typing and computer skills) in order to make the best use of technology and to improve communication. Based on research conducted by Lubbe, Mentz & Monteith (2006) on 396 students at Nort-West University, it was concluded that typing skills were necessary skills. These skills are useful for increasing the productivity of computer users, because computer users do not have to look for keys and see the keyboard continuously when entering data on the computer. With the students' typing skills, they can meet one of the demands of the world of work and are ready to compete in the world of work, especially in the office sector.

## 5. Conclusions

Based on the results of research and discussion, it can be concluded that the results of simple linear regression analysis have a significance value of 0.00. Which the significance value above is smaller or  $<0.05$ . While the  $t_{count}$  value is 7,707 and the  $t_{table}$  is 2,009. Which means  $t_{count} > t_{table}$  or  $7,707 > 2,009$ , so the conclusion of this study is that the use of master typing application media has a significant effect on 10 finger typing skills.

The limitations of this study are: 1) the researcher only examined one factor that was considered influencing the 10 finger typing skill, namely the use of master typing application media; 2) this research was only conducted in class X OTKP at SMK Muhammadiyah 2 Sumberrejo Bojonegoro. So that the suggestion that can be given to further researchers is that further researchers can carry out further research on the factors that affect the 10 finger typing skills that are not examined in this study. Likewise with the limited sample selected, it is important for further researchers to consider the samples that will be selected and used in the next research.

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