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The Relationship between the Use of the Ibis Paint X Application and the Motivation to Learn Fashion Design in Grade XI Students of Fashion Design at SMK Negeri 1 Salatiga

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Abstract

This study aims to examine the relationship between the use of the Ibis Paint X application and the motivation to learn to design fashion at SMK Negeri 1 Salatiga. This research is a quantitative approach research with a correlational design. The population in this study is all students of class XI fashion at SMK Negeri 1 Salatiga which totals 71 students, and the sample in this study uses total sampling, The sampling technique uses total sampling, namely making the population as a sample, there is a total sampling because the population is less than 100. The data collection technique used a Likert scale questionnaire. The data in this study were analyzed using descriptive and inferential statistics. Hypothesis test using Pearson correlation. The results of the study obtained that there was a significant relationship between the use of the Ibis Paint X application and the motivation to learn to design the fashion of grade XI students, the fashion show had a pearson correlation coefficient value of 0.559 and a significance value (sig. 2-tailed) of 0.000. This shows that there is a relationship between the use of the Ibis Paint X application and the motivation to learn to design fashion in grade XI students of fashion at SMK Negeri 1 Salatiga with the correlation category being.

Keywords: Ibis Paint X Application, learning motivation, digital learning, digital fashion, learning media

INTRODUCTION

The rapid development of information technology has brought significant changes in various areas of life, including education. Digitalization of education is a new form of innovation to improve the education system that is directed at the transformation of the system towards digital with the use of technology (Patmasari et al., 2023). Vocational High Schools (SMK) have a strategic role in preparing graduates who are competent and relevant to the needs of the industry. According to (Zalsyabila & Aisyah, 2025) Vocational High School (SMK) is an educational unit that is oriented towards the development of practical skills and work skills that are relevant to the needs of the business and industrial world, so that the graduates produced have work readiness and are able to adapt and contribute optimally in the field.

According to (Nurhijrah & Suryani, 2024) Vocational High Schools need to ensure their graduates have a good understanding of the basic concepts of technology and the ability to apply them in the fashion industry. There are skills that vocational school graduates must have in fashion skills. The skill of making manual and digital fashion designs is one of the skills that students must have as a form of adaptation to the orientation of graduates who have skills and skills that link and match with industry demands (Ruhidawati et al., 2025).

This skill can be supported by digital media, one of which is the Ibis Paint application. The use of the Ibis Paint X application in the creation of fashion designs provides great flexibility, making the process

easier for its users (Mubarok et al., 2024). The advantages and disadvantages of the Ibis Paint X application according to ((Hasanudin et al., 2020) namely the ability to design with detail, has a variety of canvas sizes, has various types of brushes and other supporting tools, while the disadvantage of Ibis Paint X is that the maximum size of the A4 canvas is difficult to draw in large sizes, there is no scan feature, the textures or motifs provided are incomplete. Ibis Paint X-based learning is worthy of being integrated into the curriculum of vocational schools, especially in the fashion department, to improve the quality of learning that is more innovative, contextual and according to the needs of the times (Jannah et al., 2025).

Based on the results of observations at SMK N 1 Salatiga, the use of the Ibis Paint X application in designing clothes, especially in grade XI students of fashion design in the subject of fashion design and production, technical drawing elements have been implemented. The application is a form of technology integration and is expected to help students understand fashion design materials effectively. However, based on initial observations, students' learning motivation in completing fashion design tasks is still diverse. Some students tend to do makeshift assignments to meet the assessment and show a lack of confidence in the results of the design made.

The use of technology-based learning media, such as the Ibis Paint X application has become relevant in overcoming student boredom with conventional learning methods, Students with a good level of technological literacy tend to experience boredom faster when the learning process is carried out traditionally. The use of learning media that is in accordance with the needs will produce effective and efficient learning activities. Learning motivation is an important factor that affects learning success. Motivation plays a role as a driver, director, and reinforcement of student learning activities, so that it has an impact on perseverance, focus, and quality of learning outcomes (Sipayung et al., 2025).

Several previous studies have shown that the Ibis Paint X app can increase students' interest and engagement in design learning. These results show that the use of digital applications makes a significant contribution to learning interest (Jannah et al., 2025). Research by (Wijayanti & Misbahuddin, 2025) shows that the use of the Ibis Paint X application can increase students' interest in learning to design clothes compared to manual methods. Previous research has generally focused more on aspects of learning outcomes and learning interests, while studies that examine learning motivation as an internal factor of students are still quite limited.

This study is focused on examining the extent of the relationship between the use of the Ibis Paint X application and students' learning motivation in designing clothing. By analyzing the relationship between the use of these applications, this study can produce relevant recommendations regarding strategies for using digital applications that are more optimal in supporting design learning

METHOD

This study uses a quantitative approach with correlation to measure the relationship between the use of the Ibis Paint X application and the motivation to learn to design fashion in grade XI students of fashion design at SMK Negeri 1 Salatiga. This type of correlational research describes the relationship between two or more variables, but does not provide evidence to explain which variables are causal and which are causal (Hasnunidah, 2017).

The population of this study is all students of class XI fashion at SMK Negeri 1 Salatiga totaling 71. The reason for taking the population is because the subject of fashion design and production is an advanced competency of the basics of expertise that is the foundation and skills for learning the concentration of fashion expertise. In these subjects, students are able to design manually and digitally. The sampling technique uses a total sample, to the total, which is to make the population a sample (Scott, 2021). As for using a total sample because the population is less than 100. In this study, it consists of two variables, namely the use of the Ibis Paint X application as an independent variable (X) and the motivation to learn to design fashion as a bound variable (Y).

The data collection technique in this study uses questionnaires. The questionnaire consists of a list of statements based on the indicators of the variables studied. Statement variables were measured on a likert scale with categories: Strongly agree (SS), Agree (S), Hesitate (R), disagree (TS) and strongly disagree (STS). Before being used in the data collection of this study, the instrument was tested for validity and reliability to ensure that each statement item had interpreted the indicators of the use of the Ibis Paint

X app and Motivation to learn to design fashion.

The validity in this study uses content validity. The validity of the instrument's content is obtained by consulting the details of the instrument that has been prepared with experts. *The appointed expert judgement* is an expert in the field of instruments, then the data is analyzed with the Aiken's V index. Validity testing is calculated using the Aiken's V formula to calculate the validity coefficient:

$$V = \frac{\sum s}{n(c-1)}$$

Description:

V=Aiken validity index

S=r – the

lo=Lowest validity rating number

C=Highest number of validity assessments

n=Number of raters

r=Numbers given by the assessment

(Azwar, 2022: 113)

As a result of proving validity, the instrument item is declared valid if it meets the limit of the V aiken coefficient that has been set (Prasetyaningtyas & Wening, 2022). The validity of the instrument in this study was tested by three expert assessors using an assessment scale of 5. Based on the reference of Table V, the minimum limit of validity coefficients that must be met on the instrument item is 0.92.

The calculation results show that in the variable X of the use of the Ibis Paint X application, there are 4 invalid items out of 15 items because they have a $\leq$ value of 0.92, namely in items 4, 5, 7 and 8. Meanwhile, in the Y variable Motivation for learning to design clothes, there are 3 invalid items out of 16 items, namely in items 4, 7, and 15.

The reliability of this research instrument uses inter-rater reliability *Intraclass Correlation Coefficients* (ICC), using this because the number of assessors is more than two. ICC which shows an excellent estimation level in the value range of 0.75-1.00 (D., 1994; Prasetyaningtyas & Wening, 2022). Based on the results of the calculation of the ICC variable X The use of the Ibis Paint X application is 0.774, the results of the ICC variable Y Motivation to learn to design clothes is 0.797, so it can be said that the agreement of the assessors is very good.

The data in this study were analyzed using descriptive and inferential statistics. Descriptive analysis is used to describe the data collected. Hypothesis test using Pearson correlation. In carrying out the analysis, the first step is to describe the data, then a classical assumption test is carried out which consists of a normality test, normality testing for reference for the selection of correlation tests. If it is normally distributed using parametric statistics, namely pearson product moment correlations, if it is not normally distributed, use non-parametric statistics.

RESULTS AND DISCUSSION

In this section, the results of data analysis and discussion of the relationship between the use of the Ibis Paint X application and the motivation to learn to design fashion in grade XI students of fashion design at SMK Negeri 1 Salatiga, Data analysis is carried out in stages, with descriptive analysis to describe and descriptive data results, then a classical assumption test is carried out consisting of a normality test, Normality testing for correlation test selection reference.

Ibis Paint X App Usage

Data on the use of the Ibis Paint X application was obtained from the results of giving a questionnaire to students of grade XI fashion at SMK Negeri 1 Salatiga using *a google form* conducted at the time of the research. In the research questionnaire, there were 11 items that represented the statement of the use of the Ibis Paint X application and were then processed with the help of IBM SPSS statistical software version 26. The results of the descriptive analysis of the use of the Ibis Paint X application are presented as follows:

Table 1. Descriptive Analysis of the Use of the Ibis Paint X Application

Descriptive Statistics						
	N	Range	Minimum	Maximum	Mean	Std. Deviation
Penggunaan Aplikasi Ibis Paint X (X)	71	17	38	55	45.48	3.824
Valid N (listwise)	71					

Based on the results of the descriptive statistical analysis of the variables of the use of the Ibis Paint X application table 1.1, it is known that the maximum value obtained is 55, while the minimum value is 38, so that a range of 17 is obtained. This shows that there is a variation in the use of the Ibis Paint X application among students. The average value (mean) of using the Ibis Paint X app is 45.48. While the standard deviation value is 3.824, indicating that the data spread is relatively homogeneous, because the standard deviation value is smaller compared to the mean value.

Motivation to Learn to Design Fashion

Table 2. Descriptive Analysis of Learning Motivation

Descriptive Statistics						
	N	Range	Minimum	Maximum	Mean	Std. Deviation
Motivasi Belajar (Y)	71	31	34	65	53.03	6.454
Valid N (listwise)	71					

Based on the results of the descriptive analysis of table 1.2, it can be seen that the maximum score was obtained at 65, while the minimum score was 34 out of 71 respondents. So that a range value of 31 was obtained, showing that there is a variation in the level of motivation to learn to design clothes that is quite diverse. The mean value was 53.03, with a standard deviation of 6.454 indicating that the distribution of learning motivation data was quite varied because the standard of study was smaller compared to the mean value.

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Before hypothesis testing, a classical assumption test was carried out consisting of a normality test, normality testing for reference for the selection of correlation tests.

Classic Assumption Test

Normality Test

The normality test aims to find out whether the data in the study is normally distributed or not. The normality test of this study used the Kolmogorov Smirnov test with the help of the IBM SPSS statistic 25 program. The data is distributed normally when $\text{asympt.sig} > 0.05$. Meanwhile, the data is declared to be abnormally distributed if $\text{asympt.sig} < 0.05$ (Ghozali, 2020) The following are the results of the summary of the normality test:

Table 2. Kolmogorov Smirnov Normality Test
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		71
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	5.35100526
Most Extreme Differences	Absolute	.102
	Positive	.058
	Negative	-.102
Test Statistic		.102
Asymp. Sig. (2-tailed)		.062 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Based on table 3, the results of the normality test showed that the residual value of the relationship between the use of the Ibis Paint X application and the motivation to learn to design students' clothes, was obtained a significance value of Asymp.sig. (2-tailed) by 0.062. The result of the significance value is greater than 0.05, namely the Asymp.sig value (2-tailed) is $0.062 \geq 0.05$, so the results show that the data in this study is normally distributed and meets the requirements for parametric statistics, namely the Pearson product moment correlation.

Hypothesis Test

Pearson product moment correlation test

Hypothesis testing using *Pearson product moment correlation analysis*, is used to test the hypothesis about whether or not there is a relationship between the variables studied.

The basis of decision making on the correlation test is when $r_{\text{Count}} > r_{\text{Table}}$ cast H_0 rejected and H_a accepted, meaning that there is a significant relationship between the two variables. On the other hand, when $r_{\text{Count}} < r_{\text{Table}}$, then H_0 is accepted and H_a is rejected, meaning that there is no significant relationship between the two variables (Scott, 2021). As for the guidelines for providing an interpretation of correlation coefficients looking at the level of relationships, referring to (Scott, 2021) as follows:

Table 3. Kolmogorov Smirnov Normality Test

Interval Coefficient	Relationship Level
0,00 – 0,199	Very low
0,20 – 0,399	Low
0,40 – 0,599	Medium
0,60 – 0,799	Strong
0,80 – 1,000	Very powerful

The following are the results of the Pearson Product Moment correlation test:

Table 4. Pearson Product Moment Correlation Test
Correlations

			Penggunaan Aplikasi Ibis Paint X	Motivasi Belajar
Penggunaan Ibis Paint X	Pearson Correlation		1	.559**
		Sig. (2-tailed)		.000
		N	71	71
Motivasi Belajar	Pearson Correlation		.559**	1
		Sig. (2-tailed)	.000	
		N	71	71

** . Correlation is significant at the 0.01 level (2-tailed).

Based on the results of the correlation test above, the results of the $r_{\text{calculation}}$ of $> r_{\text{table}}$ were obtained

which were $0.559 > 0.227$ it was concluded that H_0 was rejected and H_a was accepted, this shows that there is a relationship between the use of the Ibis Paint X application and the motivation to learn to design fashion in grade XI students in fashion at SMK Negeri 1 Salatiga.

The significance level resulting from the above calculation is known that between the use of the Ibis Paint X application and learning motivation, a significance value of $0.000 < 0.05$ is obtained, meaning that the relationship between the two variables is significant. In addition, the correlation coefficient value was obtained at 0.559 This shows that there is a relationship between the use of the Ibis Paint X application and the motivation to learn to design fashion in grade XI students of fashion design at SMK Negeri 1 Salatiga with a medium correlation level, because it is in the range of 0.40-0.559 based on the correlation coefficient interpretation guidelines.

These results are in accordance with the characteristics of students in the current era who are familiar with technology. According to (Afriyadi, 2023) Today's students are the generation that is used to digital technology (*Digital Native*), the use of digital technology as a learning medium is an alternative that is in accordance with the habits and environment of students. These findings show that the use of applications as a learning medium can be an alternative to increase students' motivation to learn. Motivation has an important role for students, without strong motivation, the learning process will not take place effectively. Therefore, choosing the right media in the learning process will increase students' motivation in learning. The appropriate use of learning media can help overcome students' learning difficulties, increase interest and motivation to learn (Febrita & Ulfah, 2019).

The use of the Ibis Paint X application as a digital learning medium allows students to be actively involved in exploring design ideas visually, and the ease of use of the feature makes it attractive to students, learning is more interesting. Digital-based learning is more effective in attracting students' attention, ease of use, interactive skills and flexibility of features that the Ibis Paint X application has allows them to be actively involved, increasing motivation in learning (Wijayanti & Misbahuddin, 2025). These findings are consistent with previous research by (Mustakim et al., 2024) It shows that the use of applications as a learning medium has a significant relationship with students' learning motivation. Other research by (Utami et al., 2025) The use of digital media in fashion learning has a significant impact on the quality of the teaching and learning process, increases motivation, student involvement and supports the mastery of fashion practice skills. Thus, in the context of this research, the Ibis Paint X application acts as a digital learning medium that is able to arouse students' motivation for learning to design clothes.

CONCLUSION

Based on the research and analysis that has been conducted, it can be concluded that there is a relationship between the use of the Ibis Paint X application and students' motivation in learning to design fashion in class XI Fashion Design SMK Negeri 1 Salatiga. The results of the correlation analysis showed a coefficient of 0.559 with a significant value (sig. 2-tailed) reaching 0.000, which indicates that there is a significant relationship between the two variables with a moderate correlation. These findings confirm that the Ibis Paint X application functions as a digital learning tool that can support and increase student motivation, especially in fashion design activities. Therefore, the use of the Ibis Paint X application can be considered as an effective alternative learning tool to increase students' interest, confidence, and engagement in learning fashion design in vocational schools.

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