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## **Visual Appeal and Emotional Impact on the Audience Interest of Information Systems Students at Universitas Internasional Batam: A Comparison between Anime and Live-Action One Piece in Batam**

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### **Abstract**

This study examines the influence of visual appeal and emotional impact on audience interest in students of Information Systems at Universitas Internasional Batam, using a comparison between the anime and live-action versions of One Piece. The research aims to determine which version—2D anime or 3D live action—has a more significant effect in attracting viewers through visual aesthetics and emotional delivery. A quantitative and qualitative approach was used, involving 271 respondents through a Likert-scale questionnaire. Data were analyzed using SPSS 3, including validity, reliability, normality, multicollinearity, heteroscedasticity, and hypothesis testing. The results indicate that both visual appeal and emotional impact significantly influence audience interest, with emotional impact showing a slightly stronger effect. Additionally, qualitative feedback reveals that anime is favored for its artistic visual and storytelling depth, while live-action is appreciated for its realism and emotional expression. This research provides insights into how different forms of media presentation can affect viewer engagement, which is useful for content creators and media producers.

### **Keywords:**

Visual Appeal, Emotional Impact, Audience Interest, Anime, Live Action

### **Introduction**

Animation is a technique that combines still images into motion. These images are compiled and played at high speed so that when run rapidly, they are perceived by human memory as moving visuals. This technique is designed to facilitate the delivery of information to recipients [1].

Animation can be defined as an effort to bring life or the illusion of life and movement to still images or inanimate objects. Technically, animation refers to the act of animating a sequence of still images, or the technique of filming a series of images or models to create an illusion of motion. Animated videos serve as a learning medium presented in a clear manner, making complex material easier to understand. The media created also combines audio and visual elements to attract audience interest [2].

Currently, there are many types of animation techniques, with two of the most commonly found being 2D and 3D animation techniques. Two-dimensional (2D) animation focuses on the x and y axes—length and width. In contrast, three-dimensional (3D) animation focuses on length, width, and height [3]. The 3D animation technique is a more advanced form of 2D animation, as it results in more interactive visuals. However, producing animations using 2D techniques is generally easier than with 3D.

Speaking of animation, there is currently a large global audience interested in Japanese animation, commonly referred to as anime. Anime is a distinctive form of Japanese animation typically created using colored illustrations that depict various characters, settings, and storylines, aimed at a wide range of viewers. Aside from traditional animation, live- action adaptations of anime have recently become a growing trend. Numerous film studios are attempting to transform anime series into live-action formats to reach a broader audience. One such anime that has been adapted into a live- action series and is currently trending is One Piece [3]. One Piece is one of the most beloved anime series worldwide. Created by Eiichiro Oda, it tells the story of a seventeen-year- old boy named Monkey D. Luffy, who dreams of becoming the king of the seas.

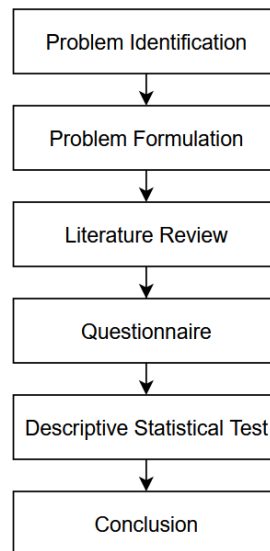
The issue addressed in this research is the influence of Visual Appeal and Emotional Impact as factors affecting Audience Interest. The debate revolves around whether the 2D anime version is more effective in influencing audience interest through visual appeal and emotional impact, or whether the 3D live-action version is more capable of doing so.

This issue is raised by the researcher as the basis of the study, aiming to determine whether expressive elements in the anime One Piece are more effective in generating audience interest, or whether the expressive elements portrayed in the live-action version are more successful in eliciting emotional engagement from the audience through the performances of real actors.

## Research Methods

### A. Research Flow

In a research study, a research flow is essential to ensure that the investigation proceeds in a more systematic and organized manner. The following is the research flow that has been designed:



**Figure 1.** Research Flow

### B. Research Design

Based on the problem to be studied, the type of research used in this study falls under the category of causal-comparative research. The purpose of this research design is to demonstrate the relationship between independent and dependent variables within one or more groups of individuals. In this study, the researcher aims to analyze the

relationship between the variables and compare the influence of the independent variables—Visual Appeal and Emotional Impact—on Audience Interest.

*C. Research Object*

The target respondents of this study are individuals who enjoy and have already watched both the 2D animated and live-action versions of One Piece. This selection is based on the fact that the One Piece animated film and its live-action adaptation have become trending topics due to the excitement of audiences eager to see their favorite animated characters adapted into a live-action format. In this research, the author created 20 questions, with a total of 271 respondents serving as the data sample to be analyzed. The questionnaire was distributed via Google Forms and shared through social media platforms [4].

*D. Operational Definitions of Variables*

1) Dependent Variable

According to [5] visual appeal in a film or a work of art becomes a significant factor that influences the attraction of viewers or art enthusiasts. When a work of art or a film is created with highly engaging and appealing visual effects, the intensity of the audience's interest in watching the film tends to increase.

[7] states that emotional impact is another crucial element in a film. A work created by an artist with deep meaning, where the artist intentionally incorporates emotional elements into the artwork, enables the audience to grasp the essence of the piece, whether explicitly or implicitly. Furthermore, it is cited from one source that the human brain operates by prioritizing its emotional responses when taking action[8]. Therefore, emotions play an essential role in films, as the emotional delivery allows the audience to empathize with the conditions and characteristics portrayed by the actors in the film.

2) Independent Variable

According to [9] Audience interest refers to the attraction or curiosity of one or more individuals toward a work or object that stimulates their desire to obtain or enjoy that particular work or object. Audience interest serves as one of the triggering variables, whereby a work or film is created with the ability to attract the audience's interest in watching or purchasing it. Furthermore, the relationship between the independent and dependent variables can be seen in [5] which states that visual appeal can influence audience interest, because when a work successfully presents engaging visuals, the audience's desire to enjoy the work also increases. In addition, according to [5] the development of emotions can influence audience interest, as a well-crafted work often leaves a lasting impression on its viewers. Therefore, if the emotional elements are effectively developed in a film, clearly portraying the characteristics of the actors, it will enhance the audience's interest in watching the film.

*E. Data Collection Techniques*

The method used in this study is a combination of quantitative and qualitative approaches. The questionnaire data were collected by creating a Google Form containing 20 questions, which were then randomly distributed to the public through social media platforms. The questions included inquiries about how often the respondents watch animation and live-action adaptations, the visual appeal presented in both versions, and the emotional impact experienced by the viewers from the animation and live-action versions.

The questionnaire utilized a five-point Likert scale to measure respondents' reactions to each question. The Likert scale consists of five levels, designed to encourage respondents to provide clear and definitive answers. The sources of the questions were adapted from previous research explaining the use of the Elaboration Likelihood Model [10].

*F. Data Analysis Method*

The method used to support this research is the descriptive analysis method. This method is employed to describe the general overview of the collected data [7]. The data components collected include respondents' interest

in One Piece based on its animation, the visual presentation, the actors, character development, and other related aspects.

#### G. Descriptive Statistical Test

The descriptive statistical test is a testing technique that examines information in the form of percentages to assist the process of quantitative data analysis in a descriptive manner. This structure also helps provide a general overview of each piece of data and information presented, followed by the identification of groups of values such as the mean, maximum, minimum, and standard deviation [11].

##### 1) Validity Test

In this study, one of the data testing methods used is the validity test.[7] states that the validity test is used to determine the value and arrangement of the questionnaire data. The validity of the questionnaire is assessed based on the respondents' understanding when filling out the questionnaire [7].

The testing criteria are as follows :

1. The measuring instrument is considered valid if the calculated  $r > \text{table } r$
2. The measuring instrument is considered invalid if the statistical  $r \leq \text{table } r$

To determine the table  $r$ , use  $df (N-2)$  and the significance level of a two-tailed test. For example, table  $r = df (13-2, 0.05)$ . To obtain the table  $r$  value, we need to refer to the  $r$  table.

##### 2) Reliability Test

This reliability test is a test that measures the level of consistency in the data obtained. This test assesses consistency across all types of data measured, ranging from methods, results, and conditions to the opinions given in the questionnaire. Therefore, it can be generally concluded that this reliability test represents the range between values on an instrument, serving as a benchmark for the alignment of the questions being tested. Thus, this test is similar to a validity test because, in addition to requiring accurate values, the consistency of the opinions provided for each question also serves as a benchmark for the research [7].

##### 3) Normality Test

The normality test is conducted with the aim of determining whether the variables used as references for hypothesis testing are naturalistic data. In other words, both the independent and dependent variables need to follow a normal distribution path so that the data obtained is not biased. This makes the normality test one of the factors researchers pay attention to because normality has a significant impact on the results of the analysis conducted [12]. Therefore, the criteria for this normality test are as follows :

1. If the  $p\text{-value} > 0.05$ , the data is considered to be normally distributed, and the next testing can proceed.
2. If the  $p\text{-value} \leq 0.05$ , the data is considered not to be normally distributed, and consideration is needed for data transformation or the use of non-parametric methods.

##### 4) Multicollinearity Test

The multicollinearity test is conducted to determine whether the variables being tested exhibit multicollinearity. This is important because the variables should not contain the same aspects, indicators, or dimensions .

Therefore, the criteria for this test are as follows:

1. If the VIF value  $> 10$ : This indicates a strong relationship between the independent variables, namely Visual Appeal and Emotional Impact. This condition shows the presence of high multicollinearity, which can cause instability in the regression coefficients, making the interpretation of the effect of each variable on Audience Interest less accurate. In this case, the regression model cannot be relied upon due to redundancy of information between the two variables.
2. If the VIF value  $< 10$ : This indicates that Visual Appeal and Emotional Impact do not have a significant correlation with each other, meaning your regression model is free from multicollinearity issues. As a result, the model becomes more stable, and the regression coefficients can be interpreted more clearly. Each

independent variable has a clear contribution to predicting Audience Interest, making the research findings more reliable and easier to understand.

#### 5) Heteroscedasticity Test

This test is conducted to address issues with the error size in the residuals across all parts of the data. In research, residuals should ideally not exhibit heteroscedasticity because it can interfere with the research process, particularly in terms of the accuracy of the findings.

The criteria required for this test are as follows:

1. If the p-value  $> 0.05$ : This indicates that there is no heteroscedasticity issue, and the residual variance can be considered constant across all data. The regression model is considered valid, and its results are more reliable because the variability in prediction errors is not affected by the levels of independent variables like Visual Appeal and Emotional Impact.
2. If the p-value  $< 0.05$ : This indicates the presence of heteroscedasticity, meaning the residual variance (prediction errors) is not constant across the values of the independent variables. In the context of your research, this could mean that the impact of Visual Appeal and Emotional Impact on Audience Interest is inconsistent across the data range. This can lead to inefficient regression results, with biased regression coefficients, making it difficult to interpret the relationships between variables.

#### 6) Hypothesis Testing

The hypothesis testing conducted in this study aims to gather data that serves as a preliminary speculation from the respondents [13]. This test is carried out to collect the responses, which will then be re-validated to assess the correctness of the answers provided [14]. The correlation data that can be derived from the questionnaire is the data provided by respondents, which is considered provisional and has been answered according to the appropriate instrument, and will then be tested for validity. This testing is assisted by using SPSS software to facilitate the testing process. The purpose of the average responses is to be used as the hypothesis in this study, which asks whether Visual Appeal has a significant effect on Audience Interest, and whether Emotional Impact has a significant effect on Audience Interest. The collected data will be evaluated to determine if the hypotheses we propose are correct or not. Based on the results, we can draw a new conclusion from the tests that have been performed. Therefore, the expected form of the hypotheses is as follows :

H1: Visual Appeal has a significant effect on Audience Interest .

H2: Emotional Impact does not have a significant effect on Audience Interest.

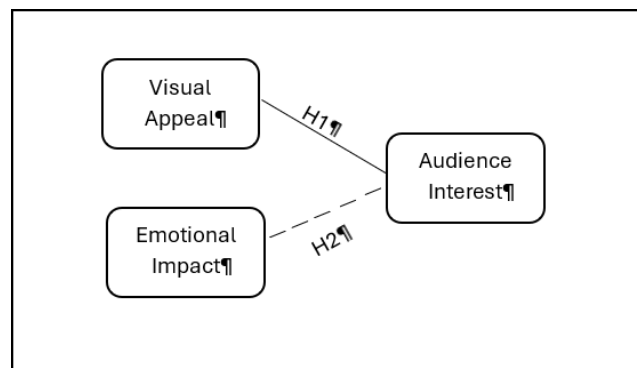


Figure 2. Hypothesis

## Results and Discussion

### A. Implementation

The implementation applied in the comparison between visual appeal and emotional delivery in anime and live-action films starts with identifying the background of the problem, where some viewers argue that visuals are more influential in 2D and 3D animated films, as well as live-action films. On the other hand, there are also opinions suggesting that in both 2D and 3D animated films and live-action, emotional delivery is what conveys a deeper message and influences the audience's interest in watching. This is followed by the design of a questionnaire, along with the design of the target respondents, which consists of students from the Information Systems department who have an interest in watching 2D and 3D anime and live-action films. The target respondents are selected using the Cluster Random Sampling technique, and the Slovin formula is used to determine the total number of respondents needed for data collection. The collected data is then processed and analyzed based on the target data using SPSS 3 software as a tool for data testing.

## B. Analysis and Discussion

### 1) Respondent Criteria

Based on the theme of comparing visual appeal and emotional delivery in relation to audience interest in watching 2D and 3D live-action "One Piece" films, the author used a sampling approach known as cluster random sampling [15] This sampling method randomly selects groups based on predetermined clusters, with the cluster for this questionnaire data test being Information Systems students from the International University of Batam, totaling 840 students from the 2020 to 2024 cohorts. The Slovin formula was then used to calculate the total number of respondents needed. After applying the Slovin formula, the required sample size for this study was 271 respondents. The collected data will then undergo statistical testing, including validity, reliability, normality, multicollinearity, heteroscedasticity tests, and hypothesis testing.

### 2) Results of Descriptive Statistical Test

#### a) Validity Test Results

The purpose of this validity test is to determine whether the results of the questionnaires distributed and the data filled out by respondents regarding the discussion are valid.

**Table 1. SPSS3 Testing Result**

Correlations					
		VA1	VA2	VA3	VASUM
VA1	Pearson Correlation	1	.694**	.713**	.886**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	271	271	271	271
VA2	Pearson Correlation	.694**	1	.749**	.906**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	271	271	271	271
VA3	Pearson Correlation	.713**	.749**	1	.911**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	271	271	271	271
VASUM	Pearson Correlation	.886**	.906**	.911**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	271	271	271	271

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

The results of the validity test showed that there were 3 questions correlating with Visual Appeal, marked as VA1, VA2, and VA3. These were tested using the average score of all the questions, yielding the following results: VA1 = 0.886, VA2 = 0.906, VA3 = 0.911. According to the criteria for validity testing, data is considered valid if the score is > 0.05. Therefore, the validity test results for the Visual Appeal variable are considered valid.



**Table 2. SPSS 3 Testing Result**

		Correlations			
		EM1	EM2	EM3	EMSUM
EM1	Pearson Correlation	1	.716**	.754**	.906**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	271	271	271	271
EM2	Pearson Correlation	.716**	1	.749**	.904**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	271	271	271	271
EM3	Pearson Correlation	.754**	.749**	1	.917**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	271	271	271	271
EMSUM	Pearson Correlation	.906**	.904**	.917**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	271	271	271	271

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

In the next table, the testing of Emotional Impact on 2D and 3D Live Action animation is presented, marked as EM1, EM2, and EM3. The results obtained are 0.906, 0.904, and 0.917. According to the validity test criteria, data is considered valid if the score is > 0.05. Therefore, the validity test results for the Emotional Impact variable are considered valid.

**Table 3. SPSS 3 Testing Result**

		Correlations							
		AU1	AU2	AU3	AU4	AU5	AU6	AU7	AUSUM
AU1	Pearson Correlation	1	.732**	.618**	.686**	.683**	.676**	.682**	.856**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001	<.001	<.001
	N	271	271	271	271	271	271	271	271
AU2	Pearson Correlation	.732**	1	.630**	.689**	.729**	.721**	.719**	.880**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	<.001	<.001	<.001
	N	271	271	271	271	271	271	271	271
AU3	Pearson Correlation	.618**	.630**	1	.633**	.647**	.656**	.583**	.802**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001	<.001	<.001
	N	271	271	271	271	271	271	271	271
AU4	Pearson Correlation	.686**	.689**	.633**	1	.634**	.675**	.590**	.826**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001	<.001	<.001
	N	271	271	271	271	271	271	271	271
AU5	Pearson Correlation	.683**	.729**	.647**	.634**	1	.701**	.700**	.860**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001	<.001	<.001
	N	271	271	271	271	271	271	271	271
AU6	Pearson Correlation	.676**	.721**	.656**	.675**	.701**	1	.681**	.864**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001		<.001	<.001
	N	271	271	271	271	271	271	271	271
AU7	Pearson Correlation	.682**	.719**	.583**	.590**	.700**	.681**	1	.839**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001		<.001
	N	271	271	271	271	271	271	271	271
AUSUM	Pearson Correlation	.856**	.880**	.802**	.826**	.860**	.864**	.839**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	<.001	
	N	271	271	271	271	271	271	271	271

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

Next, in this table, the validity test for the Audience Interest variable is presented, consisting of 7 questions marked as AU1, AU2, AU3, AU4, AU5, AU6, and AU7. The resulting data scores are 0.856, 0.880, 0.802, 0.826, 0.860, 0.864, and 0.839. According to the validity test criteria, data is considered valid if the score is > 0.05. Therefore, the validity test results for the Audience Interest variable are considered valid.

#### b) Reliability Test Results

The purpose of this reliability test is to ensure that the results of the data testing are reliable and consistent, so that the data can be trusted.

**Table 4. SPSS 3 Testing Result**

Reliability Statistics	
Cronbach's Alpha	N of Items
.884	3

In the reliability test of the Visual Appeal variable using the Cronbach's Alpha method to determine the level of reliability across the 3 questions, a score of 0.884 was obtained. According to the criteria for this test, the Visual Appeal variable is therefore considered reliable and trustworthy.

**Table 5. SPSS 3 Testing Result**

Reliability Statistics	
Cronbach's Alpha	N of Items
.895	3

In the reliability test of the Emotional Impact variable using the Cronbach's Alpha method to determine the level of reliability across the 3 questions, a score of 0.895 was obtained. According to the criteria for this test, the Emotional Impact variable is therefore considered reliable and trustworthy.

**Table 6. SPSS 3 Testing Result**

Reliability Statistics	
Cronbach's Alpha	N of Items
.934	7

In the reliability test of the Audience Interest variable using the Cronbach's Alpha method to determine the level of reliability across the 7 questions, a score of 0.934 was obtained. According to the criteria for this test, the Audience Interest variable is therefore considered reliable and trustworthy.

#### c) Normality Test Results

**Table 7. SPSS 3 Testing Result**

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized Residual
N			271
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	2.19329292	
Most Extreme Differences	Absolute	.060	
	Positive	.060	
	Negative	-.046	
Test Statistic			.060
Asymp. Sig. (2-tailed) <sup>c</sup>			.019
Monte Carlo Sig. (2-tailed) <sup>d</sup>	Sig.	.019	
	99% Confidence Interval	Lower Bound	.016
		Upper Bound	.023

Based on the table above, it is explained that the result of the normality test is 0.19, indicating that the obtained score meets the criteria for the normality test, which requires a value greater than 0.05. Thus, the data from this study is considered normally distributed. Furthermore, the graphical representation also shows that the plotted line appears fairly straight, supporting the conclusion that the data successfully meets the normality assumption



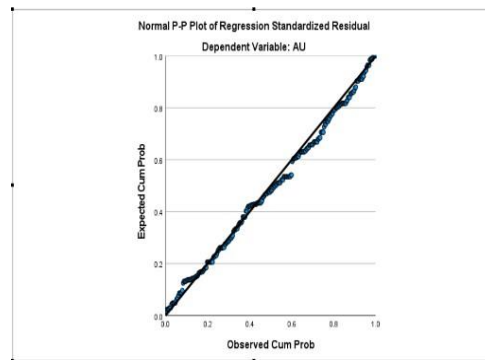


Figure 3. Normality Test Plot

d) Heteroscedasticity Test Result

Table 8. SPSS 3 Testing Result

Coefficients <sup>a</sup>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	VASUM	.212	4.718
	EMSUM	.212	4.718

a. Dependent Variable: AUSUM

The results of the multicollinearity test show that the variables tested have Tolerance values greater than 0.100 and VIF values below 10.00. Therefore, it can be concluded that the two variables are not strongly correlated with each other, indicating that multicollinearity is not present in the model.

e) Heteroscedasticity Test Results

Table 9. SPSS 3 Testing Result

Coefficients <sup>a</sup>					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	1.663	.284		<.001
	VASUM	-.112	.057	-.259	.051
	EMSUM	.112	.057	.260	.050

a. Dependent Variable: ABS\_RES

In this heteroscedasticity test, the objective was to determine whether the designed regression model is stable and accurate. Based on the results shown in the table, the Visual Appeal variable successfully met the heteroscedasticity test requirement with a p-value greater than 0.05. Meanwhile, the Emotional Impact variable obtained a p-value exactly equal to 0.05. According to the testing criteria, if the p-value is 0.05, it can still be concluded that the variable does not exhibit strong heteroscedasticity, and therefore, the regression model can still be considered valid.

f) Hypothesis Test Results

i. Partial T-Test Results

**Table 10. SPSS 3 Testing Result**

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1	(Constant)	.417	.083		6.815	<.001
	VA	.400	.038	.433	10.523	<.001
	EM	.499	.038	.545	13.230	<.001
a. Dependent Variable: AU						
					Tolerance	VIF
					.212	4.718
					.212	4.718

In the partial t-test, the results showed that the t-value for the Visual Appeal variable was 10.523, with a significance level of < 0.001. Since the significance value is below 0.05, this result proves that Visual Appeal has a significant effect on Audience Interest. Similarly, for the Emotional Impact variable, the t-value was 13.230, with a significance level below 0.05 (0.001). This indicates that Emotional Impact also significantly influences Audience Interest. Therefore, both Visual Appeal and Emotional Impact are found to have a significant effect on Audience Interest.

## ii. Simultaneous F-Test Results

**Table 11. SPSS 3 Testing Result**

ANOVA <sup>a</sup>					
Model		Sum of Squares	df	Mean Square	F
1	Regression	248.696	2	124.348	1257.226
	Residual	26.507	268	.099	
	Total	275.203	270		
a. Dependent Variable: AU					
b. Predictors: (Constant), EM, VA					
					Sig.
					<.001 <sup>b</sup>

The results of the simultaneous F-test showed an F- value of 1257.226, which indicates the strength of the relationship between the independent variables, Visual Appeal and Emotional Impact, with the dependent variable, Audience Interest. The significance value was found to be 0.001, which is less than the threshold of 0.05. Therefore, based on the F- test, the regression model is considered significant. This means that Visual Appeal and Emotional Impact, when considered together, have a significant effect on Audience Interest.

## iii. Coefficient of Determination (R<sup>2</sup>) Test Results

The results of the R Square (R<sup>2</sup>) test showed a value of 0.904. According to the criteria for the coefficient of determination, this means that Visual Appeal and Emotional Impact together explain 90.4% of the variability in Audience Interest. The remaining 9.6% of the variability is attributed to factors outside of the model, indicating that while the model is strong, other external variables may also influence Audience Interest. In conclusion, Visual Appeal and Emotional Impact have a very strong relationship with Audience Interest, accounting for 90.4% of the variability in this research.

**Table 12. SPSS 3 Testing Result**

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.951 <sup>a</sup>	.904	.903	.31449	2.035
a. Predictors: (Constant), EM, VA					
b. Dependent Variable: AU					

## 3) Qualitative Test Results

Regarding the main factor, audience interest, two questions were asked to assess respondents' preferences for 2D animation and 3D live-action films. The results showed the following:

- Some respondents preferred the 2D version due to its ability to engage the audience with the story. Visually, the characters and the plot in the 2D version were considered more effective at attracting audience interest.
- On the other hand, the 3D Live Action version also received some positive feedback, particularly for its realism. Respondents noted that the 3D version was more appealing due to the realistic elements, such as character expressions, visuals, and environmental conditions, which felt much more lifelike. This allowed viewers to feel more immersed and connected to the story they were watching.

## Conclusions

A film can have an impact on viewing interest due to the effect of both visual elements and strong emotional depth. When a film presents stunning and unique visuals, it can captivate the audience and please their eyes. Additionally, with the aid of strong emotional depth, the audience is able to empathize with the situation portrayed in the film. The aim of this study is to analyze the relationship between Visual Appeal and Emotional Impact, and how these factors significantly and validly influence Audience Interest, as both variables are interrelated and connected. Therefore, the conclusions drawn from this study are as follows:

- 1). The Visual Appeal variable has a significant impact on Audience Interest. This is evident from the T-test results, where the calculated score was 10.523 with a significance level of  $<0.001$ . According to the test criteria, a significance value of  $<0.05$  is required, and since the obtained value is below that threshold, it confirms that this variable significantly influences Audience Interest. Additionally, the qualitative results from the respondents indicate that the 2D version has a strong impact on audience engagement with the story. This is due to the visuals, characters, and plot, which in the 2D version were found to be more effective in attracting the audience's interest.
- 2). The Emotional Impact variable also has a strong influence on Audience Interest. This is supported by the T-test results, where the score obtained was 13.230 with a significance level below 0.05 (specifically 0.001), indicating that the Emotional Impact variable significantly affects Audience Interest. Additionally, from the qualitative results, based on the responses provided by the respondents, it can be concluded that the emotional approach in the 3D Live Action version also provides a deep emotional impact. This is because the characters are played by professional actors, whose expressions resonate deeply with the audience, making the emotional experience more impactful and engaging for the viewers.
- 3). The impact of both the Visual Appeal and Emotional Impact variables on Audience Interest was found to be highly significant. After undergoing the F Simultaneous Test, the result was 1257.226, indicating a strong relationship between the Visual Appeal and Emotional Impact variables. With a significance value of 0.001, which is below the threshold of  $<0.05$ , it can be concluded that the regression model is significant. Therefore, it can be inferred that both the Visual Appeal and Emotional Impact variables, when considered together, significantly influence Audience Interest.

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## References

- [1] Jimmy Pratama and Wendy Aprianto, "Design of 2D Animation Video on the History of Vietnam Village in Batam," *Braz Dent J.*, vol. 33, no. 1, pp. 1–12, 2022.

- [2] C. A. Sanchez and K. Weber, "Using Relevant Animations to Counter Stereotype Threat When Learning Science," *J. Appl. Res. Mem. Cogn.*, vol. 8, no. 4, pp. 463–470, 2019, doi: 10.1016/j.jarmac.2019.08.003.
- [3] Siti Nafisatun Khoiriyah, "Analysis of the Adaptation of Tokyo Ghoul Anime Season One into Tokyo Ghoul Live Action Viewed from Plot and Mise-En-Scene," 2021.
- [4] J. F. Hair, J. J. Risher, M. Sarstedt, and C. M. Ringle, "When to use and how to report the results of PLS- SEM," *Eur. Bus. Rev.*, vol. 31, no. 1, pp. 2–24, 2019, doi: 10.1108/EBR-11-2018-0203.
- [5] N. Astin, C. D. Murdaingtyas, and J. Fachri, "Creation of Visual Effects to Enhance Visual Appeal in Video Podcasts," *National Seminar on Applied Research and Innovation*, Semin. Nas. Terap. Ris. Inov., vol. 8, no. 1, pp. 528–535, 2023, [Online]. Available: <https://proceeding.isas.or.id/index.php/sentrinov/article/view/1201>
- [6] N. A. P. Yuliani, "Application of Leitmotif in the 1972 Film The Godfather," *Segara Widya J. Penelit. Seni*, vol. 11, no. 1, pp. 10–18, 2023, doi: 10.31091/sw.v11i1.2428.
- [7] H. Puspasari and W. Puspita, "Validity and Reliability Testing of Research Instruments on Students' Knowledge and Attitudes Toward the Selection of Health Supplements in Facing Covid-19, Validity Test and Reliability Instrument Research Level Knowledge and Attitude of Students Towards ," vol. 13, pp. 65–71, 2022.
- [8] A. Anderson, "Thinking Fast and Slow (Indonesia)," vol. 20, no. 1, pp. 139–140, 2020.
- [9] J. E. Trisakti, A. J. Firdaus, R. Haularizki, F. Rahayu, and N. Subjektif, "Increasing Movie Watching Interest in Cinemas Based on Audience Attitudes Through Management," vol. 2, no. 2, pp. 691–702, 2022.
- [10] J. J. Guyer, P. Briñol, R. E. Petty, and J. Horcajo, "Nonverbal Behavior of Persuasive Sources: A Multiple Process Analysis," *J. Nonverbal Behav.*, vol. 43, no. 2, pp. 203–231, 2019, doi: 10.1007/s10919-018-00291-x.
- [11] R. Rudini, "The Role of Statistics in Quantitative Social Research," *J. SAINTEKOM*, vol. 6, no. 2, p. 53, 2017, doi: 10.33020/saintekom.v6i2.13.
- [12] A. Pendahuluan, "Concept of Validity and Reliability Testing Using SPSS," no. 18210047.
- [13] J. H. Yam and R. Taufik, "Quantitative Research Hypothesis," vol. 3, no. 2, pp. 96–102, 2021.
- [14] H. D. Siregar, M. Wassalwa, K. Janani, I. S. Harahap, I. Gusti, and A. Ari, "Journal of Education," vol. 3, no. 1, 2024.
- [15] N. Sulistyowati, A. T. Widodo, and W. Sumarni, "The Effectiveness of the Guided Discovery Learning Model on Chemical Problem-Solving Skills," *Chem. Educ.*, vol. 2, no. 1, pp. 49–55, 2012.