IJORER : International Journal of Recent Educational Research
Homepage : https://journal.ia-education.com/index.php/ijorer
Email : ijorer@ia-education.com

p-ISSN : 2721-852X ; e-ISSN : 2721-7965
IJORER, Vol. 6, No. 4, July 2025
Page 1287-1300

Effect of Negative Emotional Video Stimuli on Word Choice in Grade X High School

Riki Maulida Rahman[1*], Yulia Ayriza[2], Sebastian Vaida[3]
[1]Yogyakarta State University, Yogyakarta, Indonesia
[2]Yogyakarta State University, Yogyakarta, Indonesia
[3]Babeş-Bolyai University, Cluj-Napoca, România

DOI: https://doi.org/10.46245/ijorer.v6i4.879

Sections Info

Article history:
Submitted: May 07, 2025
Final Revised: July 30, 2025
Accepted: July 31, 2025
Published: July 31, 2025

Keywords:
Emotion; Word Choice; High School

ABSTRACT

Objective: Emotional problems that arise in adolescents are often caused by situations within their family or neighborhood, but physical health and the influence of visual media or movie shows can also affect the emotional state of adolescents. This study aims to determine the impact of negatively charged videos on emotions in word choice This research uses a quantitative approach with an experimental method of the true experimental type. The sampling technique is simple random sampling, which is a technique where each member of the population has the same opportunity to become a research sample. The difference test used is the Mann-Whitney test because the data is an independent sample. The results showed that P = 0.000 ≤ α (0.05), then H0 was rejected, or which means that there was a difference in the number of negative word scores between the control group and the experimental group in class X students of SMA Negeri 1 Ngaglik. By rejecting H0, the study provides evidence of a significant difference in word choice between the group given the negative emotion stimulus and the control group.

INTRODUCTION

Emotions are multifaceted complex responses, regarding how they are expressed, elicited, and modulated (Pesau et al., 2024). Emotional problems that arise in adolescents are often caused by situations within their family or neighborhood, such as disharmony among family members or conflicts with peers (Jati et al., 2023; Mathew et al., 2021; Ogundele, 2018). Not only that, issues related to physical health and the influence of visual media or movie shows can also affect adolescents' emotional (Abanina & Baqri, 2021; Bozzola et al., 2022; Gagliano et al., 2023).

Research from Sevma and Thomas (2018) explains that visual media can affect the emotional levels that occur in adolescents and affect the level of personality development in a teenager, then in research conducted by Kubrak (2020) also found the results that movies affect positive and negative emotions based on the shows watched by adolescents. Movies or shows watched by adolescents have the potential to influence their actions and form habits in everyday life (Haddock et al., 2022; Kubrak, 2020; Panjeti & Ranganathan, 2023). The films can provide examples of behavior, values, and norms that can then be adopted by adolescents (Darling-Hammond et al., 2020; Döring & Hillbrink, 2015).

Based on these studies, it can be concluded that visual media or movie shows are important in influencing adolescents' emotions. These shows are not just entertainment but also have the potential to form daily habits (Kubrak, 2020). In the category of viewers who watch visual media, teenagers are one of the groups with the most categories in consuming visual media and movie shows.

Based on DataIndonesia.id written by Shilvina Widi (2022), it describes that the age of 5-17 years is the largest television audience in Indonesia with 89.69%. Visual media or

p-ISSN : 2721-852X ; e-ISSN : 2721-7965
IJORER, Vol. 6, No. 4, July 2025
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movie shows today are not only focused on television but also on various platforms on the internet such as YouTube, Netflix, Vidio, etc. In this case, teenagers also ranked first as the most users with 99.16% based on the results of a survey conducted by DataIndonesia.id written by Dimas Bayu (2022).

The data described above becomes a serious problem if it can affect adolescents' emotions, especially if the content of the broadcast has the potential to contain negative elements and can have a detrimental impact on adolescent emotional development (Liang, 2023). The use of social media at this time is also very frequent or intense since 2019 due to the COVID-19 virus outbreak which requires every individual and community to remain silent in their residence to avoid the spread of the virus (De' et al., 2020; Dhama et al., 2020), Desy Setyowati (2020) in her survey results found that there was an increase in the use of smartphones during the spread of the COVID-19 virus from 64.8% to 73.7% and increased over time. Therefore, the use of technology to access visual media and movie shows increased more drastically than before the COVID-19 virus spread (De' et al., 2020; Jonnatan et al., 2022).

The actions of each individual are never separated from the influence of the emotions they experience (Hammond et al., 2020). These emotions have deep roots in their environment and the habits they develop throughout life (Castillo-Huitrón et al., 2020). The combination of these factors plays a key role in stimulating the emergence of emotions, and these emotions influence how the individual expresses them through various actions and behaviors. In this case, the environment and habits carried out by adolescents will be created by researchers to arouse a person's emotions in the form of a video that can cause negative emotions.

Based on the explanation described above, the researcher will experiment on a group of adolescents with an age range of 16-18 years in class X students. This study aims to determine whether negatively charged video shows can affect the emotions that occur in respondents. The use of negative videos used by researchers is not without reason, but to serve as a stimulus in arousing emotions in determining their actions. Action here is defined as word choice, which is an action to choose words correctly and is very suitable for expressing ideas quickly. So that the action, which is defined as the choice of words described by the researcher, is then chosen by the respondent to find out what happens in them. Therefore, this study aims to investigate the impact of negatively charged videos on students' emotions in word choice. This study hypothesizes that there is a difference in the number of negative word scores between the control group and the experimental group in grade X high school students.

RESEARCH METHOD

The approach used in this research is a quantitative approach with the research method used being the experimental method because in practice the research object gets treatment. The type of experiment used is true experimental design with a Posttest-Only Control Group design, the paradigm or scheme in this experiment is as follows:

Table 1. Research Experiment Scheme

Group	Treatment	Posttest
Experiment	X	O2
Control		O2

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p-ISSN : 2721-852X ; e-ISSN : 2721-7965
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In this study, researchers used simple random sampling, namely sampling from a population that is carried out randomly without paying attention to the strata in the population. The number of samples in this study amounted to 28 out of 36 class X students, this is due to the screening process carried out to get the respondents as expected.

The measuring instrument used in this study is in the form of words chosen by respondents. The words consist of 15 words containing 3 (three) types of emotions, namely positive, neutral, and negative. From the words chosen by the respondent, the researcher can find out the emotions felt by the respondent.

Table 2. Three Types of Emotion Word

Positive Words	Neutral Words	Negative Words
Happy	Calm	Fed up
Spirit	Boring	Sad
Funny	Astonishing	Dislike
Like	Surprised	Disgust
Cheerful	Silent	Fear

At the time of experimental research, it is necessary to pay attention to the steps or procedures in the implementation of experiments, in this study the procedure is divided into two because of the differences in the treatment of each group. The steps are as follows:

1. Experimental group
   a. Administration of the willingness sheet
   b. Giving the 1st instruction regarding the research
   c. Subjects were asked to watch a video that contained negative emotions with a duration of 5 minutes 51 seconds
   d. After 5 minutes 51 seconds, the 2nd instruction will be given by the researcher
   e. The subject is asked to write down the answers to the questionnaire regarding the subject's emotional state after watching the video show
   f. Giving the 3rd instruction given by the researcher
   g. The subject was asked to circle 5 words out of 15 words that best suited the subject's emotional state at the time of the study
   h. The researcher collected the sheets of paper containing 5 words
   i. Giving the 4th instruction given by the researcher
   j. Subjects were asked to watch a 3-minute video. This video contains impressions of funny events (containing positive emotions) as a form of researcher responsibility for changing the subject's emotional condition after watching the previous video
   k. Giving the 5th instruction which contains thanks to the subject, and the subject
   l. Excused to leave the research room
2. Control group
   a. Providing the 1st instruction on the research
   b. Subjects were asked to write down answers to the questionnaire regarding their emotional state
   c. Giving the 2nd instruction given by the researcher

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d. The subject was asked to circle 5 words out of 15 words that best fit the subject's emotional state at the time of the study
e. The researcher collects the paper sheet containing 5 words
f. Giving the 3rd instruction which contains thanks to the subject, and the subject
g. Excused to leave the research room

The data analysis stage in this study was conducted to check whether there were significant differences between different groups using numerical comparative statistical analysis. The statistical test method used depends on the distribution of the data obtained.

First, the unpaired t-test method (Independent sample t-test) was used to compare the means between two different groups. If the data distribution was normal, the t-test was applied (Mishra et al., 2019). A significance value of $p < 0.05$ indicated a significant difference between the groups who watched the negatively charged video show against negative emotions for word choice (Andrade, 2019).

Secondly, if the data distribution was abnormal, the Mann-Whitney test method was chosen to check the difference between the two groups. The test results were evaluated by comparing the Zcount value with the critical value of Ztabel (Yoon et al., 2021). When -Ztabel < Zcount < Ztabel (Budiarto, 2021; Zimmerman, 1987), it indicates that there is no significant difference between the two groups in the effect of viewing negatively charged videos (Divine et al., 2013). Conversely, if -Ztabel < Zcount < Ztabel is not met, H0 is rejected and H1 is accepted, indicating a significant difference in each group.

RESULTS AND DISCUSSION

Results

The research findings are based on quantitative data analysis using the Mann-Whitney test processed through the SPSS for Windows version 25 program. Then the data is distinguished based on word selection in the control group and the experimental group.

Table 3. Data on Control Group

Initial	Positive	Neutral	Negative
RR	1	4	0
HNP	0	4	1
SPM	0	5	0
YDR	2	3	1
ZAC	2	3	0
NDA	0	5	0
DHO	1	3	1
C	1	3	1
AC	2	2	1
AGC	1	4	0
DR	2	3	0
INZ	1	4	0
NN	1	4	0
FRA	1	3	1

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p-ISSN : 2721-852X ; e-ISSN : 2721-7965
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Table 4. Data on Experiment Group

Initial	Positive	Neutral	Negative
MY	0	0	5
ASL	0	2	3
F	0	2	3
GDK	0	0	5
VAP	0	1	4
SPR	1	1	3
MASB	1	1	3
TE	0	1	4
NF	1	0	4
AC	0	0	5
E	0	1	4
OFN	0	1	4
IGNH	0	2	4
KK	1	0	4

This study was conducted to evaluate the impact of providing a stimulus in the form of negative emotional content on word choice in class X students of SMA Negeri 1 Ngaglik. As part of the analysis, the researcher presented a comparison graph between the control group and the experimental group regarding the selection of words related to negative aspects. This graph provides a visual representation of the differences in the frequency or types of negative words chosen by the two groups.

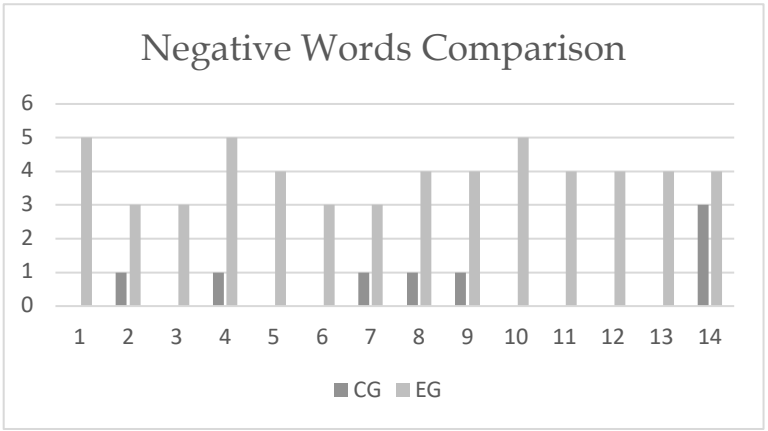

Figure 1. Negative Words Chosen by the Two Groups

Based on the graph, it can be seen that the experimental group (EG) gets the effect of negatively charged emotions after receiving treatment in the form of viewing videos that are uncomfortable to watch, this is different from the control group (CG) which does not get any treatment so that the choice of words tends to be neutral or positive.

Normality Test

In this study, the significance level applied is 5%. The steps to analyze the differences between the control group and the experimental group begin with the first step, which is the Normality Test. This step aims to assess whether the sample data follows a normal distribution or not. This assessment is important because it will determine the appropriate statistical testing method that should be used to compare data in the control group and data in the experimental group.

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Table 5. Normality Test

Group	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Control Group	0.369	14	0.000
Experiment Group	0.224	14	0.045

The normality data obtained with a value of <0.05 (<5%) indicates that the tested data does not follow a normal distribution. This indicates that the data sample does not have a distribution pattern that matches the normal distribution. In this context, the normality test results that show a significant value less than the predetermined significance level (5%) lead to the conclusion that the data does not meet the normal distribution assumption. Therefore, when conducting further statistical analysis, it is necessary to use methods that fit non-normal distributions, such as non-parametric statistical tests (Mishra et al., 2019; Nahm, 2016).

When the data does not meet the normal distribution assumption, the next step is to use a non-parametric statistical test, such as the Mann-Whitney U Test (McKnight & Najab, 2010; Nahm, 2016). This test is suitable for comparing the difference between the means of samples that are not normally distributed with each other. This non-parametric method allows the analysis of comparisons between two groups statistically without relying on certain distribution assumptions, so it can be used when the data does not meet the normal distribution requirements (Schober & Vetter, 2020). The Mann-Whitney U test will help in evaluating whether there is a significant difference between the two groups of samples being tested.

Mann-Whitney U Test

Mann-Whitney U test analysis is carried out to see the difference between the control group and the experimental group if the data is not normally distributed (non-parametric) (Nachar, 2008; Tai et al., 2022). This test uses the calculation assistance of the SPSS for Windows version 25 program.

Table 6. Mann-Whitney Test

Test Statistics	
	Negative
Mann-Whitney U	.000
Wilcoxon W	105.000
Z	-4.617
Asymp. Sig. (2-tailed)	.000
Exact Sig. [2*(1-tailed Sig.)]	.000[b]

If P ≤ α (α = 0.05), then H0 is rejected, which means there is a difference in the number of answer scores between the control group and the experimental group in class X students of SMA Negeri 1 Ngaglik. Based on the significance table above, P = 0.000 ≤ α, then H0 is rejected or in other words, there is a difference in the number of negative word scores between the control group and the experimental group in class X students of SMA Negeri 1 Ngaglik.

Based on the results of statistical analysis using the Mann-Whitney test revealed a significant impact of negative emotion stimulus on word choice in class X students of SMA Negeri 1 Ngaglik. This finding highlights a real change in word choice patterns after exposure to material or stimulus that causes negative emotions.

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Stimulus carried out using video is a tool or tool in bringing up negative situations that are aired to evoke negative emotions in participants. The video shown is a collection of short videos with a duration of 5 minutes 51 seconds that can evoke feelings of annoyance or anger in participants. Feeling upset itself is one of the emotions included in the type of negative emotion. Emotion is a series or component that prepares itself to become an action (Scherer, 2009; Scherer & Moors, 2019). Emotions involve interactions between various components such as physiological responses, feelings, thoughts, and behaviors (Izard, 2009).

The stimuli used in this study have been disaggregated into six components that make up the emotion continuum. The first component is cognitive appraisal, Cognitive appraisal is the first stage in the emotion process where participants evaluate the stimulus according to their experience of upset emotions (Qiu et al., 2022; Troy et al., 2018). It involves assessing or interpreting the situation or stimulus that triggers a particular emotional reaction (Wang & Yin, 2023). At this stage, individuals mentally evaluate or interpret the received stimulus according to the context that triggered the upset feelings. In this case, participants make a cognitive appraisal of the stimulus that causes upset emotions, forming the basis of their emotional response to the situation.

In the second stage of subjective experience, individuals experience feeling emotionally attached or engaged to the stimulus they experienced (Brown et al., 2020; Pace-Schott et al., 2019; Šimić et al., 2021). This triggers an emotional response, including in the context of this study, where participants experienced the presence of negative emotions after subjectively engaging with a given stimulus (Tyng et al., 2017). This subjective experience may manifest as feeling intense or attached to the content at hand, affecting the participant's mood or emotional reaction to the stimulus.

This third component of the emotion continuum is related to the thought and action tendencies that arise in participants in response to the stimulus they experience (Kleef & Côté, 2022). At this stage, participants feel a strong urge or desire to immediately end or avoid the stimulus that caused the negative emotion, in this case, a video that triggered feelings of anger when watched. This reaction can be a strong urge to end a situation that is causing emotional discomfort (Lerner et al., 2015), indicating that the participant feels disturbed or uncomfortable with the content of the video (Leary, 2015; O'Neill et al., 2021). The feeling of wanting to immediately finish or stop the video is one example of the thought and action tendencies that arise in response to negative emotions triggered by a given stimulus.

This fourth component of the emotion continuum refers to the internal changes in the body that occur when participants experience upset emotions. One common example is an increase in heart rate (Arias et al., 2020). When a person feels a negative emotion such as upset, the autonomic nervous system that regulates automatic functions in the body, such as heart rate, can be affected (Appelhans & Luecken, 2006; Hall et al., 2023). An increase in heart rate can be a physiological response to emotions (Wascher, 2021). Emotions such as anger or upset can trigger the release of stress hormones in the body, which in turn can increase heart rate as part of the body's response to emotional situations perceived as stressors (Schneiderman et al., 2005; Smith & Pollak, 2020).

The fifth component is facial expressions that appear when facial muscles react to a stimulus that causes negative emotions (Söderkvist et al., 2018). In this case, participants showed a scowling expression and a flushed face as a manifestation of the upset feelings they were experiencing. Facial expressions are often a clear indicator of how a person

p-ISSN : 2721-852X ; e-ISSN : 2721-7965
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feels emotionally (Barrett et al., 2019). Frowning and facial discoloration, such as blushing, are often associated with negative emotions, such as anger or upset (Kret, 2015; Nakajima et al., 2017; Takahashi & Kawabata, 2018). Facial muscles contract or show certain patterns corresponding to the type of emotion felt, which can then be seen as a typical expression of that emotion (Kuramoto et al., 2019).

The final component of this emotion continuum is the response to emotion that is reflected in word choice. Word choice is seen as a response to emotion because words can be an expression of feelings and thoughts used in communication (Lindquist, Satpute, et al., 2015; Torre & Lieberman, 2018). In this context, when individuals experience certain emotions, such as being upset, the choice of words they use in communication can be reflective of this emotional state (Hendrix & Morrison, 2020; Hofmann, 2014; Torre & Lieberman, 2018). For example, they may tend to use words that reflect frustration or anger.

Word choice is one of the most fundamental ways in which people express and convey what they feel to others. In communication situations, words become very important tools to convey emotions, thoughts, and feelings (Bucăța & Rizescu, 2017). The choice of words in communication not only conveys literal meaning but also carries emotional nuances that can provide a deeper picture of a person's state of mind (Grillo & Enesi, 2022). When a person experiences certain emotions, the choice of words they use tends to reflect that emotional state (Lindquist et al., 2015). Thus, in the context of emotions, the choice of words becomes a direct response that reflects one's emotional state when communicating. This shows how words can be a mirror of what a person feels and how they want to convey their feelings to others (Absattar et al., 2022).

The results of the study showed that the stimulus in the form of negatively charged videos had a significant influence on the actions taken by participants. The response to this stimulus is reflected in the choice of words by participants, where they tend to choose words related to negative emotions. This suggests that video content that triggers negative emotions can influence the choice of words used by participants.

This response could be an indication that exposure to negatively charged content can alter verbal communication patterns, particularly in terms of the use of words associated with negative emotions (Baez-Lugo et al., 2023; Kauschke et al., 2019). These results show the significant impact of emotional stimuli on participants' verbal responses, demonstrating how certain visual content can influence their verbal expression, especially in the choice of words they use.

CONCLUSION

Fundamental Finding : Data analysis in this study indicates that the provision of negative emotion-triggering stimuli has a significant effect on word choice among grade X students at SMA Negeri 1 Ngaglik. With the discussion according to the hypothesis, this study provides evidence that there is a significant difference in word choice between the group given the negative emotion stimulus and the control group. This suggests that exposure to a stimulus that produces negative emotions can change the way students choose words when they communicate or respond to certain situations. These results support the idea that certain visual content or stimuli have a measurable influence on verbal communication patterns, particularly in terms of the choice of words used by students.

p-ISSN : 2721-852X ; e-ISSN : 2721-7965
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ACKNOWLEDGEMENTS

With full dedication, we conducted this experimental research with the hope that it could provide benefits to various related fields. The success of this research is also inseparable from the help of the reviewers and editorial team of the Jurnal Psikologi (JP) who have made invaluable contributions to improve our research. We appreciate their unlimited support. It is our hope that the findings of this study can serve as a strong and valuable basis for future scientific research.

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p-ISSN : 2721-852X ; e-ISSN : 2721-7965
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Riki Maulida Rahman
Faculty of Education and Psychology,
Yogyakarta State University,
Jl. Colombo No.1 Karangmalang, Yogyakarta, 55281, Indonesia
Email: rikimaulida.2022@student.uny.ac.id

Yulia Ayriza
Faculty of Education and Psychology,
Yogyakarta State University,
Jl. Colombo No.1 Karangmalang, Yogyakarta, 55281, Indonesia
Email: yulia_ayriza@uny.ac.id

Sebastian Vaida
Faculty of Psychology and Educational Science,
Babeş-Bolyai University
Str. Mihail Kogălniceanu, nr. 1, Cluj-Napoca, 400084, România,
Email: sebastianvaida@psychology.ro