

Fear Emotion of Reading the Horror Webtoon “Kemala” with Background Music

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ABSTRACT

Technological innovations in webtoons, such as the capability of adding background music, change the comic reading experience and thus deserve further research. One of the comic titles that uses this feature is the well-known Indonesian horror comic, Kemala. Background music is known to be an important component in audio-visual media, especially in the horror genre. Indeed, it functions as a tool for eliciting emotions of fear that match the horror narrative. Essentially, the horror genre aims to scare its audience. Having an additional source of horror through the usage of background music might help horror webtoons achieve their goal. It is imperative to have specific research that examines the effect of background music on the emotion of fear in reading horror webtoons. This study, using the horror comic Kemala, conducted a two-group experimental approach: one group read the comic without music while another group read the comic with music to measure the differences in the emotion of fear using a questionnaire. Finally, a Mann-Whitney U Test was done using SPSS; it was found that there was a significant difference in fear levels between the groups. Thus, reading Kemala with background music provides a scarier reading experience.

Keywords: Background Music, Fear, Horror Genre, Webtoon

INTRODUCTION

Even though there is no true scientific consensus on the definition of emotion, it is known as an entity that can be triggered (Gendron, 2010). Furthermore, three components have long been considered essential parts of emotion: motor expression, bodily symptoms/arousal, and subjective experience (Mulligan & Scherer, 2012). The dynamics of these three components signal the presence of emotion. Research regarding comics' capability to elicit certain emotions has been done before by Matsubara et al. (2016). In the study, bodily symptoms tracking tools were used, and it was found that some participants' arousal could be estimated accurately, but others were not due to participants' tendency to move unconsciously (Matsubara et al., 2016). Furthermore, the study did not specifically track the emotion of fear nor use comics with background music. Another study has also been done to examine how a fictional narrative could elicit certain emotions (Visch et al., 2010). However, the study used films as a stimulus and did not specifically track the emotion of fear.

Background music, especially in films, plays an important role in forming mental reactions and manipulating the emotions of audiences (Donnelly, 2019). Indeed, even music, in general, can be used as a tool for people to immerse themselves in the emotions that they are feeling (Dingle et al., 2019). Furthermore, specifically in the horror genre, background music plays an important role as it acts as a device for eliciting specific emotions, usually fear or feelings of discomfort and uneasiness (Donnelly, 2019).

Thanks to technological advancements, webtoons have various novel features compared to their traditional counterparts. One of the new features was the capability to insert background music, which was introduced in 2009 for the Naver Webtoon platform. Although readers were

unfamiliar with the new feature back then, as of this writing, more than 150 titles in Naver Webtoon have used this feature (webtoon.fandom.com). Furthermore, even major players in the music industry, such as K.Will, Baek Z-young, Gummy, and Kim Jong-Kook, who often produce soundtracks for Korean Drama, have also released original soundtracks for webtoon comics (Si-Jin, 2021). Additionally, outside the webtoon realm, in the French-language *bande dessinée* field, the phenomenon of combining music and comics was also present and meant to be experienced together (Blin-Rolland, 2019). All in all, this means that the trend of using background music is increasing and is here to stay. Thanks to many new novel features, such as the insertion of background music or the click-and-drag reading mode, digital comics diverge from their traditional conventions (Dittmar, 2012) and give readers a new kind of reading experience (Park, 2020). Particularly in horror webtoons, background music is now a part of comic authors' toolbox to further influence the emotional reactions of their readers.

Kemala is an Indonesian gore supernatural horror comic (Mawla Fatha & Mansoor, 2020) targeting teenagers and has included background music since its debut in 2020. The comic is well-known, boasting over 19 million readers and a rating of 9.91 out of 10. Of course, its popularity isn't solely due to its usage of background music, but it is undeniable that the background music provides a unique reading experience that might significantly influence readers' fear emotions, making it a subject worthy of further research.

Through the literature review, we found no research that has specifically investigated the effect of background music on the emotion of fear in reading Indonesian digital horror comics. In this study, we presented the horror comic *Kemala* to two groups of participants in different formats: one group read the comic with background music, while the other group read it without music. We hypothesized that participants who read the comic with background music would experience a significantly greater emotion of fear.

RESEARCH METHOD

This study used a quantitative approach and used SPSS to analyze the data. This approach allows for collecting data from a larger sample, offering a comprehensive representation of the population. It also supports statistical analysis to identify significant patterns and trends effectively. The details are as follows:

1. Participants

One hundred adolescent students (29 men; 71 women) from a private school in Medan were randomly assigned to one of two conditions: either reading the comic with music ($N = 51$) or reading the comic without music ($N = 49$). Due to unequal gender representation, gender was not considered a factor. The mean age of the sample was 16.79 years. Participants were tested in groups of twenty students in each session.

2. Stimuli

The comic selected for the experiment was the first two chapters of the horror comic *Kemala*. The first two chapters were chosen because *Kemala*, as of this writing, is still an ongoing series and has an overarching storyline throughout its years of publication. Thus, we deemed it easier for participants who might have no prior knowledge of the series to read.

3. Reading Equipment

Participants read using a customized Vurrion Core i3-12100 computer of the lab with a GTC Primera 16 inc Wide series monitor and accessed the comic through the official Indonesian Naver Webtoon site using Google Chrome. Participants who belonged to the reading with music group were provided with Keenion brand headphones.

4. Experiment Procedure

Firstly, participants were told that they would be participating in an experiment designed to investigate people's responses to horror comics without mentioning the focus

on the emotion of fear. The experiment took place in the computer laboratory of Perguruan Panca Budi, a private school in Medan city. The laboratory was comfortable: well-illuminated, carpeted, and air-conditioned. The laboratory contained eighty sets of computers and headphones. However, in the experiment, only twenty sets of computers and ten headphones (only for the group reading with music) were used per session, with ten sets of computers per group. The group with headphones was separated from those who read without headphones. Each participant in each group was seated with approximately two seats of space between them and the next participant. Secondly, the participants were asked to read the comic. There was no time limit for the participants to read the comic. The experimenter, a teacher, and a laboratory staff were present during the experiment but positioned at the backside of the lab and were asked not to disturb the participant. Thirdly, after reading, participants were asked to complete the feedback questionnaire on the computer using online forms. The dependent measure was the emotion of fear experienced during the reading test. Fourthly, after filling out the form, each participant received snacks as a participating gift and was asked to leave the laboratory. Thus, the experiment ended. We found that the data we collected was not normally distributed; thus, we decided to use a nonparametric approach. Therefore, a Mann-Whitney U Test was employed using SPSS software to analyze the data.

5. Feedback Questionnaire

At the end of the reading session, participants rated the emotion of fear to their experience using a modified Sparks and Spirek (1988) post-test questionnaire, a seven-point scale questionnaire, and each scale was labeled at the endpoints with the two possible extreme reactions (Sparks and Spirek, 1988). The questionnaire is considered valid to rate the emotion of fear if a measurement physiological signal tool is not available (Martin, 2019).

RESULT AND DISCUSSION

This study examines the differences between the emotion of fear levels in two groups of participants. On one hand, one group read the horror comic *Kemala* using background music. On the other hand, another group read the comic without background music.

One participant was identified as an outlier and thus was taken out. To analyze the data, firstly, a validity and reliability test was administered. All the items in the questionnaire used in this study passed the validity and reliability test. Secondly, a test of normality was administered. The data collected was found to be not normally distributed. Thirdly, a test of homogeneity of variances was done. The data obtained was homogenous. The test results of all the above can be seen below from Table 1 to Table 4. Consequently, because the data collected was not normally distributed, a non-parametric approach was used, using the Mann-Whitney U Test.

Table 1. Validity Test

Items	Corrected Item Total Correlation (r)	r _{table}	Results
1	0,685	0,195	Valid
2	0,569	0,195	Valid
3	0,685	0,195	Valid
4	0,638	0,195	Valid
5	0,415	0,195	Valid
6	0,324	0,195	Valid

Table 2. Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
0,837	6

Table 3. Test of Normality

GROUP		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
FEAR	With Music	0,125	50	0,049	0,964	50	0,125
	Without Music	0,166	49	0,002	0,934	49	0,009

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Table 4. Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
FEAR	0,041	1	97	0,840

The results of the Mann-Whitney U Test were as follows:

Table 5. Mean Rank

FEAR	GROUP	Ranks		
		N	Mean Rank	Sum of Ranks
	With Music	50	60,31	3015,50
	Without Music	49	39,48	1934,50
	Total	99		

Table 6. Mann-Whitney U Test

Test Statistics ^a		FEAR
Mann-Whitney U		709,500
Wilcoxon W		1934,500
Z		-3,611
Asymp. Sig. (2-tailed)		0,000

a. Grouping Variable: GROUP

1. Findings

Table 5 above shows the difference in mean between the two groups: the group with background music (60,31) achieved a higher mean than the group without background music (39,48). Furthermore, in Table 6, we can see that the Asymp. Sig. (2-tailed) is valued at 0.00. Thus, the significance value of the emotion of fear variable is smaller than the p-value ($p < 0.05$), which means there is a significant difference in the fear emotion between the groups. As predicted in our hypotheses, background music in the horror comic *Kemala* was associated with more fear emotion. So, it can be concluded that there is a significant difference in the emotion of fear between the two groups; the group with music has a higher score than the group without music. All in all, this finding provides useful insight for comic artists, editors, and people who work in the digital comic industry, particularly those who specialize in the horror genre.

2. Discussion

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We found a significant difference in fear emotion between the groups; the group that read with music rated the experience as more fearful. There may be several explanations for this. Firstly, background music is a tool for building a mental framework and gives the audience, in the case of digital comics, readers, to give directions on what emotion they should feel (Donnelly, 2019). In *Kemala*, apart from the already scary visuals (Mawla Fatha & Mansoor, 2020), the background music provided in the comic also suggests the emotion of fear to the reader. Furthermore, the background music of *Kemala* has a slow melody and is not particularly memorable or tuneful, a defining aspect of music typically used in the horror genre (Donnelly, 2019). The background music of *Kemala* is identified to use a tone known as the Devil's Tritone, a highly dissonant interval within the Western musical system. This tritone has always made it exceptionally useful to composers who wish to convey the idea of evil, the Other, or the alien (Lerner et al., 2010). Additionally, the background music also incorporates ghastly gibberish voices that convey the idea of fear. This is essentially the purpose of horror background music to shake the reader's sense of comfort (Donnelly, 2019). All in all, the source of fear for *Kemala* comic readers who use background music is not only found in its visuals but also in its audio, which is why the readers' fear is significantly higher.

Secondly, in the comics medium, there is already an element of sound and 'musicality' albeit in visual form such as onomatopoeia, fonts, or word balloons (Kim, 2023). This is why comics are said to be polysemic and a multimodal medium that is divided into many elements, not just purely a visual medium (Chute & Dekoven, 2012). Thus, of course this pseudo-sound construction is also present in the visual narrative of *Kemala*. Hence, this already present element, coupled with the appropriate background music, intensified the readers' sense of dread. All in all, we can see that additional elements, such as background music that matches the visuals and themes of the story, such as in *Kemala*, make the horror elements in *Kemala* comics multi-layered, which makes its reader elicit more fear. This also aligns with Blin-Rolland's research, which argues that when comic is combined with music, it becomes greater than the sum of its parts and becomes a new entity entirely (Blin-Rolland, 2019).

This study found that background music in *Kemala* significantly affected the readers' emotions of fear. However, this does not mean that background music is mandatory in comics. From the data obtained, it is clear that comics without music also cause fear. Even without background music, there are already multiple horror elements in a horror comic, from the character design, fonts used, speech bubbles, onomatopoeia, visualization of lighting and shadows, and others. All these elements can arouse emotions in readers (Kim, 2023). Also, it is undeniable that comics without background music also have elements of sound. Many scholars have argued that there are many strategies a comic artist can implement to visually represent sound and push the boundaries of this soundless medium (Kim, 2023).

Unlike in the context of horror films, in which music usage seems mandatory, as if horror films cannot work if there is no accompanying music (Donnelly, 2019). However, this is certainly not the case for comics, which essentially do not use background music (Kim, 2023). However, the development of digital technology in comics has certainly changed the conventions of traditional comics (Dittmar, 2012). But it is important to keep in mind that comics are essentially a visual medium, so even if background music is inserted, it should not become the main element of the comic and still maintain the specifications of the comic medium so that it does not exceed its graphic/textuality limits (Kim, 2023). However, we can

conclude that the use of music in webtoons, especially in the horror comic *Kemala*, helps build the mental framework process of its readers, thus providing a different and unique comic reading experience.

Even though digital comics are changing the conventions of traditional comics (Dittmar, 2012). The existence of digital comics does not replace conventional comics because, according to Park (2020), the existence of webtoons is a case of media convergence as in the convergence of digital media and comics and is not a digital revolution model that assumes old media would be replaced by new media (Park, 2020). This can be seen from the many comics that were published as digital-first but then republished in printed format. Or vice versa, where the comic was published as a print and then republished into a digital version; *Garudayana* by Is Yuniarto is one example. All in all, with all its technological innovations, Webtoon makes comics in different formats to provide a new experience for comic readers (Park, 2020). While the use of background music was proven to cause significant differences in fear levels, it does not mean that comics with background music are better because, in the end, it all depends on the reader's subjectivity and preferences.

Kemala horror comics based on the horror genre category fall into the supernatural horror category (Cherry, 2009). Thus, the use of background music is appropriate in helping to create a supernatural horror ambiance and atmosphere, as evidenced by the use of ethereal sounds in the music tracks. However, it needs to be clarified that, unlike movies that are fixed-pace media, webtoons, such as *Kemala*, are self-paced media, where the reader determines the speed of the back and forth of the narrative flow. So, the use and application of background music in *Kemala* are not the same as in a movie because the insertion of music in *Kemala* is not arranged according to the visuals that appear in a movie. However, it is undeniable that with background music, the experience of reading comics becomes more eerie. Indeed, the mixture of background music and comic visuals provides a different and new comic reading experience (Blin-Rolland, 2019). So, background music can add value to a horror comic title and become a unique selling proposition for potential readers.

Finally, it is important to note that the present study did not address the influence of gender, even though supposedly there are differences in how adolescents of different genders react to horror narratives (Martin, 2019) that might or might not affect the level of fear they elicit. Furthermore, as stated, comics are a multimodal medium, so for further research, we hope to look deeper at which variables contribute the most to the arousal of the emotion of fear in the digital horror comic. For example, it might be the usage of animations, gore visuals, character design, reading equipment, reading locations, or other factors. So, it is just as important to factor in how other variables might affect the overall fearfulness of the reading experience. Such investigations would enhance the understanding of our response to horror, especially in the realm of horror digital comics.

CONCLUSION

Studies show that readers of the horror webtoon *Kemala* with background music experience significantly higher levels of fear than readers of the comic without music. Though background music can help build the reader's mental framework, thus making the reading experience more eerie, it is not a mandatory comic element. Even without background music, horror comics can create similar effects by utilizing visual representations of sound through onomatopoeia, font choices, word balloons, lighting, etc. Nevertheless, it is undeniable that digital comics have changed the conventions of traditional comics. Utilizing technology to insert background music can provide a different reading experience and turn comics and music into a new entity. Even so, the use of background music in webtoons, such as *Kemala*, must be designed not to overpower the main focus of comic media, namely the visual and narrative elements. The use of background music is expected not to exceed the graphic/textuality of comic media, which is essentially a visual medium. However, it can be concluded that the use of background music can add value and appeal to digital comic readers, even if its effectiveness remains subjective, depending on the preferences of each reader.

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