

# The Development of Animation Film “Stress and Love”

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**Abstract**-The objectives of this research are 1) to develop the animated film "Stress and Love" 2) To study the audience's satisfaction with the animated film. A sample of 396 high school students in the 2021 school year was obtained from two combination sample selections: purposive sampling, followed by snowball sampling, collected online. The instruments used for the research are 1) developed animated films, and 2) audience satisfaction questionnaires. The statistics used to analyze the data are average and standard deviation.

The study found that 1) the assessment by experts overall had averaged scores of 4.71 at the highest level, and 2) the audience satisfaction with animated films had averaged scores of 4.61 at the highest level.

**Keywords:** Animation film, 2D animation, Stress

## I. INTRODUCTION

### *A. Background and statement of the problems*

Teenager is an age that is transitioning into adulthood, and modifications to the whole body, emotions and society occur. Therefore, there is a risk of experiencing mental health problems [1]. Stress affects teenagers development and influent in there learning and behaviour. Aggressive behaviour, lack of enthusiasm, isolation from society, and some contemplate suicide [2]. According to the research study, the stress event characteristic is the first contributing factor to depression in teenagers. The top three motivating factors for depression were family problems 39.4 per cent, school problems 20.9 per cent, and problems with loved ones 19.2 per cent [3].

When teenagers are exposed to factors that affect additional life stress, they cause biological changes, especially in the endocrine system and the brain [4]. Factors influencing depression in high school students are self-esteem, family bonding, and close bonding with peers [5].

A study report from the Journal of Mental Health analyzed the relationship between stress event characteristics and suicidal thoughts. Stressful events are statistically significantly related to suicidal thoughts. There is only one thing: problems with their loved ones. Teenagers who experience issues with their loved ones result in 46.4 per cent of suicidal thoughts [3] [4]. The researchers, therefore, found the importance of this issue and chose animated film media because they are media

based on modern digital technologies [6]. It is easily accessible via smartphone and online to communicate and present issues that reflect the problems faced by high

school teens. There is a chance to meet difficulties with unrequited love, resulting in self-esteem. But what holds back this negative thought comes from the love of the family. If the family relationship is strong, it can be a bond of love, a bond for teenagers to think about and try to continue living their lives in the love of their families.

### *B. Scope of the study*

The population are high school students for the 2021 academic year.

The samples are high school students. In the 2021 academic year, there were 396 students.

### *C. Objectives of the study*

1) To develop an animated film titled "Stress and Love".

2) To study the audience's satisfaction with animated films.

## II. LITERATURE REVIEWS

The relevant studies are as follows:

Research on the design of tales as an animation to promote morality and ethics for children titled "An honest farmer" [7]. The objectives are 1) to design animation to promote knowledge of morality and ethics for the second-year kindergarten, 2) to assess the knowledge of the second-year kindergarten students toward animation to promote knowledge of morality and ethics. Data collection using purposive sampling methods. The results showed that 1) an animation to promote morality and ethics for the second-year kindergarten title "An honest farmer" has good quality. In addition, it communicates on the spot in line with the objectives; the content is appropriate for the age of the learners. Besides, this media is useful. 2) second-year kindergarten students' knowledge after watching the animation title "An honest farmer" have an average score of 15.1 out of 20. The average score passes the required criteria at a good level.

Research on developing 2D animation titled "Acute myocardial infarction" [8]. The objectives are 1) developing 2D animation on acute myocardial infarction, and 2) evaluating the user's satisfaction with 2D animation on acute myocardial infarction. The samples

included 60 individuals. The results showed that 1) experts had the opinion toward 2D animation overall at an excellent level, and 2) assessments for satisfaction with 2D animation overall at a very good level, with an average of 4.54.

Research on animation to guide the development of animated films. It found that animation media has modern technology to produce and distribute works in the digital age. Audiences of all ages can choose to watch and evaluate media online. Nowadays, the animation media production model is either cartoon for the enjoyment of knowledge or used as learning materials to improve student learning. This production of animated media uses an integrated concept, bringing the science of storytelling. It is used in conjunction with the creative design of cartoon animation to present issues that reflect the social conditions of mental health in teenagers to spread their advantages.

The study of factors influencing animation to relieve anxiety of pediatric inpatients with cancer.[10]. Objectives of the research: 1) to study the factors affecting anxiety in children admitted to hospital and 2) to study the form of fantasy that is suitable for use in animated films to reduce anxiety in hospitalized children. This research will respond to research in 2 parts: 1) conceptual development and 2) development that followed was the study of the 2 parts that were remembered to be further developed into an animated film. The experts who provide information are professionals who have experience working closely with children hospitalized which consists of number of specialists in child and adolescent psychiatry 2 persons and 1 specialist in child development and behavior.

The design data analysis focusing on character development, 3 characters and scenes remember 1 scene consisting of the main character being a cancer patient admitted to the hospital. The dragon represents the fear that the main character has to go through and the world scene in mind. A vision that reflects the fears of children with cancer who are admitted to the hospital. Data analysis shows that the visual fantasy genre is appropriate that will be used with most children admitted to the hospital with an average suitability of 5.00 and standard deviation was 0.00, alternative worlds where the mean is 4.00 and the deviation standard was 0.00 and animal toy and miniature people fantasy mean was 3.66 and the standard deviation was 1.15. A study of the appropriate form of fantasy in communicating with children undergoing treatment in the hospital found that the visual fantasy format was the most suitable because it could use symbolic images fantasy can communicate with inner feelings.

### III. METHODOLOGY

Stage 1: Design and create an animated film.

1. Study documents and research relevant to Mental health issues in teenagers. Finding content issues that benefit young people in today's society. Thus, it concludes that the problem of stress in teenagers may cause by unrequited love.

2. Create a 2D animated film script using storytelling techniques that bring essential scenes first. This teenager will choose to take through life's crises to draw viewers' attention to the solutions.

3. Design and create characters following the script and propose them to animation experts to evaluate. Then improve the work before making an animated film.

4. Create a storyboard for the sequence of each scene before drawing it on the computer.

5. Prepare the audio files that use in work, i.e. voiceovers. Choose the voice of those who have the appropriate voice for the character's personality. Next, separate the audio files according to the scene.

6. Create a movie file by sequencing the files according to the storyboard and mixing the relevant audio for each scene.

7. Testing movie files online. Finally, assessment of audio and visual.



Figure 1: Design of the main character.

Figure 1 design of the main character. It was designed by studying examples of teenage personalities with stress symptoms. There is distress within the mind at secondary school age.



Figure 2: Create a design of the scene in the program.

Figure 2, design the scene, which emphasizes communication in accordance with the script. Use colour psychology-based tone to create a mood that makes the audience feel amenable.

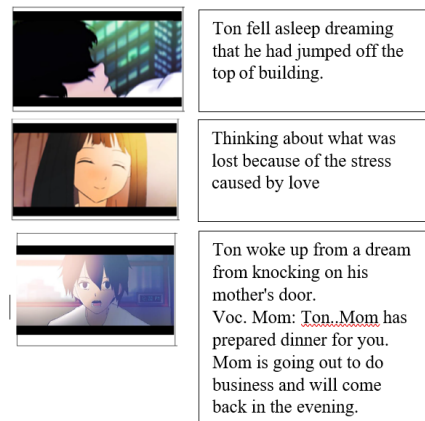


Figure 3: Creating a storyboard.

Figure 3, create a storyboard for story sequences and use it as a guideline to review exciting storytelling techniques. Then use it as a guideline in the creative process of producing images in a computer system and animations, mixing audio and integrating it into animated film files, and then publishing online.

Stage 2: Assess the quality of animation films by experts.

1. Create an inquiry form to assess the quality of an animated film.
2. Determine the content validity of the questionnaire using the Item-Objective Congruence Index (IOC) value, evaluated by three experts.
3. Selection of questions with IOC values in the 0.7-1.00.

Stage 3: Determine the number of samples and create a questionnaire.

1. The population is large, and the exact population is unknown. Determine the sample size using W.G. Cochran's formula at the .95 per cent confidence. The sample size was at least 384 people, then an additional 3% to 396.
2. Find out the confidence value of the questionnaire with audience satisfaction. Cronbach's alpha coefficient ( $\alpha$  - Coefficient) is .73.

Stage 4: Evaluate the animated film by a sample group.

1. Prepare animated film and electronic questionnaire files for online evaluation by audiences.
2. Data collection from December 2020 - January 2021
3. Whereas received a questionnaire from 396 people, the data was then analyzed using statistical analysis to summarize and interpret the results.

#### IV. CONCLUSIONS AND DISCUSSIONS

##### A. Conclusions

The evaluation of animated films by experts is summarized as follows:

**Table 1** Assessment of Content Perception by Experts.

Issues	( $\bar{X}$ )	(S.D)	Interpretation
1. Reflections on story points that benefit the audience in society.	4.67	0.58	Highest
2. There are storytelling techniques that result in the viewer's suspicions and follow them until the end of the story.	5.00	0.00	Highest
3. The use of communicative language is appropriate; there is no violence in the use of language.	4.67	0.58	Highest
4. After watching, audiences know the importance of family love to assist in pulling teens out of stress problems where love is unrequited.	4.67	0.58	Highest
Average	4.75	0.43	Highest

Table 1 shows that experts' overall assessment of content perception had an average score of 4.75, the highest level.

**Table 2:** Evaluation of animated film design by experts

Issues	( $\bar{X}$ )	(S.D)	Interpretation
1. Character design is consistent with the acting role.	4.33	0.58	High
2. Design the camera angle, assist in communicating, and emphasise the actors' emotions.	5.00	0.00	Highest
3. The voiceover is consistent with the character.	4.33	0.58	High
4. Design the tone of the work, and communicate the mood with the content.	5.00	0.00	Highest
Average	4.67	0.29	Highest

Table 2 shows that experts' overall assessment of animated film design had an average score of 4.67, the highest level.

**Table 3:** Evaluation of animated film by experts

Issues	( $\bar{X}$ )	(S.D)	Interpretation
1. Content perception.	4.75	0.43	Highest
2. Animation film design.	4.67	0.29	Highest
Average	4.71	0.36	Highest

Table 3 shows that experts' overall assessment of animated film had an average score of 4.71, the highest level.

The audience's inquiry into animation film results are summarised as follows.

**Table 4:** Assessment of audience satisfaction with animated films.

Issues	( $\bar{X}$ )	(S.D)	Interpretation
1. Narrative techniques that present the scenes that create suspense and then unravel later. Make it fun, addictive to the end.	4.81	0.39	Highest
2. Characters of the actors are designed creatively and beautifully.	4.63	0.48	Highest
3. Voice actors are appropriate for the characters.	4.44	0.50	High
4. Animated films make it possible to recognise the essence of family love to assist in pulling teenagers out of stress problems where love is unrequited.	4.56	0.50	Highest
Average	4.61	0.47	Highest

Table 4 shows that audience satisfaction with animated films had an average score of 4.61, the highest level.

### **B.Discussions**

Results of the assessment by experts in the overall and audience satisfaction with animated films had averaged scores at the highest level. Besides, consistently, the animated film gives audiences a sense of the crucial of family love to assist in pulling teenagers out of the stress problem of unrequited love at the highest level. It is consistent with research and theory [9] that late teenagers are the beginning of having someone close to them. In addition, an analysis of the relationship between the nature of stress events and suicidal thoughts statistically significantly correlated the problem with the loved ones. Statistics indicate that teenagers have trouble with their loved ones, which results in suicidal thoughts in 46.4 per cent [3] [4]. So to hold teenagers out of the situation is that family love, which is critical to immunise their lives.

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