Used of Motion Graphics to Create Awareness on Handling Stress

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Abstract. The development of the interactive motion graphic is to spread awareness to the people about the correct ways to handle stress. This is because many people face stress in daily life, but they do not know the correct way to manage stress. An interactive motion graphic is used as the medium because it is easy to understand and can attract the viewers' attention. The model used to help develop this product is Alessi and Trollip Model. The model contains 3 phases which are planning, design and development phase. Alpha test is conducted to test the effectiveness of the product and to make sure that the objectives of the project are achieved. The test is conducted by interviewing a multimedia expert, a content expert and 5 users which are students that reside at KolejKediamanTuankuFauziah (PFi2). The results obtained from conducting this test were positive as the feedback from the users suggests that the information given in this video is relevant and useful thus, help them to manage their stress. In conclusion, the development of this product can help people manage their stress.

1. Introduction
Stress is one of the most dangerous illnesses or mental problem that could happen to a person. It is also said that stress causes physical, mental or emotional strain or tension that can ultimately affect a person's mental and physical health. Stress can cause a lot of things and the most it can do to a person is causing the person to commit suicide. Persons with posttraumatic stress disorder (PTSD) had the highest score on the measures of suicide risk, anger, and impulsivity and the lowest scores on social support (Kotler, Iancu, Efroni, & Amir, 2001). This research is centered on how to handle stress to avoid this kind of repercussion. Motion graphic is used as the medium to convey the intent of this research to create awareness for the people on how to properly handle stress to help people with stress-related problems. Motion graphic has been used for quite a while now in this industry. It is a type of animation that used text as its major component and it sits in the middle between animation and graphic design. Essentially, it is an animated graphic design. According to Steve Curran (2000), motion graphics is the art of communication design for broadcast and film. It is a way to communicate with the audience while adding depth to the content of the story. Motion
graphics are divided into many types and categories such as branding, television title sequence, telling a story, creating awareness, explaining a concept and share a product video.

2. Stress and Motion Graphics

Stress is a normal process that happens while people encounter life as it is a natural physical and mental response. It can be trigger anytime and occurs in everyday life including work and family matters. Some of it can be trigger by experience such as the death of a dear one, illness diagnosed and war or natural disaster. Stress is a well-known benefactor to mood, mental disorders, leads to mental health issues or the appearance of diseases and it also will ultimately steer to the direction of suicide risk (Rosiek, et al., 2016).

Suicide is the 10th leading cause of death in the United States of America (USA) the and each year 44,965 Americans die by suicide. According to Pillay (2017), the number of people reaching out for help has increased by 16 percent, from 21,256 in 2015 to 24,821 in 2017. On average, 20 of the 68 people who reach out for help by calling Befrienders Kuala Lumpur have suicidal thoughts. This is a very worrying statistic. One of the major contributors to suicide is stress (Feskanich, et al., 2002). A triggering event such as the death of a spouse or the loss of a job may become a reason for a person to justify the action of committing suicide. However, such events are more likely acting as trigger to an already vulnerable person (Feskanich, et al., 2002). That is why stress should be handled with care and in the proper way so that it does not proliferate into something worse.

Motion graphics can be used as the medium as it is are emotionally captivating and can distill information for easy comprehension. According to a web article by French (2017), motion graphics can grab the viewers' attention and also affects emotions because it is a biological response which is called the phenomenon of emotional contagion. A person will immediately empathize with and feel the emotions of the experiences that the person watches or see on a screen.

Motion graphics is a type of visual communication. It is effective for the viewers to understand the message delivered because visual processing to the brain is nearly instant. This fact was proven in an MIT study by Trafton (2014), which suggests that images are only seen for 13 milliseconds before the appearance of the next image, but part of the brain will continue to process the images longer than that. The benefit of motion graphics as a medium for the presentation of information can easily attract the attention of viewers (Siregar, 2017). Thus, it is proven that motion graphics is one of the best media to convey information and awareness messages to the public.

2.1. Motion Graphic in Communication

According to Shir&Asadollahi (2014), motion graphics has become a new tool to acquire better and more effective communication. The effectiveness of the message by the motion graphics needs different techniques, methods, and background to attract more audience. Motion graphics are a video or animation and it is created by making an illusion of movement or by changing a visual factor's appearance. It is usually paired with sounds and usually appears in electronic media. Motion graphics can be created by using many different methods so that each of them has its characteristics, disadvantages, and attractions. This is because the sole aim and the priority of motion graphics are attracting audiences. The quality of the works can be improved with the presence of great graphics and pictures. The audiences’ ideas, desires, and criteria must be considered so that the intended message can be conveyed. Motion graphics helped in the development of new communication technologies.

Today, motion graphics have been able to branch itself out to mass media which are TV and cinemas in which graphics play quite an important role in the visual expression. The title sequence is
related to motion graphics as motion and sound are used as the dramatic effect of the sequence and graphic design is involved in the visual aspects. Motion graphics are also used to give identity to networks and ABC network by Harry Marquez is one of the primary identities making examples. In TV news, motion graphics are used to cover unwanted events until pictures and motions are received. There are five employing motion graphics used in TV news such as subtitle, mortise, program guide, informer motion graphics and motion graphics in the advertisement. Motion graphics were also spotted used in a web-based context which is an attractive way to make web pages more interesting and interactive. GIFs and Flash are also used in a Web-Based context. Motion site gives quite an impact on information transfer because a site can transfer information thoroughly using a more attractive way which is by using images, texts, films, sounds or animation. In multimedia files, the message is conveyed better with the use of sound, picture, video, animation, text, etc. Nowadays, advertising through multimedia advertising and multimedia CDs is the best way to convey a message. Lastly, motion graphics are also involved in outdoor advertising.

2.2. The Effects of Suicide Awareness Programs

Research about the effect of public awareness campaigns on suicides was conducted by Matsubayashi, Ueda & Sawada (2014), which aims to tests whether public awareness campaigns can reduce the number of suicides in Nagoya, Japan. This is because the effectiveness of such programs has not been confirmed in previous researches. According to the article, the researchers cited a Vital Statistics which was compiled by the Ministry of Health, Labour, and Welfare which states that in 2010, 448 people died by committing suicide which results in a suicide rate of 20.3. To solve the problem, the city government of Nagoya launched a public awareness program that acts as a suicide prevention program in 2009 to educate and heighten the awareness of depression and also promote care-seeking behavior to the public.

The results received post-campaign shows the total number of suicides decreased two months after the campaigns. The campaign's effects last for four months but not more than five months. In the second month during the post-distribution period, the only statistically-significant reduction in the number of suicides was observed. With these results achieved, it is safe to say that the program has effectively achieved its outcome because the campaign affected reducing the suicide number of the target audience which is the middle-aged male in the city from the second to fourth month of the program’s implementation.

Another study to test the effects of the suicide awareness program was conducted by Tsai et al. (2010) in Taiwan. The motive of the study was to evaluate the effects of the suicide awareness program in enhancing community volunteers' awareness of suicide warning signs. According to the article, statistics from the Department of Health (2007), show that the mortality count of suicide has almost doubled from 1997 to 2006 which is from 2,172 to 4,406. A group of 76 community volunteers (1 male and 75 females) in northern Taiwan aged 31 to 50 years was recruited to participate in this study. This study requires the participants to complete a before and after questionnaire to test their knowledge and awareness about suicide warning signs before the program and to test the effects of the program on the participants after they completed a 90-minute suicide awareness program.

The participants are claimed to be aware if they can perceive the warning signs in this study which is addressed as being verbal, behavioral, and emotional messages that the potentially suicidal person may send before they attempt or commit suicide and can thus predict the probability of suicide. The
results obtained from the study shows that half of the participants have had experienced with a patient that suffers from a major depressive disorder. In the pre-test before the program was held, 15 items from the questionnaire answered by the participants scored more than 4 points but after the educational intervention, 27 items scored more than 4 points. This concludes that the participants could perceive 84.38% of the stress warning signs. At the end of the program, 61 participants (80.3%) connote that if they were to encounter a potentially suicidal person, they would encourage that person to seek professional help.

With the results obtained from the study, it is confirmed that the stress awareness program can improve the community volunteers’ awareness on stress warning signs but, the sample size in this research was small and was recruited from a group of volunteers so further studies should be done to evaluate the duration of the effect of the program in the future.

2.3. Mental Health Video on Youtube

The initiative had been made by looking into the different methods of use in the making of three videos on YouTube. It had been randomly picking based on the title of mental health. The result as shown in Table 2.1 as below:

| Exhibit         | Video 1             | Video 2             | Video 3             |
|-----------------|---------------------|---------------------|---------------------|
| Figure 4.1      | Figure 4.2          | Figure 4.3          |
| Title           | Mental Health Motion Graphic | How to Deal with Stress – Motion Graphics and Green Screen Video | Motion Graphics: Benestar – Easy Ways to Reduce Stress |
| Channel Uploader| Karl Rombauts       | Stone’s Throw Media | LD Global          |
| Year Release    | November 3rd, 2016  | November 13th, 2013 | June 10th, 2018    |
| Duration        | 1 minute 5 seconds  | 2 minutes 55 seconds | 2 minutes 44 seconds |
| Color used      | Grey, white, maroon, orange and blue | Varies according to the images (background is white) | Green, blue, grey, red and white |
| Concept         | Infographics        | Green Screen        | Cartoon animation  |
| Music Background| Not too strong and not too subtle | Simple music with a serious note | Smooth and relaxing |
| Space           | Neat and structured. | Spread apart all over the video frame | Lots of space |
| Typography      | Very big, clear and arranged neatly | Simple and clear | Big and clear |

The message that conveys in the video also important. To get the story and message clearly, the researcher makes a comparison to see the differences in the term of their storyline. The results had shown in Table 2.2 as below:

| Duration | Video 1                                                                 | Video 2                                                                 | Video 3                                                                 |
|----------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 0 – 15 sec | The average number of people suffering from a mental disorder and explained the term ‘stress’. | Explanation about the needs of stress in life. | Introduces the title of the video and explains the needs of stress in life. |
| Time       | Activity                                                                 | Explanation                                                                 |
|------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 15 – 30 sec| The statistics number of people who will commit suicide.                 | The signs and signals of stress and need to be aware of how to prevent stress. The importance of keeping stress under control. |
| 30 – 45 sec| The average number of people who use mental health services.             | The employer has a legal duty to ensure the health, safety, and welfare of its employees. The first simple technique was introduced: tummy breathing. |
| 45 – 60 sec| The importance of reaching out for help.                                 | Definition of stress. Explains the correct way to perform tummy breathing. |
| 60 – 75 sec| Montage (3 seconds).                                                     | Situations that cause stress. Explains the correct way to perform tummy breathing. |
| 75 – 90 sec| -                                                                       | Signs of stress. Explains the correct way to perform tummy breathing.       |
| 90 – 105 sec| -                                                                       | Examples of signs of stress. The next technique: Sitting to standing.       |
| 105 – 120 sec| -                                                                       | How to deal with stress. The third technique: Visualisation exercise.       |
| 120 – 135 sec| -                                                                       | Situations that can help reduce stress in the workplace. Explain how to perform visualization exercises. |
| 135 – 150 sec| -                                                                       | Reach out to the manager such as seeking advice. Suggest trying all the techniques or only one of them. It is important to keep stress under control. |
| 150 – 165 sec| -                                                                       | Pointing out that the university can guide the managers to recognize, prevents and deals with stress. Asking the audiences about which techniques will they try first. Inserted Benestar’s slogan at the end of the video. |
| 165 – 180 sec| -                                                                       | Provide the link to the University of Wolverhampton's page. -               |
2.4. Summarize for Youtube Video

From the table shown in Table 1, results show differences in way of the method used somehow there also some similarities. In terms of the color used, three of them used white color. White color means pure, virginal, clean, youthful and mild (Herman Cerrato, 2012). Hence, Herman (2012) says white is
associated with hospitals and doctors, and synonym with the promoting medical products. Otherwise, white color helps to be used in the awareness of mental illness because they rely on the health issue.

Colors help to lift the mood and can cause effects to the readers and viewers. As for teenagers, they might not like the light color. Teenagers might prefer a bright color more. Children aged from four to nine might prefer vibrant colors which are blue, orange, green and red rather than white and black. So, the usage of color also important because it can make the viewers will stay on that video and focus on the message delivered.

The concepts used in the video had a different type. However, those concepts just a way to attract audiences. Those concepts had been proven in the way of attracting the viewers. Fanguy, W. (n.d) says that infographics can cause increasing engagement. Infographics help on capturing and keeping the audience’s attention hence it can convey more information in less time but spread faster information (Fanguy, W. n.d). The green screen usually used because it can be added on extra effects in a video. This concept also can be used in various ways include in promotion and awareness concepts. The effects could be added based on the creativity of an editor. The cartoon concept usually used because the target audience is children between 9 to 12. Children seem to have the best experience because of the cartoon. Cartoons able to attract the children to focus on it. The benefits given by this helps the developer to use the concepts even in an awareness campaign.

The dimension or space used in each of the videos is not really can be concluded. If the message using typography as the method, so bigger dimension with left bigger space is the best chosen. Space here means the white color or soft color except for the text and image. Video 1 used neat and structure because they used the concept of the infographic. The infographics need a bigger space to make sure the message conveyed in the best way. Video 2 space used by spreading apart each of the objects used in the video frame. In time, it may want to attract people because they are using green screen concepts. The last video used lots of space so that the typography has seen much bigger and clear because when the developer used the cartoon concept, it should ensure that the audience can focus on the message of the video.

Refer to Table 2, the flow and storyline of previous products had their similarities and differences too. From 0 to 15 seconds, the video introduces what is the meaning of the word Stress is.

3. Method used in the development process
The model used in this research was adapted from Alessi & Trollip (2001). Method used discusses the product design, chronology of design and development, procedure of design and development, and the respondents’ feedback.

According to Por et al. (2012), Alessi & Trollip’s three-phase Instructional System Design (ISD) can be adapted in this project because of its detailed and complete development strategy from paper work to the real final product. In the same journal, Por et al. quoted from Hunter & Ellis (2000), the importance of sequencing events and recommended the use of storyboarding to facilitate pilot testing on learners. The three steps and stages in the model include planning, design, and development.

3.1. Design Phase
The designing process involves designing and developing initial content ideas. Starting the video explains about stress. The definition of stress is given to let the viewers know what the word ‘stress’ means. The video will then continue to briefly explain the types of mental illness that most people are suffering from whether they realize it or not. This part will also explain the effect of mental illness on a person if chosen not to be treated and after that, the video will smoothly proceed to tell the importance of mental health services. Finally, the video will offer the viewers the correct and most effective ways to cope and handle stress. Storyboards and scripts were prepared by the researcher to visualize the idea to create the best content for this video.
The idea of the overall content was summarizing by the storyboards. A brilliant idea creates good content for the viewer's so that the viewers can understand and enjoy the product made. Data collected from the previous projects will be used as a guidance and reference to generate an idea and content of the motion graphic video.

3.2. Development Phase
Video development used Adobe Illustrator, Adobe Animation, Adobe After Effects and Adobe Premiere Pro. After the development of the product, an evaluation needs to be conducted. Alpha test had been conducted to evaluate the effectiveness of the product that was created. According to Mohd & Shahboim (2015), conducting an alpha test involves content expert so, the results from the test indicates that the product met the needs and requirement associated with the topic. A content expert is a person or organization that has the knowledge and expertise in a certain field and has authority in a certain area or topic. The content expert in this research will be the subject to the alpha test which is a psychiatrist. Psychiatry is a medical specialty that deals with the origin, diagnose, prevention, and management of mental disorders or mental illness, emotional and behavioral disturbances. According to Bhugra et al. (2015), a psychiatrist is a trained doctor who has received further training in the psychiatry specialty. The psychiatrist chosen will go through the content and information of the motion graphic video and the content expert is to decide whether the video has achieved its requirement and met the needs of the target audiences.

The results obtained from conducting this test were positive as the feedback from the users suggests that the information given in this video is relevant and useful. Otherwise helps them to manage their stress.

4. The Conclusion
Motion graphics suitable to be used as an awareness campaign including the mental health awareness campaign. It's able to deliver the message well since it can capture audiences' attention. Colors used also important to make sure that the audiences still on focus till the end of the video. The duration of the video must not exceed four minutes to get the audience not bored. Each message must have a story to deliver interestingly. Other than that, the creativity of the developer must be extra points to create a successful and interesting awareness campaign by a video.

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