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Development of the "Sehat Tanpa Depresi" Explainer Animation as a Mental Health Education Media for Adolescents

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ABSTRACT

Going through a transitional time in their adolescence makes many Indonesians more susceptible to depression. When people do not realize how important mental health is, depression can grow in popularity. They can be a suitable way to explain what depression is. Many believe that using explainer animations helps share these messages interestingly and easily. This project plans to produce an explainer animation named "Sehat Tanpa Depresi" for teaching mental health to adolescents and to check how effective it is. Using the Design and Development (D&D) approach with the N.J. Manson model, the research consisted of five parts: problem awareness, suggestions, product development, evaluation and conclusion. Experts tested and reviewed the developed media, finding it met 91.45% of the requirements, offered 91.11% proper media and was evaluated by 83.8% of users. According to these findings, the explainer animation works well and is suitable for teaching mental health to teenagers.

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1. INTRODUCTION

During adolescence, people experience a lot of physical, emotional and mental changes in a short time which raises their risk of anxiety and depression. Up to 15% of young people worldwide experience mental health problems, sadly many do not get proper treatment mainly due to prejudice, lack of learning and scarce access to services (Rachmayanti et al., 2024). Additionally, in Indonesia, problems like these are complicated by local taboos and insufficient mental health knowledge, mainly among teenagers who receive little to no counseling at home and at school (Yani et al., 2025). The COVID-19 pandemic worsened mental health problems facing adolescents around the world, including in Indonesia. A lot of studies found that being away from school for a long time, feeling lonely and dealing with additional family issues may lead to anxiety, depression and feelings of loneliness for teenagers. According to the I-NAMHS in Indonesia, 34.9% of adolescents had mental health problems during and after the pandemic (Faridah et al., 2024). Because of lockdowns, many students saw their face-to-face school counseling shut down, preventing them from getting the help they needed. They have shown that young people need immediate access to mental health care that is designed and suited to their culture and daily routines.

Depression is a common mental illness for adolescents as they are moving through a stage of identity formation and feel unstable emotions. In 2018, based on Riskesdas (Indonesia's Basic Health Research), the number of Indonesians who show indications of depression is higher among youth aged 15–24, affect 6.2% of these individuals and slowly increases with age (Kementerian Kesehatan Republik Indonesia, 2018). Depression is not a single disorder, but there are different disorders, which have various properties and degrees of their severity. Depression that is the most known is the Major Depressive Disorder (MDD), which is characterized by poor mood, loss of interests in activities, and a lot of functional impairment. MDD may be mild, severe, and comes as a primary concern to a clinic (Fancher, T., & Kravitz, R., 2010., Malhi, G., & Mann, J., 2018). The Bipolar Depression type is another subtype present in the settings of bipolarity. It covers depressive moods in both Bipolar I and Bipolar II and mixed moods that have both depressive and hypomanic/manic symptoms (Benazzi, F. , 2006). Conversely, Dysthymia, or Persistent Depressive Disorder, is defined as a long running but milder depressive condition, which can extend past the age of two years, which is easily ignored because of the slow unfolding of the condition (Benazzi, F. , 2006, Paykel, E. , 2008, Wanot, W., et al., 2019). Atypical Depression manifests with such symptoms as mood reactivity, and appetite rise as well as high sleeping, which distinguishes it enough when compared with more classic melancholic profile (Benazzi, F., 2006). Regarding that, Melancholic Depression is characterized by a strong sense of loss of pleasure, early morning awakening, as well as clearly apparent physical manifestations of the illness including fatigue and psychomotor shifts (Benazzi, F. , 2006, Paykel, E. , 2008). Finally, Other Subtype category consists of the following forms of it: agitated depression, seasonal depression (conjoined to the changes of seasons), psychotic depression, postpartum depression, and those in relation to the medical conditions or aging. Such subtypes demonstrate that depression is indeed extremely complicated, and the process of education and awareness promotion should be individually adjusted to bring the topic to a variety of experiences (Benazzi, F., 2006, Wanot, W., et al., 2019).

Given the diverse manifestations of depressive disorders, it becomes increasingly important to equip individuals—especially adolescents and educators—with not only awareness but also the ability to provide immediate, appropriate responses to emerging mental health issues. One such intervention framework that supports this goal is Mental

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Health First Aid (MHFA). MHFA is a globally recognized public education program designed to help individuals recognize the early signs of mental health challenges or crises and respond with timely, supportive actions (Pengelly, T. ,2017, Kitchener, B., & Jorm, A. , 2011) . Much like traditional first aid for physical injuries, MHFA focuses on delivering initial care before professional help is available or a crisis resolves. The training equips participants with practical knowledge to identify common mental disorders, navigate acute mental health emergencies—such as suicidal ideation or psychological trauma—and guide affected individuals toward appropriate professional resources (Pengelly, T. ,2017, Robertson, L. et al., 2023, Kitchener, B., & Jorm, A. , 2011). Originally developed in Australia, MHFA has since been adopted in over 20 countries, reaching millions worldwide. Its integration into mental health literacy efforts, particularly among youth populations, represents a proactive strategy to reduce stigma, improve early detection, and foster a more supportive environment for those living with conditions such as depression (Pengelly, T. ,2017, Kitchener, B., & Jorm, A. , 2011).

Further findings suggest that teenage girls may be more at risk for depression because of strong links between their mental health and school pressures, low self-esteem, their family environment and using social media too often (Rahmayani & Suharsono, 2025). As a result of these issues, more and more researchers and mental health experts are encouraging the use of digital media in teen mental health education. Using multimedia interventions such as animated explainer videos, is a fun way to teach young people about complicated topics in psychology. Research is showing that adolescents in Indonesia understand and respond to mental health better, avoid becoming obese and learn self-control through animated videos (Kamiliatun Nisa' et al., 2024); (Fatma et al., 2024). The media give teens minds and hearts the support they need, making them particularly important for teens facing changes in their feelings. Even though digital mental health tools are effective, it is necessary to make them suitable for the cultures of adolescents, handle language carefully and match what adolescents enjoy or use. Studies now indicate that having teens take part in deciding and judging strategies makes the strategies culturally suitable and effective (Yani et al., 2025). Digital animations made with Indonesian topics, speech and settings have been demonstrated to reach youth more closely and encourage aid-seeking practices (Choirunissa et al., 2023).

Since depression rates among adolescents are increasing and with the pandemic disrupting teaching, it is very necessary to seek out simple and creative approaches for teaching mental health knowledge to Indonesian young people. Depression can be hard for many teens to understand because of legal issues, lack of help at home, social stigma and few adequate youth awareness programs. Therefore, we must provide educational programs that are appropriate to different cultures, hold students' attention and fit their development level. Consequently, this study is developing and testing "Sehat Tanpa Depresi", a digital video, to teach Indonesian teenagers about depression and lessen stigma. Targeting design quality, cultural significance and media availability, the present research aims to help improve mental health efforts for adolescents across the country.

2. METHODS

The research followed a Design and Development (D&D) method, making it suitable for designing, adjusting and assessing educational media products. According to Richey and Klein (2007), the approach of D&D requires instructional activities to be reviewed, improved and tested which supports the development of effective educational improvements. In this study, the specific D&D framework used was that suggested by N.J. Manson, consisting of five different steps: awareness of the problem, creation of a solution suggestion, product development, evaluation of the solution and conclusion.

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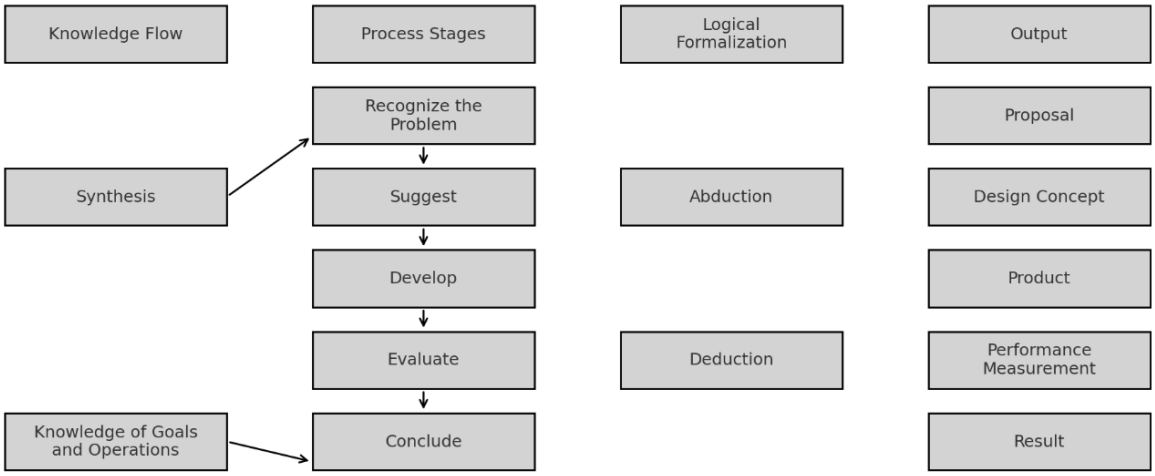

Figure 1. Adapted N.J Manson Model (Li, L., wt al., 2022)

To address the development of a culturally relevant and pedagogically sound media product, this study employed the N.J. Manson Design and Development (D&D) model. This approach was selected for its logical and iterative structure, which aligns well with the step-by-step nature of creating and refining educational interventions. The five phases—problem awareness, suggestion, product development, evaluation, and conclusion—enable continuous refinement based on expert and user feedback, making it ideal for media intended for youth mental health education.

The reason for adopting this approach was largely because the orderly structure supports theory and the creation of media products. Like several other recent projects, we gathered data for both the start and finish of the intervention when we collected all our study data. Many recent studies indicate that D&D and technology approaches support students' learning, with a particular benefit for teenagers' mental health. For instance, (Kasmana et al., 2021) successfully developed an application to assist people in stress management and nutrition education using multimedia tools during COVID-19. Furthermore, (Sumual et al., 2024) found that when instruction is multimedia-based, engaging students can be improved by following specific stages in design, testing and distribution.

Qualitative data was collected for the project through interviewing experts and holding focus groups with adolescents during both the choice of topics and evaluation parts of the work. During the study, the team looked at numbers from pre- and post-intervention assessments to track changes in people's understanding of depression and attitudes toward it. Using the mixed-methods approach is recognized more and more for creating effective multimedia tools in educational settings, mainly when the topic is adolescent mental health (Widiastuti et al., 2021). For this reason, combining the N.J. Manson model and the D&D research approach delivered a strong but flexible base for developing the animation.

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3. RESULTS AND EVALUATION

3.1. Awareness of the Problem

The rise in depression in children and the minimal public awareness about mental health led us to identify this problem. To check the issue, a questionnaire created on Google Forms was given to 50 teenagers aged 15–24 in Bandung. The purpose of the survey was to evaluate their ability to pick out early signs of depression. Around 92% of people surveyed said they had experienced symptoms that could be related to depression which included feeling anxious and empty, losing interest in activities and having low self-esteem. However, only 4 respondents (or 8%) did not report having any of these symptoms. According to the findings, it is very important to provide special education to increase mental health knowledge among teenagers.

The 50 adolescent respondents were selected through purposive sampling based on specific inclusion criteria: aged 15–24 years, residing in Bandung, and willing to participate in the study. This sampling method was chosen to accommodate time and cost constraints while ensuring the relevance of participants to the study's objectives. While this approach allowed for efficient data collection and targeted insights, it may limit the generalizability of the results. Future studies are encouraged to involve a broader and more diverse sample across different regions to enhance the representativeness and applicability of the findings.

3.2. Suggestion Stage

In this stage, the researchers proposed a potential solution to the identified issue by designing an animated explainer video as an educational medium to raise awareness about depression among adolescents. Since it can be understood by most people, is visually appealing and illustrates psychological concepts nicely, animation was chosen to appeal to and engage young viewers.

3.3. Product Development

In this phase, the concept was turned into a useful learning tool by creating an animated explainer video. The project was developed in these four stages:

a. Material Research
   In the beginning, extensive details on depression were gathered which included the definition, symptoms and coping techniques. Information was taken from strong mental health sources and checked for accuracy.
b. Script and Storyline Development
   When the information was gathered, it was put together into a narrative way that would work for the animation. It was written to make the content easy to understand, conversational and caring, while at the same time keeping the facts accurate.
c. Color Concept
   The colors used were meant to suggest comfort, peace and safety, since addressing depression calls for extra consideration. As blue and green are known to encourage mental peacefulness and lessen anxiety, these are the colors we use in our palette, based on color psychology.

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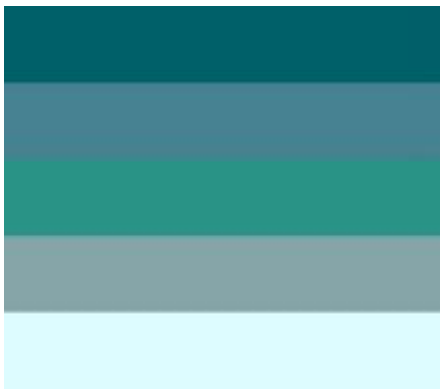

Figure 2. Color Palette Used in the Explainer Animation.

The palette illustrated in Figure 2 was applied consistently across the animation, including backgrounds, characters, and transitions. The gradient—from deep teal to light aqua—symbolizes a journey from emotional heaviness to mental clarity, mirroring the educational aim of guiding adolescents toward better self-awareness and emotional resilience. The visual method increases the style of the content and makes sure the message reflects the right emotions which assists viewers in engaging with and remembering it.

d. Typography Concept

Typography helps determine both the tone and how well animated educational media is read. Because minimalist serif-less fonts look sharp and are easy to read, they were chosen for the animation that would appear digitally to a young audience. Two typefaces were employed: Poppins, known for its geometric simplicity and readability, and Hussar Print, chosen to add stylistic contrast and emphasis to key narrative elements.

Figure 3. Hussar Print Typeface.

Hussar Print was used selectively to highlight emotionally expressive or motivational phrases, adding a distinctive visual identity that captures the viewer's attention. Its slightly artistic and decorative form contrasts effectively with the more neutral, body-text font, enhancing the overall visual hierarchy of the animation.

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Figure 4. Poppins Typeface.

In comparison, Poppins was chosen for the main text and narration instructions because it is legible, ordered and works smoothly in digital formats. By choosing two fonts, you can ensure your information is both legible and appealing to see. All these typefaces work together to communicate the lessons and ensure that the theme, teenage depression, is handled gently and is almost universal for kids.

e. Illustration Concept

During the animation, flat design is used, a vector-based style that avoids using many details and future-looking perspectives. Flat design is used because it is often seen in digital communication and allows information to be presented stylishly. This type of visual content connects well with teenagers, so it's both relatable and simple to understand.

f. Storyboard Design

Before starting production, a storyboard was made to maintain clarity in the film. By mapping out each scene, including character placement, motion between scenes and when characters are speaking, the design team can synchronize the animation with the learning targets and general mood of the program.

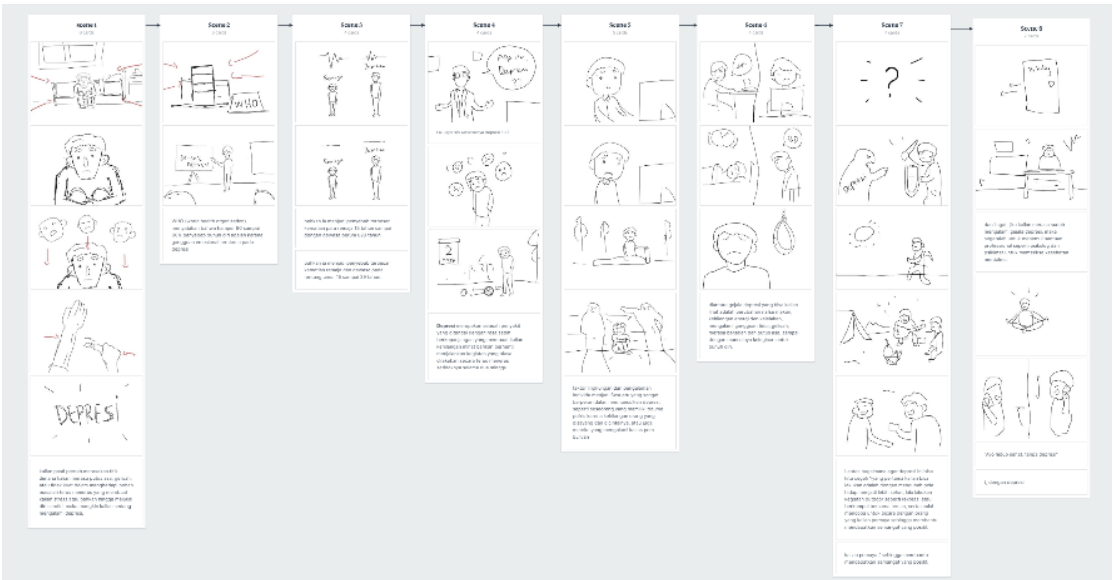

Figure 5. Storyboard for the Explainer Animation.

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As shown in Figure 5, the storyboard provides a sequential visual breakdown of the animation, guiding the timing and interaction of elements such as motion, text, and audio. Each frame includes annotations that reflect the emotional tone of the scene, ensuring consistency between visual storytelling and the message being conveyed. Through this visual planning process, the production team was able to anticipate design challenges, streamline asset development, and maintain a cohesive structure throughout the animation. The storyboard served as a critical blueprint that translated the conceptual narrative into an executable visual framework.

g. Asset Creation

Following storyboard approval, asset creation commenced. The visual assets were categorized into two main groups: characters and background environments. All vector assets were created using Adobe Illustrator 2022, allowing for scalable, high-quality graphics that are consistent across animation scenes.

Figure 6. Sample Visual Assets: Characters and Backgrounds.

As illustrated in Figure 6, the assets include a range of character expressions, gestures, and contextual backgrounds designed to support various emotional scenarios depicted in the animation. The visual style adheres to flat design principles, maintaining clarity and coherence with the established illustration concept. It was important to have this phase to set the basis for what would become the animation. With all images and designs finished beforehand, the design team allowed for more efficient motion design and a clear visual style throughout the entire video. Turning concepts into visual content for the project was possible largely due to the asset creation process.

h. Animation and Voice Over

Once all the visual assets were done, the next step was to make the animation. All character and background movements were animated using Adobe After Effects 2022, allowing for smooth transitions and expressive motion. The voice-over narration was recorded by the researcher using a smartphone audio recorder, ensuring a clear and personalized delivery of the narrative content.

i. Editing and Rendering

For the last phase, everything needed to be edited and all pieces put together. Using Adobe Premiere Pro 2022, all animation, narration, sound and effects were put together and synchronized. With the rendering complete, the video was available to use to teach adolescents about mental health over the internet.

This study outlines nine steps through which an initial idea is developed into a polished and useful educational animation for teaching. Every stage such as research, scripting,

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designing, recording voices and integrating different media, was organized to hit the goals and keep the right tone in the animation. With accessible graphics, engaging stories and a simple layout, the result supported young people in mental health and educated them as well. It demonstrates how design-based research can be used to create programs that fit with young people's cultures.

3.4. Implementation of Evaluation

The evaluation process was conducted through a systematic validation approach involving expert review and user testing with adolescents aged 15–24 years in Bandung, Indonesia. This phase included three primary components: content validation, media validation, and field testing, described as follows:

a. Content Validation
An expert in educational psychology and adolescent mental health and psychosocial education was used to validate the content. The purpose of this validation was to evaluate the accuracy, depth, clarity, and delivery of the educational material presented in the explainer animation. Based on the assessment, the overall content validity score was 91.45%, reflecting strong alignment with educational and psychological standards. Detailed scores for each evaluation aspect are presented in Table 1.

Table 1. Content Expert Evaluation Results.

Aspect	Evaluation Item	Max Score	Score Obtained	Percentage
Content	Scientific accuracy of the material presented	15	12	80%
	Depth and substance of the material			
	Relevance and usefulness for knowledge enrichment			
Language	Use of effective and efficient language	10	10	100%
	Ease of understanding the flow of information in the animation			
Presentation	Logical sequencing of material in the animation Visuals support and clarify the presented material	10	10	100%
Average Score				**91.45%**

Although the scores were high, the expert recommended enriching the material by adding information about types of depression and introducing the concept of Mental Health First Aid (MHFA) to enhance its practical value for adolescent viewers.

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b. Media Validation

Media validation was conducted by a digital media expert with a background in software engineering and multimedia development, to assess the technical quality and presentation of the explainer animation. The expert evaluated key visual and auditory components, including graphic design, typography, audio clarity, and animation movement. The results of this expert review are summarized in Table 2.

Table 2. Media Expert Evaluation Results.

Aspect	Evaluation Item	Max Score	Score Obtained	Percentage
Graphics	Quality of character and background design in the explainer animation	20	17	80%
	Color harmony used in the animation explainer			
	Image clarity in the explainer animation			
	Layout and sizing of visual objects			
Typography	Font selection and color usage in the animation	10	10	100%
	Text readability in the animation			
Audio	Appropriateness of background music and narration	10	10	100%
	Clarity and quality of audio			
Animation	Timing and synchronization of animation movement with voiceover	5	4	80%
Average Score				**91.11%**

The overall score of 91.11% reflects a high level of media quality and usability. Nevertheless, the expert suggested several refinements to improve the animation's effectiveness, such as enhancing the design of character hands, ensuring consistency of animation icons, and refining the smoothness of animation transitions. These suggestions were considered during the revision process to optimize the final media product for clarity, coherence, and visual engagement.

c. User Testing

To evaluate the effectiveness and audience reception of the explainer animation, a media trial was conducted with a group of 50 adolescents aged 15–24 years residing in Bandung. Participants were selected based on relevance to the target demographic

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and were asked to respond to a structured questionnaire covering various aspects of the media's performance. The evaluation focused on four keys dimensions: content success, media influence, media impact, and communication clarity. The detailed results are presented in Table 3.

Table 3. Adolescent Media Trial Results.

Aspect	Evaluation Item (Summary)	Max Score	Score Obtained	Percentage
Content Success	Information presented was engaging and memorable	500	432	86.4%
	Information was easy to understand			
Media Influence	Increased confidence in the accuracy of information	500	409	81.8%
	Motivated viewers to care more about their mental health			
Media Impact	Helped users better understand depression	500	413	82.6%
	Raised awareness of the importance of mental health			
Communication	Animation communicated the message clearly and effectively	250	213	85.2%
Average Score				**93.8%**

The user testing results show a high overall acceptance of the explainer animation, with an average score of 83.8%. The highest-rated category was *Content Success* (86.4%), followed by *Communication Clarity* (85.2%). These findings shows that the animation was well-received by the target audience and was effective in conveying educational messages about mental health and depression in a clear, relatable, and impactful manner.

The evaluation results across all stages—content validation, media validation, and user testing—demonstrate that the Sehat Tanpa Depresi explainer animation meets high standards of educational quality, technical execution, and user relevance. Expert feedback contributed valuable insights for refinement, while the strong positive response from adolescents confirms the media's effectiveness in communicating sensitive mental health

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topics in an accessible and engaging manner. These findings support the animation's potential as a scalable and culturally appropriate tool for promoting mental health awareness among Indonesian youth.

4. CONCLUSION

As a digital mental health solution for teenagers, the study evaluated an explainer animation named "Sehat Tanpa Depresi." Following expert validation and testing by users, the animation was found to meet all the requirements for its educational purpose. They found the material to be straightforward, readable, with a useful structure, but requested that more details about mental health should be included. AI specialists confirmed that the animation was remarkable in its use of type, how easy the lines are to understand and in overall design. In addition, testing among adolescents aged 15–24 found that participants gave the information high scores for effectiveness, media impact, messaging and quality of communication. The study reveals that the animation is suitable for Indonesian culture, interesting and good at increasing awareness of mental health in young people.

The results from the animation were positive, though some improvements should be added for the next version. To add more to our education, the lessons might cover various types of depression and initial steps to help such as learning MHFA (Mental Health First Aid). They might keep their designs interesting for teens by including varied stories and artistic ways of presenting them. The updates will make the animation both more instructive and more appealing, keeping the audience involved and understanding the topics.

5. ACKNOWLEDGMENT

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6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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