Developing Assertive Media Based On Android

Haryani\textsuperscript{a}, Erlin Fitria\textsuperscript{b}
\textsuperscript{a}Department Guidance and Counseling
\textsuperscript{b}Yogyakarta University of Technology
e-mail: yharyani91@gmail.com\textsuperscript{a}

Abstract: This work aimed to develop asertif based on android. Research setting are at Junior High School 3 Godean. Media developed by combine any multimedia object, including text, images, audio, video, and interactive buttons. Content of media such as video to gain understanding about asertif behavior, 15 questions, and social media researcher information. Research method using research and development and alessi and trolip procedures. Research procedure including (1) research plan, (2) design, including flowcart and story board development, (3) development, including media production using code program, alpha, revise, and beta tested. Percentage tested found that content tested 75\% (worthy), media tested 81,5\% (very worthy). Student tested result 83,6\% (very worthy).

Keywords: assertive behavior, media development

INTRODUCTION

The impact of low assertive behavior in adolescents, one of which is bullying. Someone who has low assertive behavior tends to not be able to consider what is said to others, where someone expresses what is considered true without thinking about the feelings and opinions of others, whereas students who are victims of bullying have not been able to express their displeasure towards friends, defend the rights they should get, reject friend requests/requests, and express their personal opinions (Novalia & Dayaksini, 2013).

Many cases occur as a result of a person lacking assertive behavior which will ultimately be detrimental to oneself. The phenomenon that is rife occurs for example in children who fall into drugs. They do things out of desire due to not being straightforward with the opinions he has. Children are easily influenced by drug use because they are afraid of being judged as teenagers who cannot keep up with the times. Likewise in children who do promiscuity, he is afraid to refuse the invitation of a partner for fear of being judged not really love a partner.

The importance of alleviation of assertive behavior is low in students who are
included in guidance and counseling, namely social guidance, in order to achieve maximum learning outcomes in students, where students can get maximum learning gained from the social environment and how to interact in the environment, thus if students have behavior assertive and also other social problems, students can follow the learning process optimally.

Assertive behavior that is good for individuals can facilitate socializing in their environment, avoiding conflict, because being honest, forthright and can solve problems effectively. Teenagers who have good assertive behavior can put themselves in the environment in a situation, able to communicate with others, where a teenager can communicate according to the needs openly and honestly without punishing or threatening and does not impede the rights of others, Puspitasari (Susulawati & Andriyani, 2016)

Therefore the purpose of the research is to develop assertive behavior media for Android-based students to analyze the level of assertive behavior of students that can be used easily and can see the results of the high and low assertive behavior using a smartphone.

METHODS

The research model used in this study is Research and Development (RnD). Research and development (R&D) is a research method that aims to produce certain products and test the validity and effectiveness of the product in its application (Hanafi, 2017). The model in this research development is a procedural model, which is a model that is descriptive and outlines the development steps (Sugiyono, 2012).

The research location was at Junior High School 3 Godean, Yogyakarta. This research was conducted on 30 March 2019 to 27 September 2019. The subjects in this study were students of class VIII. The research procedure used in this study was to use the methods of Alessi and Tulip. The research procedure consists of (1) planning stage (2) design (3) development.

1. The Planning Stage

The steps that must be taken in this study, namely: 1) Identification of Problems, this stage is the initial stage of this research in the form of problem identification [2) Identification of needs, identification of needs is in the form of tools or materials to be made in the development media assertive behavior, which is in the form of software, computers and materials that will be used in the media 3) Collection of Materials, At this stage will be collected objects needed to run the application. These objects include hardware, software, and learning tools needed.

2. Design

The steps in this study are as follows 1) Making Flowcharts, a diagram showing the steps in the form of graphic symbols, 2) Making Storyboards, namely the design of the display screen (storyboard) is an overview of a program structure. Screen display design or display is made to facilitate the programmer in translating in the form of a programming language.

3. Development

The steps in the research stage are 1) Media Production, namely the initial step taken at the development stage is making the display pages of the media made. Display that has been designed previously implemented in the finished form, 2) Writing program code, the second step in the development stage is writing program code, which is the appearance of the page that has been made then given the commands in the form of program code so that it can run according to its function. In making application development media products, researchers collaborated with S1 Informatics Engineering students at the Yogyakarta University of Technology. The material to be loaded in the previous application is encoded, 3) Alpha Testing, Alpha Testing is testing conducted by experts in their fields. Alpha test is done before the product is tested on 5 potential users. In the alpha test records given by experts are
collected to correct deficiencies in the product. Alpha Iji is in the form of a product feasibility test instrument from media experts, material experts and a feasibility test instrument on products for students. Revisions were made based on records obtained from experts during the alpha test. These records serve as guidelines for product improvement. 5) Beta Testing, Beta testing is application testing that is tested on a group of prospective users without any control from the developer. This test is carried out to determine the level of eligibility of the application. Beta test conducted by researchers is a closed beta test, where only a few students are invited to try products that have been tested for eligibility by material experts and media experts. In a limited trial, the researcher involved 5 students who represented the students.

Data collection techniques in this study are, 1) Interview, 2) Distribution of questionnaires, while the data analysis technique used is 1) Evaluation of Material Tests, namely the assessment of material contained in applications conducted by material experts using assessment instruments to determine the level of eligibility media. 2) assessment of media tests, namely assessment of the media conducted by media experts using assessment instruments to determine the level of eligibility of the media, 3) beta testing, namely assessments made to 5 students as users of the media that have been given input and advice by material experts and media experts to determine the level of eligibility for users using assessment instruments.

**FINDINGS AND DISCUSSION**

**Findings**

The results showed the level of assertive behavior in eighth grade students of Junior High School 3 Godean, Yogyakarta at a moderate level. The assessment of alpha and beta tests shows that the development of assertive behavior media based on android is appropriate.
Table 1 Content Tested Score

<table>
<thead>
<tr>
<th>Number</th>
<th>Component tested</th>
<th>Item</th>
<th>Maximal score</th>
<th>Total score</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Learning point</td>
<td>4</td>
<td>16</td>
<td>12</td>
<td>75%</td>
</tr>
<tr>
<td>2.</td>
<td>Content and question</td>
<td>5</td>
<td>20</td>
<td>15</td>
<td>75%</td>
</tr>
<tr>
<td>3.</td>
<td>language</td>
<td>2</td>
<td>8</td>
<td>6</td>
<td>75%</td>
</tr>
<tr>
<td>4.</td>
<td>Carried out</td>
<td>4</td>
<td>16</td>
<td>12</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td><strong>Total score</strong></td>
<td></td>
<td>*</td>
<td>**</td>
<td>*</td>
</tr>
</tbody>
</table>

Table 2 Media Tested Score

<table>
<thead>
<tr>
<th>Number</th>
<th>Component tested</th>
<th>Item</th>
<th>Maximal score</th>
<th>Total score</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>display</td>
<td>10</td>
<td>40</td>
<td>32</td>
<td>80%</td>
</tr>
<tr>
<td>2.</td>
<td>program</td>
<td>6</td>
<td>24</td>
<td>18</td>
<td>75%</td>
</tr>
<tr>
<td>3.</td>
<td>Audio-visual</td>
<td>3</td>
<td>12</td>
<td>12</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td><strong>Total score</strong></td>
<td></td>
<td>*</td>
<td>**</td>
<td>*</td>
</tr>
</tbody>
</table>

Table 3. Student Tested Score

<table>
<thead>
<tr>
<th>Number</th>
<th>Component tested</th>
<th>Item</th>
<th>Maximal score</th>
<th>Result</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Easy to use</td>
<td>5</td>
<td>100</td>
<td>91</td>
<td>91%</td>
</tr>
<tr>
<td>2.</td>
<td>Impactful</td>
<td>5</td>
<td>100</td>
<td>84</td>
<td>84%</td>
</tr>
<tr>
<td>3.</td>
<td>attractiveness</td>
<td>5</td>
<td>100</td>
<td>76</td>
<td>76%</td>
</tr>
<tr>
<td></td>
<td><strong>Total score</strong></td>
<td></td>
<td>*</td>
<td>**</td>
<td>*</td>
</tr>
</tbody>
</table>

The final results of the evaluation of the absent test along with the advice and input provided and also the beta test were the results of a percentage of 75% of the material test, 81.5% of the presentation of the results of the media test and 83.6% of the percentage of student test results. So that it can be said that the media developed by researchers get a good enough response so that the development of assertive behavioral media based on Android can be used.

**Discussion**

Based on the results of research on the development of Android-based assertive behavior identification media, data are obtained about the media development process that was made and the results of the alpha and beta trials.

The research method used in research uses the Research & Development (R&D) research method with research models from Alessi and Tulip. The first step in this research is planning. This planning is carried out determining the contents in the menus of the application to be developed. In accordance with the problem analysis and needs analysis, in the analysis of the problem from the results of the interview, that the most common problem is bullying. Acts of bullying with physical violence but verbal acts of bullying, that is only through words. However, even so, according to the Clinical Psychologist that verbal bullying is not seen directly, but it will have effects such as depression, anxiety, and low self-esteem so that it disrupts a person's psyche, even the most suicides come from cyberbullying and verbal bullying.

As in the research journal conducted by Abdul Wahab et al, (2017). The results of his study said that adolescents who experience bullying are more at risk of experiencing depression than adolescents who do not experience bullying. Verbal bullying is an act of
violence through words while ascertaining is the desired communication, felt with others and respects the rights and feelings of others. So, the importance of a person's assertive behavior, because with a good assertiveness, someone will dare to refuse if you get an action and words that are not acceptable. So, it is necessary for adolescents to know how high assertive behavior possessed.

In previous studies to analyze a problem or about students themselves using a questionnaire or questionnaire that was felt to be the easiest and most effective. However, adjustments to needs in the era of globalization relate to principles regarding service programs, where the guidance and counseling service program must be flexible. So that demands GC (Guidance and Counseling) teachers to utilize technology to keep abreast of developments. Where students at this time are more interested in media technology-based learning that is interesting and easy to use. However, based on the results of the interview, the GC teacher still uses a manual questionnaire to analyze students who are considered to be time-consuming so they are less efficient. So that media is needed to facilitate teachers in identifying students themselves.

The researcher developed a media to make it easier to analyze about the students themselves before the teacher analyzed the questionnaire with the time that was felt to be less effective, becoming easier and faster and could be done anywhere. This research develops an Android-based assertive behavior identification media. Before designing the media, researchers collected material that would be used in the application and also collected media development materials used, namely using hardware and software such as MacOsMojave, i5 AMD Radeon Processor core, mouse, android studio 3.4, and the google browser text editor. The results of this development are applications with a minimum device specification Jellybean4.1 minimum operating system, a minimum of 1 GB RAM, and a resolution of 5 inches.

Before making media development in its finished form, it is first to design a Flowchart and also a Storyboard that is used to describe the flow of the media being carried out. After making the flowchart and storyboard, an application with menus and material has been prepared. After the application is made then the eligibility is tested by media experts, material experts and also student tests or also called alpha and beta tests. Validation from material experts is 75%, which means "Eligible" is used with the advice and input provided, namely improving the percentage of test analysis results, ie the results of assertive behavior high or low on the final results. After validation, the material expert then validates from the media expert. the results of the media expert validation obtained were 81.5% which means "Very Eligible" was used with the advice and input provided namely eliminating the material menu replaced with detailed assertive video with an explanation placed on the home page, rearranging the position/layout of the buttons navigation buttons, removes the Question mark in the statement section, and in the results section not only displays the analysis results but also adds tips/solutions related to the results obtained from the user.
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After the absent test, the material and media expert test, the conclusion is that the final result of the media there are 3 menus namely a video about understanding assertive behavior, Test to analyze and also a menu about the application that contains email and also the social media address of the researcher, and can be run with specifications Operating system, minimum Jellybean4.1, minimum 1 GB RAM and 5-inch resolution.

After going through the material and media validation test and having gone through the revision process, the researchers conducted a beta test or student trial. The beta test is a closed beta test. Where only a few students or users are invited to try the final results of the media that have been tested material and also the media test without specifying criteria or conditions for users who will conduct the trial. The trial was conducted on 5 IX F grade students at Godean Yogyakarta 3 Junior High School with the final result of 83.6% which means ‘Very Worthy’. After the media is tested for alpha and beta with a high level of eligibility, the Android-based assertive behavior identification media can be used in a wider circle and can also be developed later with a wider range of material and with a more attractive appearance.

CONCLUSION

Based on the results of the discussion that has been stated, it is concluded that the development of assertive behavior media is appropriate to be used to determine the level of assertive behavior of students, namely the level of assertiveness in students.

It is known that the results of the percentage level of assertiveness using the post questionnaire for students of Junior High School 3 Godean, Yogyakarta showed that the greatest results were in the moderate category at 62.43%. While the results of research into the development of assertive behavior media in the form of applications used on smartphone devices go through 3 stages, namely the planning, design and development stages.

The final results of the evaluation of the absent test along with the advice and input provided and also the beta test were the results of a percentage of 75% of the material test, 81.5% of the presentation of the results of the media test and 83.6% of the percentage of student test results. So that it can be said that the media developed by researchers get a good enough response so that the development of assertive behavioral media based on Android can be used.

REFERENCES


