Infisdial as Learning Media for Strengthening "Anti Bullying" Attitudes

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ABSTRACT

Bullying is increasingly common in Indonesia, especially in school environments. Teachers have a very important contribution to overcoming bullying behavior towards students, one of which is by providing interesting but still effective learning to transform knowledge and information as well as life values through learning at school. The learning process can be carried out using learning media. The aim of this research is to develop infographic-based learning media through social media that can strengthen students' anti-bullying attitudes. This development uses the ADDIE model. This study involving material experts and media experts, as well as Pancasila Education subject teachers and 30 Phase E students as research subjects. Data collection was carried out using questionnaires and interviews. At the validation stage, the material expert received the “Very good” category. The results of the Independent Sample T-test diinterpreted to show that the calculated t value was greater than the t table so that it could be concluded that H0 was rejected and H1 was accepted with the test decision being that the experimental class mean was greater than the control class. This shows that treatment using informal media has a significant impact on strengthening the value of anti-bullying attitudes in students.

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1. INTRODUCTION

Bullying is increasingly common in Indonesia, especially among young children and in the school environment. Bullying is one of the most aggressive attitudes and is violence between peers in the school environment the elementary school level. Children are more likely to be rejected the bully than the victim, but this is reversed in secondary school where the bully may be popular (Nurlia & Suardiman, 2020; Whale et al., 2018). Studies longitudinal by previous study explore involvement in bullying and victimization of over time among children aged 9 to 12 years and 11 to 16 years, with similar results (Haltigan & Vaillancourt, 2014). Bullying in school is the use of authority or intimidation, both physical and verbal against students who are considered different or do not have power by friends or seniors. Bullying is not just a problem between the perpetrator and the victim, but it is recognized as a group phenomenon occurring in a social context where various factors serve to promote, maintain, or suppress the behavior. Bullying causes increased aggressive behavior (Evans et al., 2018; Wanabuliandari et al., 2021).

Harmful results from bullying include one or more people being physically or emotionally hurt. Being bullied by peer results in poor physical health, socially integrated and socially marginalized disorders and poor school adjustment, including being unhappy, feeling insecurity, truancy, poor achievement and, in some cases, dropping out of school and trying to suicide attempt (Evans et al., 2018; Swearer & Hymel, 2015). Bullying that is done verbally or physically brings serious harm to students who are involved in it, both victims of bullying and...
perpetrators of bullying, such as experiencing psychological problems with high levels of depression, low self-esteem, and anxiety (Enz et al., 2007; Juvonen, J., & Graham, 2014). Several forms of prevention can be taken to minimize bullying, namely by strengthening anti-bullying attitudes from various parties, such as strengthening tolerance, recognizing equality, accepting the rule of law, and respecting human being rights. Teachers as the main actors in education, especially in the learning process in class, teachers are very closely related to the application of learning media.

Learning media is a tool that can help in the learning process. According to previous studies, learning media is a device and also materials used in the learning process (Arsyad, 2017). The need for a learning media that is communicative and acceptable to all groups makes it important to develop a learning media to accommodate the interests of students in the middle school age range. Learning media used in the current digital era is an information technology-based learning media. The use of digital media is very helpful and facilitates teachers in delivering learning materials (Kusmana & Nurznian, 2022; Sari et al., 2023). Besides that, the teacher can feel the use of digital media is very helpful and speeds up the process of delivering material more efficiently and attractively because in the current era the integration of technology in learning is needed, innovation in the use of digital electronic media is a reflection of technology integration into the learning process (Aeni & Yusupa, 2018; Fahmi et al., 2021). This is also supported by previous research which found that the delivery of material or information in learning through digital media is very enjoyable for students so that it can increase active participation in the learning process (Yeni & Cagiltay, 2017). Previous research found that bullying that occurs can be prevented through several approaches, namely animation media (Sweater & Hymel, 2015), with motion graphics media to increase tolerance among students (Hanif, 2020), DST media Digital Story Telling (Puspitasari, 2018) and film media (Cahyaningrum et al., 2018).

Based on the results of previous research showing that bullying can be prevented by using learning media, the novelty of this research is to use infographic learning media delivered via social media, because the use of social media makes it easy to communicate, both friends and family who are not able to communicate directly because distance factor (Nasution et al., 2021; Ozdamli & Ozdal, 2018). We can send the information needed easily and quickly, as well as in accessing the information we need. Social media is a form of electronic communication in which users create online communities to exchange information, photos, videos, ideas, personal messages and other content (Aripadono, 2020; Miaz et al., 2019). Social media is a safe means of communication without physical contact because communication is done with a computer as the mediation (Arfani et al., 2020; Astuti, 2022). Therefore efforts to strengthen the attitude of anti-bullying in students can be realized through the development of learning media "Infisdial" social media infographics.

Teachers have a very important contribution to overcoming bullying behavior towards students in the school environment, because considering the impact of bullying is very dangerous for students, so teachers have an important role in the future of students. Efforts to transform knowledge and information as well as life values can take place through the learning process in the classroom, an effective and efficient learning process can be carried out using learning media in the form of infographic-based learning media through social media. This study aims to develop infisdial learning media and test the effectiveness of infisdial media in strengthening anti-bullying attitudes in students.

2. METHOD

This research is included in the type of Research and Development (R&D) with the ADDIE development model (Analyze, Design, development, Implementation, Evaluation). ADDIE model is a rational and complete model compared to other development models (Mulyatiningih, 2011). This type of research and development is research that is used to produce certain products and test the effectiveness of these products. The product resulting from this research is an infographic learning media through social media to strengthen anti-bullying attitudes. Need analysis is carried out by interviewing and distributing questionnaires to high schools, namely students and teachers. This needs analysis stage is to analyze student characteristics, analyze student interests in learning, and analyze the desired media in learning. The interview was conducted using open questions. The questions asked in the interview were guided by the interview protocol in Table 1.

The next analysis is to find out the needs of students in developing learning media in accordance with learning outcomes and learning objectives. Further analysis from the perspective of educational technology to find out information related to the use of gadgets or devices and internet access by students and teachers, as well as the habits of teachers and students in using gadgets for social media. Questionnaire of needs analysis in the development of learning media is show in Table 2.
The design stage is a systematic stage starting from determining the determination of student characteristics data needs, formulating learning objectives, formulating material points, developing success measurement tools and writing media scripts. At the design stage there are two steps that must be taken, namely compiling learning objectives and designing learning product concepts. Furthermore, in the development stage, in this development stage, the conceptual design will be realized into an infisdial media product that is ready to be implemented, the creation of infisdial media using the Canva and Pixel Lab applications, at this stage it also involves assessment validators, namely from material experts and media experts. The implementation phase is carried out in the learning process of the Pancasila Education subject at MA Mu'allimat Kudus. The learning process using infisdial media is carried out for 2 hours of lessons according to available lesson hours. The last stage is evaluation. evaluation was carried out out to assess student and teacher responses to infisdial learning media. The learning outcomes in its implementation are to seek to strengthen anti-bullying attitudes in students with learning outcomes students can analyze norms and rules, rights and obligations as citizens regulated in the constitution and applicable norms.

This research and development involved teachers and students as research participants and then participated in the assessment of the validator, namely material experts and media experts. The material expert is a teacher who is experienced and has knowledge and expertise in the field of Pancasila and Citizenship Education. While the media expert is an experienced teacher with knowledge and expertise in the field of Visual Communication Design or in design instructional Media. Collecting data in this development research with questionnaires and interviews. The questionnaire contains 15 questions with a Likert scale questionnaire type with 5 answer scales from "Strongly disagree" to "Strongly agree". Then coupled with interviews to complete the data. The data in this development research are in the form of quantitative data from questionnaires and qualitative data from interviews.
3. RESULT AND DISCUSSION

Result

The stages of needs analysis sourced from questionnaire data show that in the learning process students need interesting learning media as a product that sends messages or information that is of interest to many students so that it attracts students' attention. Students really need digital media through social networks that are interesting and in accordance with today's youth trends. Students need graphic visual media through social media that is easy accessible by their smartphones or devices. The data shows that 30 students and most of them can master smartphones and have social media accounts. Infinite learning media is needed because in learning the teacher only provides makeshift media and is less attractive to students.

Apart from that, there are textbooks which are loans from the school library which students must return at any time, limiting learning resources. Also strengthened by interviews with teachers about media needs, learning media can make it easier to deliver messages or materials to students, remember us also related to the problem of bullying cases that have occurred, therefore teachers also really need learning media as an effort to strengthen anti-bullying attitudes in students. The development of infographic-based learning media to strengthen understanding of anti-bullying attitudes shows that all students support it, which is shown by 70% of students agreeing and 30% of students answering strongly agreed. With regard to illustrations that need to be developed in digital learning media, 50% of students want an attractive design, while 50% of students need clear explanations but are still supported by attractive images.

The stages of preparing the product design or design stages are the stages in designing infographic-based learning media through social media to strengthen students' anti-bullying attitudes, the results of the analysis are then used as guidelines in designing infographic-based learning media products through social media to strengthen students anti-bullying attitudes in elements of the 1945 Constitution of the Republic of Indonesia. Phase E, learning outcomes students can analyze norms and rules, rights and obligations as citizens regulated in the constitution and applicable norms and can practice them and practice making mutual agreements in schools related to norms that must be obeyed by all learners. At the design stage it is carried out by designing infisdial learning media starting from manufacture flowchart provide an overview of the steps or procedures of the system, followed by compiling storyboard as media product development design. Infisdial media steps in Figure 1.

![Figure 1. Infisdial Media Steps](image)

At the media development stage, the product is developed according to flow chart and storyboard. Products are developed with applications Canva and Pixel Lab. There are several stages that need to be prepared in this development, the first is preparing material or information content in the media, supporting pictures and illustrations, as well as assessment questions. The second stage is production, namely by making products that are integrated with pictures or illustrations as well as assessment questions until they become Infographic learning media products through social media, then the stage of validation of material experts and media experts. Infidiaal learning media products are shown in Figure 2.
The first stage of validation was carried out by the material expert validator and obtained a score of 47 out of a maximum score of 60. The percentage of suitability was 78.33% including the "Decent" category, some suggestions for improvement from material experts were that there were still a few sentences that were not in accordance with students' cognitive development, and there were several words that had multiple interpretations, and then after there was improvement a reassessment was obtained with a score of 88.33%. Furthermore, the assessment of the media expert validator obtained a score of 44 out of a maximum score of 60. The percentage of suitability was 73.33% and was included in the "Decent" category. with the content of media images, then after making improvements to obtain a score of 83.33%.

Implementation of infisdial media in the experimental class consisting of 30 students of class X4 was carried out in 4 meetings. While learning in the control class consisted of 30 students in class X2, learning using modules in the form of material in the form of power points was carried out for 4 meetings. Learning in the experimental class and the control class were both carried out in 4 meetings with a duration of 45 minutes for each meeting. The last stage is the evaluation stage, this stage is a test of the effectiveness of the product that has been implemented. As for the prerequisite test as a condition for testing product effectiveness, then an independent sample t-test is carried out to determine the effectiveness of the product being developed. As for the prerequisite test used is the normality test and homogeneity test. The results of the normality test are presented in Table 3.

### Table 3. Results of Normality Test Analysis

<table>
<thead>
<tr>
<th>Data</th>
<th>Group</th>
<th>Amount sample</th>
<th>Mark Sig.</th>
<th>α</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Anti Bullying</td>
<td>Class Control</td>
<td>30</td>
<td>0.386</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td>Class Experiment</td>
<td>30</td>
<td>0.460</td>
<td>0.05</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Based on Table 3, the results of the normality test in the experimental class and control class obtained results above 0.05 so that the conclusions obtained were that the samples came from populations that were normally distributed. Furthermore, the results of the homogeneity test are presented in Table 4.

### Table 4. Results of Homogeneity Test Analysis

<table>
<thead>
<tr>
<th>Data</th>
<th>Group</th>
<th>Mark Sig.</th>
<th>α</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Anti Bullying</td>
<td>Class Control</td>
<td>0.668</td>
<td>0.05</td>
<td>Homogeneity</td>
</tr>
</tbody>
</table>


Based on Table 4 show testing the results of the homogeneity test in the experimental class and the control class obtained results above 0.05 so that there was no difference in variance between the experimental class and the control class, the conclusions obtained were homogeneous. From the results of the prerequisite test of the experimental class and the control class, it can be concluded that the sample comes from a normally distributed population and the variance of the two classes is homogeneous. Then the follow-up test used is the independent sample t-test of one right tail. The results of data testing are presented in Table 5.

**Table 5. Summary of Independent Sample T-test Results**

<table>
<thead>
<tr>
<th>Group</th>
<th>t count</th>
<th>t table</th>
<th>Average Pre-test</th>
<th>Average Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Class</td>
<td>4.155</td>
<td>2.048</td>
<td>33.3667</td>
<td>39.1333</td>
</tr>
<tr>
<td>Class Experiment</td>
<td>33.2667</td>
<td>46.6000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 5 test results, it can be interpreted that the calculated t value is greater than t-table with a significant level of 0.05. t-count 4.155 is bigger than t-table 2.048. then it can be concluded that H0 rejected and H1 accepted with the decision of the experimental class mean test is greater than the control class. the results of the post-test mean of the two classes, the comparison of the mean between the experimental class and the control class shows that the mean of the experimental class is greater than the control class. In addition to the mean of the experimental class and the control class, there is a mean difference between the pre-test and post-test values in the experiment. The pre-test value is the anti-bullying attitude value that has not received treatment, the post-test value is the anti-bullying attitude value that has received treatment. The test results show that the post-test average yields higher results than the pre-test average. This shows that the treatment using infidial media has a significant impact on strengthening the value of anti-bullying attitudes in students.

**Discussion**

The results of the study show that the development of independent media can meet the needs of teachers and students in the learning process as a tool to transform messages or information according to learning outcomes. This media provide an understanding of indicators of anti-bullying attitudes so that they can strive to strengthen anti-bullying attitudes in students. According to previous studies, learning media are all sources whether in the form of data, people or objects that can be used to provide learning facilities convenience for students (Nurrita, 2019). The learning media includes messages, people, materials, equipment, techniques, and the environment/setting. In the current era, learning media are needed that can attract students' attention, such as visual graphic-based media. Research on the development of Infsidal learning media to strengthen anti-anxiety attitudes bullying This student is based on theory Hypodermic Needle Theory. The hypodermic needle theory or bullet theory is also known as “the concept of powerful mass media” by Elisabeth Noelle-Neumann (Mehrad et al., 2020; Puspianto et al., 2022). This theory views the media as having a strong influence on media audiences or mass audiences and, can intentionally change attitudes and control people's behavior. In this theory, audiences are described as being the target of the information injection process fired by the media and audiences cannot avoid or reject injections made by the media (Dung, 2021; McLoughlin, 2011).

Teachers and students showed a positive response to the development of this independent media. Teachers and students explained that infidial media has good visual aspects so that it can attract students to read and see the illustrated pictures. In addition to this infographic media, it is presented through social media so that students feel interested because they keep up with the times because social media is an important part of contemporary communication (Adami & Jewitt, 2016; Beesoon & Cant, 2023). The need for guidelines for using social media, multiple platforms shows that visual media containing an interesting message or information is presented via social media such as the use of Facebook for marketing, through the web design, stylish expression on Tumblr and Pinterest, and YouTube media effectively helps the learning process (Adami & Jewitt, 2016; Elkordy, 2016; Sulianta et al., 2019). Besides that the material presented has been simplified properly so that students can quickly grasp the explanation from the media (Asih & Ujiianti, 2021; Rahmatika et al., 2021). The use of infographic media can increase people's understanding of information, people's understanding of information can increase because of the intensity of using infographics media, the contents of infographic media messages, the attractiveness of infographics media.

This is further strengthened by studying that state visual graphic information media can provide understanding with the essence of knowledge using limited text, because student infographics are able to synthesize content and the purpose of the information conveyed (Nawaz & Ghulam, 2010). The attractiveness aspect of infographic media is the presentation of existing content on infographics to attract readers' attention through the display of colors and images, based on the aspect of clarity, the information presented in infographics provides clarity to the reader seen from the appearance of the letters and the suitability of the images used, in terms of convenience aspects. Infographic readers can understand the information in infographics so that readers can
understand and interpret the meaning and messages on infographics (Dudek & Heiser, 2017; Resnatika et al., 2018).

Based on previous research showing that infographic based media delivered through social media such as Instagram and Tiktok, and other social media can increase understanding for readers, this can be the basis for strengthening one's attitude, it can be concluded that infisdial media for strengthening students' anti-bullying attitudes can strengthen media theory and also strengthen previous research on infographic media to strengthen students' anti-bullying attitudes. With the existence of research on the development of learning media, it can contribute to the field of education and the development of learning media because it can increase student learning interest. Students are also more active and not only student teachers are also actively and creatively involved in teaching, because behind good and easy to understand learning media there are teachers who are active and creative in making learning media. This development has limitations in making graphic elements, where layout settings, use of type and size of fonts, image size ratios, and text composition require special skills in making infographics because most of the data will be represented in visual form. Based on these limitations, the researcher provides suggestions to have more skills in making graphic elements so that they can be well conceptualized and can attract readers.

4. CONCLUSION

Based on the results of the study and discussion, it can be concluded that teachers and students also need learning media that can actually help the learning process to achieve learning objectives. Infisdial media is considered capable of providing knowledge and understanding of anti-bullying attitudes so that it can provide reinforcement of anti-bullying attitudes in students, infisdial media is considered appropriate for use because it provides knowledge and understanding regarding indicators of anti-bullying attitudes in students such as commitment to truth, commitment to peace, open-mindedness and responsibility for his actions. It can be interpreted that infographic media through social media provides reinforcement of anti-bullying attitudes in students.

5. REFERENCES


