



Development of Angry Meter Digital Comics as Group Guidance Media to Improve Students' Angry Management

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Abstract. This study aims to: 1) create angry meter digital comics as a group guidance medium to improve students' anger management, 2) find out the feasibility of angry meter digital comics as group guidance media to improve students' anger management, and 3) find out the effectiveness of angry digital comics meter as a group guidance media to improve students' anger management. This research is research and development that refers to the five steps of the ADDIE development model, namely analysis, design, development, implementation, and evaluation. The data collection used the media feasibility test scale, the material feasibility test scale, the counseling teacher response questionnaire, the student response questionnaire, and the anger management scale. The product feasibility test was done by material experts, media experts, counseling teachers, and students. This is analyzed using the conversion of five quantitative criteria. The subjects of the effectiveness test in this study were six students of class X SMK Muhammadiyah Mungkid Magelang. The data analysis technique is quantitative descriptive analysis and gains score.

The results of this study indicate that: 1) angry meter digital comics have been produced as media for group guidance to improve students' anger management in the form of colored digital comics with four episodes in the blog as group guidance media to improve anger management for Vocational students, 2) angry meter digital comics media produced is feasible based on the validation of media experts, material experts, and counseling teachers, which is feasible to be tested on students, and 3) angry meter digital comics are quite effective for anger management. Based on the calculation of anger management scale data result in the guidance group given, the angry meter digital comic media showed an increase of 70.34% which was included in the criteria of being quite effective.

Keywords: digital comic · angry management · vocational student

1 Introduction

Anger has been experienced by every human being. Anger according to Goleman is one of the three basic types of human emotions. Anger is an emotion that is often avoided because it can have a negative impact [1]. According to Cherry and Flanagan, the impact of anger can trigger aggressiveness that leads to crime [2].

Anger becomes the right emotion when it can be controlled. Not all anger has a negative impact, anger can also be a positive thing such as indicating that things are going wrong, can motivate to make changes to oneself, and can overcome problems that individuals experience by not avoiding them [3]. This opinion is also supported by Cherry and Flanagan that anger is a healthy natural thing [2]. But individuals need to distinguish between anger, aggression, or violence which is often equated. Anger is a potential behavior that is an emotion that is felt within the individual. Meanwhile, the impact of certain emotions, especially anger, can be called aggression or violence. Angry emotions do not always lead to aggressive behavior. Anger that is managed properly can lead to behavior that is acceptable to social norms. However, if anger is not managed properly then anger can have an impact on the emergence of aggressive or violent behavior which as a result can make individuals not accepted by social norms. Angry emotions in adolescents need to be managed properly. One way to manage angry emotions well is anger management.

Anger management or anger management is a way to identify the causes of anger and train appropriate responses when angry [4]. Anger management can be a key to emotional well-being by balancing emotions and not just suppressing them to keep them under control. According to research conducted by Amin and Khawar shows that anger management training can manage anger and aggression in students [5]. Bhave and Saini also argue that learning how to properly manage angry emotions can help individuals positively express anger [6].

Research conducted by Valizadeh, Davaji, and Nikamal shows that anger management has proven effective in reducing aggressiveness in high school students [7]. Research conducted by Hudaya shows that anger management can improve the ability to manage angry emotions in class X students of Computer and Network Engineering at SMK Muhammadiyah 1 Moyudan. A significant increase was evidenced by the results of the scale score of the ability to manage angry emotions of 15.83 with a percentage of 19% and an average pretest score of 101.38 and a posttest of 117.22 [8]. In addition, research conducted by Nasrizulhaidi, Minauli, and Yusuf also proves that anger management training can reduce aggressiveness in adolescents with disruptive behavior disorders [9]. In this study, subjects in the experimental group experienced a decrease in aggressiveness after receiving AMT (Anger Management Training) and subjects in the control group experienced an increase in aggressiveness because they did not receive AMT. Another study was also conducted by Siddiqah that anger management can prevent and deal with aggressive behavior in adolescents through anger management [10]. The results of this study indicate that the anger management program has a significant effect on changing the aggressiveness of research subjects by managing angry emotions.

Angry emotions are negative emotions that are often felt by adolescents who are in the transitional stage from childhood to adulthood. This transitional stage is a confusing time for a teenager [11]. Vocational High School students are in this phase. If it is associated

with vocational students who are in a period of emotional development, students are in the stage of emotional development which is erratic, unstable, and explosive. According to research conducted by Raval, that anger has an impact on cases of aggression, from assault to murder [12].

Guidance and counseling teacher assistance are carried out by developing skills in managing emotions, one of which is anger. According to Permendikbud, guidance and counseling teachers in schools have a role in helping students achieve optimal, independent, successful, prosperous and happy self-development in their lives [13]. The development of students can be said to be optimal if they reach the competency standards of student independence. One aspect of the competency standards for student independence is achieving emotional maturity.

Emotional maturity can be seen in the way students manage their emotions, one of which is how to manage anger. The guidance and counseling teacher's efforts are very important in efforts to develop anger management skills, thus requiring guidance and counseling teachers to interact more with students. However, the Indonesian Ministry of Education and Culture issued a new curriculum, namely Curriculum 2013 regarding the allocation of face-to-face hours. Even though indirectly the provision of information services benefits students and guidance and counseling teachers who lack class hours [14].

Lack of class hours is of course a new problem for guidance and counseling teachers when facilitating students in developing emotional management skills. Even though the allocation of class hours is of course very helpful for guidance and counseling teachers in carrying out their duties [15]. In implementing guidance and counseling services, teachers are required to be creative in helping students solve problems, especially in facilitating student career planning at school [16]. Guidance and counseling teachers who are creative and innovative are one of the demands of the 21st century. In the 21st century guidance and counseling, teachers need to be more innovative and creative in developing guidance and counseling service systems, such as starting to utilize media that can be used independently even though they are constrained by time allocation.

One of the basic guidance and counseling services used by guidance and counseling teachers is group guidance services. Group guidance services can overcome problems in the shortage of class hours. In addition, group guidance can also help students to develop all their abilities in learning and avoid problems with themselves, and these problems can be solved in a group atmosphere with other members. Confirmed by Nurfitasari, Wibowo, and Sugiharto in their research explaining that through group guidance services students can improve their learning abilities, overcome problems in themselves, and students become more skilled at deciding an alternative to solving problems [17]. Learners are helped to develop abilities in their learning, can avoid problems themselves, and are skilled in taking an alternative in solving problems with group members.

Media can be used by guidance and counseling teachers in providing services. The use of media can make the delivery of messages clearer and more interesting. By the Panduan Operasional Prosedur (POP) SMK, guidance services can be carried out through the media to achieve guidance and counseling purposes [18]. The use of media also makes students get more information from guidance and counseling services. Guidance and counseling teachers need to use media creatively in providing services so that students

can learn more, keep in mind the things they learn well, and improve skills according to the goals of guidance and counseling [20].

Media is also considered a tool that can help students solve problems, especially learning problems [58]. Guidance and counseling teachers are required to be more innovative and creative in developing counseling guidance service systems, especially in managing anger, such as starting to utilize digital media which can combine face-to-face, offline and online learning that can be used independently even though it is constrained by time allocation. Services that combine face-to-face, online and offline are the best choices to increase the efficiency and effectiveness of guidance and counseling services in schools [20]. So when adapted to the times, digital comics are one of the interactive media that can be used anytime and anywhere that can be used online or offline. This has relevance to the phenomena that are often experienced by vocational students.

Phenomena are often experienced by vocational students who are often unable to manage anger properly. Vocational high school students who are in the late adolescent development period have high [21]. High anger and not accompanied by good anger management can manifest from criminal, anti-social, or violent behavior. This is in line with research conducted by Currie which says that late adolescents are still unable to manage anger properly [22].

Digital comics aim to help students change their behavior so they can improve anger management with faster access. Digital comics are comics that use digital software [23]. Digital comics are the development of printed comics. Comics were chosen because comics can be a means of conveying messages to readers [24]. Comics, which are a means of conveying this message, will make it easier to provide information to readers. As the opinion expressed by Maharsi that comics have a role as a medium that has a major influence in giving readers a quick understanding of something that has educational content [25]. Digital comics can change students' behavior by presenting characters in comics. These character figures are the main component in success in conveying messages and information which is a representation of the whole message to be conveyed [26]. Through the characters created in comics, individuals can imitate the behavior played out in the storyline in comics. According to Corey, one model that can change individual behavior is the symbolic model [57]. This symbolic model is a model of the characters seen through films, videos, or other media so that this symbolic model can change inappropriate behavior.

Comics can provide a model that can be used to develop personality in individuals [27]. Comics bring up characters repeatedly. Characters that appear repeatedly in comics become the soul of comic readers and blend with the personality of the reader, thus enabling vocational students to change their anger management behavior.

The advantages of comics as a means of conveying messages will be more efficient when combined with technology. Digital comics have a high mobility feature that allows comics in digital form to be brought into small and efficient gadgets [28]. Digital comics will be more accessible to students, so students will benefit from reading comics with only one click. Digital comics have the advantage of being able to connect to the internet so that they are easily accessible by the target audience of teenagers in the millennial era. Studies find that 79.5% of internet users are teenagers and children [29]. So that this is a

solution for guidance and counseling teachers who are constrained by the allocation of time to continue to carry out services to support improving student anger management.

Based on pre-survey research, researchers conducted interviews with guidance and counseling teachers as well as needs studies by distributing questionnaires to class X students to obtain initial data for needs analysis at Muhammadiyah Mungkid Vocational High School Magelang on October 26, 2021. The results obtained were that the provision of guidance and counseling services was not maximized, especially on emotional management, the provision of vocational guidance services is still limited by time allocation constraints, the use of media in guidance services is still not optimal due to the unavailability of media, at school students are allowed to bring cellphones for study purposes, and facilities such as computer laboratories are available and adequate, and also There is wifi facility in the school. The results of the anger management level of students were 2.83% in the low category, 24.46% in the medium category, 59.21 in the high category, and 13.47% in the very high category of the anger management scale distributed to Vocational students. While the students need assessment regarding the media they are interested in, 59.40% of students chose digital comics and 40.6% chose other media.

Looking at these problems, the researcher is interested in researching the development of digital comics to improve anger management in vocational students because so far research on comic development in guidance and counseling has only been limited to print media and has not been connected to the internet. Like the research conducted by Luawo and Nugroho to produce learning media in the form of comics about emotional independence aimed at class XI at SMA Negeri 111 Jakarta [30]. The results of this study indicate that the results of formative evaluations conducted by media experts were 77.5%, content expert assessments were 75%, and student assessments reached 89%. Results Development of comics to improve understanding of emotional independence is categorized as very good. In addition, research was conducted by Pranowo, Sugiharto, and Sutoyo to produce guidance and counseling media in the form of educational comics for elementary school students [31]. The results of the study showed that educational comics were effective in increasing learning motivation with low grades at MI Ma'arif Grabag showing the number $0.003 < 0.05$.

Another study that uses comic media as a media for guidance and counseling is research conducted by Rahmanto, Dwikurnaningsih, and Setyorini to develop bullying comic media that can be used by guidance and counseling teachers in providing services in the personal and social fields, as efforts to prevent bullying behavior [32]. The results of the assessment of media experts and experts from guidance and counseling include indicators of usefulness at 89.28%, feasibility indicators at 75%, and accuracy indicators at 78.12%. Meanwhile, the results of the school counselor test were indicators of usefulness 83.92%, feasibility indicators 87.5%, and accuracy indicators 85.57%. Based on the results of this study it can be concluded that bullying comic products have met the criteria and are suitable for use as a media for guidance and counseling services in the personal and social fields.

Based on these various problems and need assessments, the researchers in this development study intend to produce a digital angry meter comic as a group guidance medium to improve anger management in Vocational students.

2 Methods

2.1 Type of Research

The research method used by researchers in research on the development of digital angry meter comics as a group guidance media to improve student anger management is research and development (Research and Development or R and D). The product development model in this study uses the ADDIE learning design development model from Dick, Carey, and Carey [33].

2.2 Time and Place of Research

The research was conducted at Muhammadiyah Mungkid Vocational School, Magelang. The research was conducted from 29 September 2021 to 19 June 2021.

2.3 Research Subject

The trial subjects included in this study were students in class X SMK Muhammadiyah Mungkid Magelang, totaling six students who were included in the guidance group members taken from Class X TKJ 1 who were taken randomly with students who had low anger management, medium, and high.

2.4 Data, Instruments, and Data Collection Techniques

The data collection instruments used were interview guides, anger management slack, material expert validation questionnaires, media expert validation questionnaires, practitioner questionnaires, and student response questionnaires. Data collection was carried out using data collection techniques: 1) interviews with guidance and counseling teachers, 2) questionnaires assessing the feasibility of material experts, media experts, guidance and counseling teachers, and student responses to digital angry meter comics, and 3) a scale, namely a scale anger management.

2.5 Procedure

The development research procedure uses the ADDIE model in developing angry meter digital comics as a group guidance media to improve anger management for Vocational students to produce angry meter digital comics and test the feasibility of digital comics, namely the stages of analysis, design, development, implementation, and evaluation.

2.6 Data Analysis Techniques

The data obtained in this study are qualitative and quantitative. The data analysis carried out in media development is qualitative data analysis and quantitative descriptive analysis. Qualitative data is in the form of suggestions or input provided by media experts, material experts, and practitioners. These data were analyzed descriptively and used for consideration and improvement in media development. Qualitative data analysis

using content analysis, namely by classifying qualitative data information in the form of responses, opinions, criticisms, and suggestions or comments obtained based on the results of field trials.

Quantitative data in the form of numbers resulting from calculations or measurements can be processed by testing, by comparing the expected amounts and the results obtained in the form of numbers or percentages. Quantitative data analysis was used to 1) analyze students' anger management scale data, 2) analyze media feasibility according to media experts, material feasibility according to material experts, media feasibility according to practitioners, and students' responses, and 3) analyze the results of the material pretest and posttest service.

3 Finding and Discussion

3.1 Development of Angry Meter Digital Comic Media as a Group Guidance Media to Improve Student Anger Management

This research is development research that produces a product in the form of a digital angry meter comic as a group guidance medium to improve anger management in class X Vocational students. This development research uses the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). Paidi states that one of the functions of the ADDIE model is to serve as a guide in building research tools and infrastructure that are effective, and dynamic, and support the performance of the training itself so that it can assist training infrastructure in managing training and learning [34].

The stage of developing digital angry meter comics as a group guidance medium to improve student anger management starts from the first stage, namely the analysis stage which includes the identification of instructional needs, analysis of general instructional objectives, and identification of students' initial characteristics. The first stage of analysis is the identification of instructional needs. Identification of instructional needs based on Dick, Carey, and Carey is obtained from three groups of people who can be used as sources of information, namely students, communities, and educators [33]. For this reason, researchers identified needs with sources of information from class X students and guidance and counseling teachers at SMK Muhammadiyah Mungkid Magelang through interviews.

Based on the results of interviews with guidance and counseling teachers, it was stated that Muhammadiyah Mungkid Magelang Vocational School students were still lacking in managing angry emotions. This is evidenced by the presence of students who are involved in conflicts between students caused by anger that cannot be controlled. By the opinion of Tefrate, Kassinove, and McKay said that anger can cause negative things that damage friendships [3].

In addition to interviews with guidance and counseling teachers, the results of collecting anger management scale data from 282 students filled in, 6.03% of students still had low anger management. Anger management is needed by students to avoid the negative effects of anger. In line with the opinion of Reilly and Shropshire who say that anger needs to be controlled because anger can have negative consequences from the inappropriate expression of anger [35].

Schools have tried to take various approaches so that students' anger can be controlled, including by exemplifying behavior that reflects being able to control anger. However, students' anger management has not developed optimally. By the opinion of Goleman also said that of the several emotions that most people want to avoid is anger [1]. Thus, it is necessary to have the role of guidance and counseling teachers in providing services with anger management materials.

Furthermore, guidance and counseling teachers said that guidance and counseling teachers find it difficult to apply anger management material to group guidance because when guidance is carried out, the interaction between guidance and counseling teachers is lacking. The concentration of students is often divided when group guidance is carried out because students feel less interested if only in the lecture method. Therefore, guidance and counseling teachers need creative media to make students interested in carrying out group guidance. In line with the opinion of Nursalim that guidance and counseling teachers need to use media creatively in providing services so that students can learn more, keep in mind what is well learned, and improve skills by the goals of guidance and counseling [19]. In addition, according to the Panduan Operasional Prosedur BK (POP BK), guidance services can be carried out through the media to achieve the objectives of guidance and counseling [18]. So, with the media developed, it can help guidance and counseling teachers to carry out group guidance.

For this reason, researchers developed digital angry meter comics because they have an attractive appearance that can arouse students' interest and motivation to learn. This is supported by Fay's research which states that the reasons for using comics are because of their visual appeal, efficiency, and the strength of their messages [36]. Wiegerová and Navrátilová also state that comics convey real situations that provoke, suggest solutions, and motivate children to think of their own about a situation [37].

The next stage of analysis is the analysis of general instructional objectives. Dick, Carey, and Carey state that instructional analysis is a set of procedures that, when published for instructional purposes, results in identifying the appropriate steps for carrying out the goals and subordinate skills for the learner to achieve the goals [33]. The purpose of developing angry meter digital comic media is a group guidance media product to improve student anger management.

The next stage of analysis is the identification of the initial characteristics of students. Munadi states that the characteristics of students are the overall pattern of behavior and abilities that exist in students as a result of their nature and experience so that they determine activity patterns [38]. Class X students are at the stage of adolescent development aged 13 to 18 years. According to Semiawan, adolescence usually has great energy, and burning emotions, while self-control is not perfect [39]. Teenagers also often experience feelings of insecurity and unrest. One way to achieve emotional maturity is to develop emotional skills so that adolescents can manage their emotions well. One way to develop adolescent emotional skills, especially in anger management, is to use digital comics that are used in group counseling services. Digital comics provide a learning experience from the plot. In line with the opinion of Tolmie who states that comics provide a learning experience from each part of the panel drawn on the comic [40].

In the development of angry meter digital comic media, the goal is to improve student anger management so that students can recognize anger, control anger, defuse anger, and express anger assertively. In line with Goleman's opinion, there are several aspects of anger management, namely recognizing angry emotions, controlling anger, defusing anger, and expressing anger assertively [1].

Angry meter digital comic media was developed as an answer to solving problems regarding the difficulties of guidance and counseling teachers in implementing group guidance services to improve student anger management according to the characteristics of students. The choice of digital comic media as a medium for group guidance has the potential to be preferred by students because it contains strong visual elements and stories. Comic media is also effective in transferring character values through characterizations in comic stories. This is because the images in comics can animate the rows of written text that accompany them. In line with the opinion of Waluyanto Swho said that comics can be a means of conveying messages to readers [24]. By what was said by Soedarso that these characters are the main component in success in conveying messages and information which is a representation of the whole message to be conveyed [26]. Soedarso's opinion is also supported by the opinion of Maharsi that comics have a role as a medium that has a large influence in giving readers a quick understanding of something that has educational content [25].

The second stage of developing the angry meter digital comic designs, namely designing the goals of group guidance services, group guidance materials, media frameworks, and evaluation. The first stage in design is compiling specific instructions. In special instructions, it must be organized and designed logically and systematically so that the references used must also be clear. For the main reference in the development of digital comics, the angry meter uses aspects of anger management according to Goleman, namely identifying anger, controlling anger, defusing anger, and expressing anger assertively [1].

The next stage in the design is designing the angry meter digital comic media framework which consists of an introduction and content section. The introductory section contains comic titles and character introductions. Meanwhile, the content contains four episodes of digital angry meter comics based on aspects of anger management according to Goleman [1]. Then proceed with designing storylines and storyboards. Storyline adapted to anger management aspects. Storyboards are used to make it easier to illustrate ideas so that they are arranged systematically. This is supported by Surjono's opinion which states that storyboards are used by designers to illustrate and organize ideas and to obtain feedback. The more complete the storyboard, the easier it will be to produce media [41].

The next design stage is to design an instrument for assessing the quality and effectiveness of comic media. The instruments used in this development research were interview instruments, assessment questionnaires for media experts, subject matter experts, guidance and counseling teachers, student response questionnaires, and anger management scales. Interview instruments to determine initial conditions and identification of instructional needs. The assessment questionnaire instrument for media experts, material experts, and guidance and counseling teachers was used to assessing the quality of the media in terms of design and material. Student response instruments to get responses or

information from students regarding the media used. Anger management scale instrument to determine the level of anger management that can develop before and after group guidance.

All instruments were validated, both content validation through expert judgment and empirical validation until the instruments were declared valid and ready to be used in development research. This is by Gay in Sukardi which states that an instrument is said to be valid if the instrument used can measure what it is intended to measure [42]. In addition, Arikunto also states that an instrument is said to be valid if it can reveal data from the variables studied correctly [43].

The third stage of the development of angry meter digital comics, namely development or development, is product realization. The first step is compiling comic media based on the systematics of making comics proposed by Maharsi, namely making verbal and visual characters, panel layout sketches, illustrations, text balloons, inking, coloring, making covers, comic book layouts, and the finishing stage [25]. The preparation of comic media is also guided by the criteria for compiling print media from the National Education Standards Agency (BSNP), namely graphic feasibility, presentation feasibility, content eligibility, and language eligibility.

The next step in the development stage is to do editing with due diligence on media experts, material experts, and guidance and counseling teachers. Sukiman says that the media needs to be assessed first to know whether the media made can achieve the goals that have been set or not [44]. The next step after the assessment, namely the angry meter digital comic media was revised according to input and suggestions from experts to then carry out field trials on students.

The fourth stage of developing angry meter digital comics is implementation, by conducting trials of angry meter digital comics as a group guidance medium to improve anger management in class X students of Muhammadiyah Mungkid Magelang Vocational School in group guidance services. Emzir stated that trials were conducted to determine the effectiveness of the product being developed [45]. The trials were carried out in two stages, namely field trials and product effectiveness tests. In the field trial, students who took part in group guidance services were given a response questionnaire to obtain information and suggestions from students when using comic media for revision and improvement. In addition, students who take part in group guidance services are given a pretest and posttest to find out the difference in the results of providing group guidance services with digital angry meter comics.

The final stage is evaluation. At this stage, the researcher carried out the final evaluation, namely making final improvements and revisions to the digital comic media that was developed if there were still input and suggestions from students. It is intended that the comic media developed is feasible and effective so that it can be disseminated.

3.2 The Feasibility of Angry Meter Digital Comic Media as Group Guidance Media to Improve Students' Angry Management

The feasibility quality of angry meter digital comics as a group guidance medium to improve anger management in class X students of Muhammadiyah Mungkid Magelang Vocational School is seen from the results of the assessment of material experts, media experts, and guidance and counseling teachers.

The results of the assessment of material experts show that number 4.1 is included in the feasible criteria. These results indicate that according to material experts, digital comic strips are appropriate as a media for group guidance to improve anger management from a material standpoint. The opinion expressed by Daryanto that comics can reveal characters and apply a story in an order that is closely related to images and is designed to provide entertainment to readers so that material from comics can be used as a message delivery so that it is easily understood by readers [46]. Maharsi also said that pictures make stories that are easy to understand and understand in creating and conveying messages so that they are easy to follow and remember [25]. This opinion is in line with research also by Wissman that digital comics provide opportunities for students to deepen their understanding of the material [47].

The results of the media expert's assessment show that the number 4.23 is included in the very feasible criteria. These results indicate that according to media experts, digital comic strips are very appropriate as a media for group guidance to improve anger management from a media perspective. The opinion expressed by Nursalim is guidance and counseling teachers need creative media in providing student services so they can learn more and improve their skills [19]. The Guidance and Counseling Operational Guidelines (POP) also state that guidance services can be carried out through the media to achieve the goals of guidance and counseling [18]. Digital comics were chosen as a medium to improve anger management because comics are a good means of conveying messages. In line with the opinion expressed by Waluyanto who said that comics were chosen because comics can be a means of conveying messages to readers [24]. In addition, research conducted by Luawo and Nugroho which also uses comics is categorized as very good at increasing understanding of emotional independence [30]. So comics are said to be an alternative to address various individual mental health problems [40].

The results of the assessment of the guidance and counseling teacher show a score of 4.34 which is included in the very feasible criteria. These results indicate that the digital comic angry meter according to guidance and counseling teachers is appropriate as a medium for group guidance to improve anger management. Research conducted by Rasiman and Pramasdyahsari that digital comics develop students' critical thinking skills so that students can think more critically about the problems currently being faced [48]. In addition, research conducted by Putra and Iqbal also argues that digital comics are a medium for increasing students' creative thinking abilities and learning activities [49]. In line with this, Azman, Zaibon, and Shiratuddin also argue that the impact of using digital comics can support and accelerate educational development [56]. Guidance and counseling teachers can also use comics as a model for students so that students get examples from what students see. In line with the opinion expressed by McGrail, Doepker, and McGeorge that comics provide experience and modeling for students from reading comics [50].

The results of the student's responses to the angry meter digital comic media showed 4.41 which was included in the very effective criteria. Angry meter digital comics are considered very effective according to students as a medium for group guidance to improve anger management. Increasing anger management makes students prevent the negative effects of a lack of anger management such as aggression. This opinion is

also supported by research conducted by Utami and Elfina which states that aggressive behavior can be worse when the individual lacks anger management skills [51]. Improve student anger management, it can be done with various kinds of media. Several studies have used various media to improve anger management, such as research conducted by Ahmad, Yusuf, and Aman which used art therapy, and research conducted by Chin and Ahmad which used anger management modules to improve anger management [52, 53]. In this study, digital angry meter comic media was very effectively used to improve anger management. Research conducted by Aeni and Yusupa that digital angry meter comics are innovative, effective, efficient, and fun media, to increase students' attention in understanding the material [54].

3.3 The Effectiveness of Angry Meter Digital Comic Media as a Group Guidance Media to Improve Students' Anger Management

The effectiveness of digital angry meter comics as a medium for group guidance to improve anger management in class X students at Muhammadiyah Mungkid Magelang Vocational School is done by testing effectiveness using a Gain Score.

The N-Gain Score result of the guidance group is 0.70 which means that the digital angry meter comic for anger management as a media for group guidance to improve anger management is in the moderate criteria. The percentage of the N-Gain Score is 70.34%, which means that the digital comic anger meter for anger management as a medium for group guidance is quite effective in improving anger management. In line with the opinion of McCloud who said that comics are intended to convey information and produce aesthetic responses to readers [55]. Stein and Thon also support McCloud's opinion that comics can provide a model that can be used to develop personality in individuals [27]. Angry meter digital comic is an alternative media for improving anger management. In line with Wisman and Costello who said that angry meter digital comics divert students' attention to the perspective of knowing the process and choices made, angry meter digital comics provide opportunities for students to deepen their understanding [47].

The use of digital angry meter comics as a medium for group guidance to improve anger management has proven to be effective as evidenced by the increase in the level of anger management in class X students at SMK Muhammadiyah Mungkid Magelang. So with the existence of angry meter digital comic media, it becomes an alternative for guidance and counseling teachers to provide guidance services.

4 Conclusion

Based on the results of research and development of a digital comic entitled Angry Meter as a group guidance medium to improve anger management in Vocational students, it can be concluded as follows.

- 1) The resulting angry meter digital comic is a color digital comic with four episodes on the blog as a media for group guidance to improve anger management in Vocational students.

- 2) Angry Meter Digital Comics as group guidance media to improve student anger management are appropriate for use in group guidance services for class X students. Based on the results of the due diligence media experts obtained very feasible result criteria, material experts obtained feasible outcome criteria, and Guidance and counseling teachers obtain very decent outcome criteria.
- 3) Angry meter digital comics as a media for group guidance to improve student anger management proved to be quite effective in group guidance services based on the results of the pretest and posttest which showed improved results.

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