Journal of Education Technology

Volume 7, Number 3, 2023, pp. 554-563 P-ISSN: 2549-4856 E-ISSN: 2549-8290

Open Access: https://ejournal.undiksha.ac.id/index.php/JET



Digital Cognitive Behavior Modification Module to Reduce Cyberbullying Behavior

Nada Fristy Yusri^{1*}, Yeni Karneli², Netrawati³

1,2,3 Department Guidance and Counseling, Universitas Negeri Padang, Padang, Indonesia

ARTICLE INFO

Article history:

Received May 05, 2023 Revised May 11, 2023 Accepted August 12, 2023 Available online August 25, 2023

Kata Kunci:

Modul Digital, Modifikasi Perilaku Kognitif, Cyberbullying

Keywords:

Digital Module, Cognitive Behavior Modification, Cyberbullying

DOI:

https://doi.org/10.23887/jet.v7i3.7

ABSTRAK

Cyberbullying pada remaja semakin marak terjadi dan meresahkan dunia pendidikan. Cyberbullying memberikan dampak negatif yang serius pada bidang psikologis, emosional, dan sosial yang berujung pada ketakutan, kecemasan, dan bunuh diri. Tujuan dari penelitian ini adalah untuk menghasilkan produk berupa modul digital cognitive behavior modification untuk mereduksi perilaku cyberbullying yang telah diuji valid dan dapat digunakan oleh guru Bimbingan dan Konseling dan konselor. Penelitian ini menggunakan jenis penelitian pengembangan (research and development) dengan menggunakan model prosedur ADDIE. Materi modul didapatkan dari analisis kebutuhan perilaku cyberbullying siswa, kemudian dilakukan uji kelayakan modul oleh 2 orang ahli materi dan 2 orang ahli media. Uji keterpakaian oleh 3 orang guru Bimbingan dan Konseling. Metode yang digunakan untuk mengumpulkan data yaitu observasi, wawancara, dan kuesioner. instrumen yang digunakan dalam mengumpulkan data yaitu kuesioner. Teknik yang digunakan untuk menganalisis data yaitu analisis deskriptif dan analisis non-parametrik. Hasil dari penelitian ini adalah modul digital cognitive behavior modification untuk mereduksi perilaku cyberbullying berada pada kategori sangat layak dari para ahli dan mendapatkan. Hasil uji praktikalitas modul digital berada pada kategori sangat baik. Disimpulkan bahwa modul digital yang disusun sangat layak untuk diimplementasikan atau digunakan oleh guru Bimbingan dan Konseling dan konselor. Implikasi penelitian ini yaitu modul digital yang dikembangkan membantu konselor dan guru Bimbingan dan Konseling dalam memberikan pelayanan kepada kliennya.

ABSTRACT

Cyberbullying among teenagers is increasingly common and is disturbing the world of education. Cyberbullying has a severe negative impact on the psychological, emotional and social fields, which leads to fear, anxiety and suicide. This research aims to produce a product in the form of a digital cognitive behaviour modification module to reduce cyberbullying behaviour, which has been tested as valid and can be used by guidance and counselling teachers and counsellors. This research uses a type of research and development using the ADDIE procedural model. The module material was obtained from an analysis of students' cyberbullying behaviour needs; then, a module feasibility test was carried out by 2 material experts and 2 media experts. Usability test by 3 guidance and counselling teachers. The methods used to collect data are observation, interviews and questionnaires. The instrument used to collect data was a questionnaire. The techniques used to analyze the data are descriptive analysis and non-parametric analysis. The results of this research are that the digital cognitive behaviour modification module to reduce cyberbullying behaviour is in the very appropriate category from experts and has received results. The practicality test results of the digital module are in a very good class. It was concluded that the digital module prepared was suitable for implementation or use by guidance and counselling teachers and counsellors. The implication of this research is that the digital module developed helps counselors and guidance and counseling teachers in providing services to their clients.

This is an open access article under the <u>CC BY-SA</u> license. Copyright © 2023 by Author. Published by Universitas Pendidikan Ganesha.



1. INTRODUCTION

In the last decade, major changes and advances in technology have resulted in the expansion of a new form of harassment and intimidation among children and adolescents known as cyberbullying. In this case, social media is a platform for carrying out these negative actions. Cyberbullying is a new form of bullying that is commonly experienced in the real world but with different characteristics and effects (Oguz et al., 2023; Paek et al., 2023; Şahin & Ayaz-Alkaya, 2023). Cyberbullying is also an aggressive act, carried out intentionally by a group or individual, using electronic forms of contact, repeatedly and over time against a victim (Alzaqebah et al., 2023; Chen et al., 2023). Cyberbullying occurs if someone is threatened, frightened, humiliated by other people through the internet, digital technology and so on. Cyberbullying can also be said to be a negative action carried out by certain individuals or groups by sending text messages, pictures or memes and videos on social media that contain elements of insults/discrimination to the victim (Favini et al., 2023; He et al., 2023). Cyberbullying has a worse impact than bullying. This is because victims of cyberbullying cannot hide, due to the widespread prevalence

of cyberbullying (Favini et al., 2023)(Bussu et al., 2023; Favini et al., 2023; He et al., 2023). Possible impacts that arise on victims of cyberbullying can include psychological disorders, such as excessive anxiety, always feeling afraid, depression, wanting to commit suicide, and symptoms of post-traumatic stress (PTSD), feeling that their life is depressed, afraid of meeting the bully, even depression and wanting to commit suicide (Alzaqebah et al., 2023; Chen et al., 2023).

The results of several studies also show that 1 in 4 students are involved in cyberbullying as victims or perpetrators (Mishna et al., 2012), all respondents (250 respondents) had been involved in cyberbullying (Sari et al., 2020) and more women are in the high category of cyberbullying than men (Satalina, 2014). Cyberbullying Facts and Statistics 2018-2022 reveals that the increase in cyberbullying is caused by internet users' extra free time or a lot of free time for surfing social media. Apart from that, the psychological reason someone becomes a victim of cyberbullying is self-defense and self-defense behavior (Comparitech, 2022). There are many triggers for people to engage in cyberbullying, namely because they are angry, frustrated, want revenge, jealousy, want to get attention and even just for entertainment because they have free time. Survey results show that 60% of parents in the world report that their children have received cyberbullying treatment, the largest percentage of age of cyberbullying victims is 59.9% of children aged 14-18 years, followed by 56.4% of children aged 11-13 years, then 54.3% aged 19 years and over, and 47.7% children aged 6-10 years (Comparitech, 2022). Other findings show that 75% of children at school have experienced cyberbullying at least once in the last year (Smith, 2016).

There are also many cases of cyberbullying in Indonesia, one of which occurred on Twitter social media on May 18 2022, where several NCT Dream fans urged and asked Safa to join a space. The space lasted for more than 2 hours containing demands and threats made by several NCT Dream fans to Safa, this had an impact on Safa's psychology. Then a cyberbullying case occurred in early July 2022 which happened to Indonesian singer, namely Keisya Levronka. It started with a viral video on social media, where in the video Keisya couldn't successfully sing the high notes of her own song. That's where criticism and ridicule by netizens on social media emerged. That wasn't enough, when Keisya was invited to a talent search event on television, she received unpleasant treatment by one of the judges and hosts at the event. Based on interviews with guidance and counseling teachers at SMKN 6 Padang, guidance and counseling teachers can recognize signs of students who are involved in cyberbullying behavior. Based on the results of these interviews, many students have been involved in cyberbullying behavior, ranging from hate comments on social media stories, to sharing inappropriate photos on social media. As a result of cyberbullying, students who experience cyberbullying deactivate their social media accounts and even miss school.

Cyberbullying incidents affect the school environment negatively. Students who are victims of cyberbullying more than once will miss school, bring weapons to school and are likely to drop out of school (Ayas, 2014; Quintana-Orts et al., 2021; Saputra et al., 2022). Other research also shows that the impact felt by victims of cyberbullying in psychological and emotional aspects is feeling angry, afraid, anxious, irritated, and feeling uncomfortable (Pasquale et al., 2021; Triyono & Rimadani, 2019). Cyberbullying has a negative psychological impact on victims such as; depression, anxiety, loneliness, low self-esteem, social exclusion, school phobia, having poor academic performance, and leading them to think about committing suicide as a way to escape from abuse (Muzdalifah & Deasyanti, 2020; Triyono & Rimadani, 2019). In general, victims of cyberbullying are reported to have high levels of anxiety, experience depression, and have low self-confidence (Hidajat et al., 2015; Paek et al., 2023). Cyberbullying behavior can cause serious impacts, so it cannot be considered normal behavior, therefore cyberbullying behavior needs to be addressed. The effectiveness of behavior change can occur if it is followed by a person's cognitive changes.

Based on these problems, one solution to reduce cyberbullying behavior in students is to develop a digital cognitive behavior modification module. Teaching modules that are created electronically or digitally are called digital modules (Dinatha & Kua, 2019; Marwanti et al., 2022; Rahmawati et al., 2017; Winatha et al., 2018). Digital modules are teaching materials that are packaged attractively and digitally because they can contain audio or video adapted to the learning material (Erisa et al., 2020; Irwandani et al., 2017b; Rahmawati et al., 2017; Sa'diyah, 2021). In order to address complex problems such as cyberbullying behavior, careful research is needed to understand the dynamics of this behavior, as well as collaborative efforts between individuals, families, educational institutions, and governments to create positive change. The Cognitive Behavior Modification (CBM) approach aims to change visible and hidden behavior by applying cognitive methods and behavioral methods (Wahyuningsih & Daengsari, 2020; Yonita & Karneli, 2019). This means that the Cognitive Behavior Modification (CBM) approach is able to change various behaviors in individuals by changing their thought patterns and behavior (Lotfi et al., 2011; Rimvall et al., 2023; Wahyuningsih & Daengsari, 2020; Yonita & Karneli, 2019). Matter, there are various procedures involved in cognitive behavioral modification, including cognitive therapy, rational emotive therapy, stress reduction training, anxiety management training, self-control, and self-instruction training.

Previous research findings stated that the cognitive behavioral modification approach in a group setting was effective in reducing student bullying behavior (Yonita & Karneli, 2019), and change a person's cognition

(Wahyuningsih & Daengsari, 2020). Previous research findings also state that the use of digital modules can make it easier for students to learn (Irwandani et al., 2017a; Marwanti et al., 2022; Sutama et al., 2021). It can be concluded that the digital cognitive behavior modification module can be used to reduce cyberbullying behavior. There are no studies regarding digital cognitive behavior modification modules to reduce cyberbullying behavior. The advantage of the digital module that will be developed is that the digital module will help counselors and guidance counselors with information to reduce cyberbullying behavior, so that various materials read and studied will be processed and used to help alleviate client problems. The digital module material includes substance about reducing cyberbullying behavior using a cognitive behavior modification approach which is structured systematically in communicative language, so that counselors and guidance counselors can understand the material. Based on this, the objectives of this research are:to develop a digital cognitive behavior modification module to reduce cyberbullying behavior.

2. METHOD

This type of research includes research and development using the ADDIE procedural model (Analyze, Design, Development, Implementation, Evaluation) (Chairudin & Dewi, 2021). At the analysis stage, it is carried outanalysis based on the results of a cyberbullying behavior questionnaire. Then, a study of the research results related to the module was carried out and cyberbullying behavior was analyzed. In the design stage, a material design for the digital cognitive behavior modification module was prepared to reduce cyberbullying behavior. In the development stage, a digital cognitive behavior modification module was developed to reduce cyberbullying and behavior research product validation tests. At the implementation stage it is carried out Feasibility test of digital modules for guidance and counseling teachers at schools. The evaluation stage is carried out to assess the overall usability aspect of the product being developed.

The subjects of this research were 4 experts, namely 2 learning material experts and 2 learning media experts. The product trial subjects were 3 counselors and guidance counselors on duty at the school. The methods used to collect data are observation, interviews and questionnaires. The instrument used to collect data was a questionnaire. The instrument used in this research is an instrument in the form of a Likert scale to analyze students' cyberbullying behavior. The questionnaire grid is presented in Table 1, and Table 2.

Table 1. Expert Assessment Grid Regarding Digital Module Material/Con
--

No.	Assessment Indicators	Number of Statement Items
1	Foreword	1
2	List Of Contents	1
3	General Review	9
4	Attachment	4
5	Language Use	4
6	Service Plan	3
	Amount	20

 Table 2. Expert Assessment Grid Regarding Digital Module Display

No.	Assessment Indicators	Number of Statement Items	
1	Cover design	4	
2	Type and size of letters in the material	4	
3	The colors used in the material	3	
4	Punctuation used in the material	3	
5	Images used in the material	3	
6	Empty space or space in the material	4	
7	Consistency	3	
8	Digital module quality	3	
	Amount	27	

The techniques used to analyze the data are descriptive analysis and non-parametric analysis. Descriptive analysis is used to describe trends in cyberbullying behavior in schools based on the results of the cyberbullying behavior instrument. Then to describe the characteristics of the distribution of scores for each respondent in validation activities of the content and appearance of the service design to experts, as well as product usability testing for counselors and guidance counselors. Non-parametric analysis is used to find out more about the assessment results related to the research products being developed. Statistical tests were carried out to determine whether there was harmony or consistency in the assessments between each expert regarding the suitability of the

digital module and between each counselor and guidance counselor regarding the usability of the digital module that had been implemented. Non-parametric statistical analysis with the statistical test used is the Kendall's Concordance Coefficient Test.

3. RESULT AND DISCUSSION

Result

This research aims to developing a digital cognitive behavior modification module to reduce cyberbullying behavior using the ADDIE model. First, analyze. This analysis stage is the first stage in a series of research stages. Analysis activities based on the results of a cyberbullying behavior questionnaire. Then, a study of the research results related to the module was carried out and cyberbullying behavior was analyzed. In this first stage, analysis is carried out based on the conditions experienced by students obtained from the results of the cyberbullying behavior instrument. Initial data was obtained based on processing cyberbullying behavior data, where the data will be used as topic material in the module that will be developed with the aim of reducing cyberbullying behavior using a cognitive behavior modification approach. Initial data for selecting digital module material topics is presented in Table 3.

Table 3. Initial Data for Selection of Digital Module Material Topics

No. Item on Instrument	Statement	Average
1	I sent messages with inappropriate language on social media	2.12%
2	I sent messages with abusive language on social media	1.89%
19	I spread gossip to my friends via Whatsapp	2.01%
43	I track other people's personal information	2.16%
46	I took photos/videos of other people's bullying	1.89%

The recapitulated needs assessment results are discussed with expert lecturers. Based on analysis and input by expert lecturers, the materials that will be used in the digital cognitive behavior modification module to reduce cyberbullying behavior are Self Control, Smart Steps to Fight Hoaxes, Success in Socializing, and Cyberbullying.

Second, design. Based on the results of the description presented at the analysis stage, a material design for the digital cognitive behavior modification module was prepared to reduce cyberbullying behavior. There are several sub topics that will be used, namely as follows. Chapter 1:Issue, Digital Module Description, Foundation of Digital Module Development, Purpose of using digital modules, General Instructions for Use of Digital Modules, Material arrangement, Service Implementation Plan, Cognitive Behavior Modification Approach, Implementation steps Cognitive Behavior Modification, and The Use of Group Counseling Using a Cognitive Behavior Modification Approach to Reduce Cyberbullying Behavior. Chapter 2: Service Implementation Plan (1), Service Implementation Plan (2), Service Implementation Plan (3), Service Implementation Plan (4). After completing the material design for the cognitive behavior modification approach to reduce student cyberbullying behavior, the next step is to discuss it with the supervisor. Through activities at this design stage, a form of initial product design was obtained, namely a digital cognitive behavior modification module to reduce students' cyberbullying behavior.

Third, development. Based on the design stage that has been carried out, research products are developed in the form of modules containing topics as explained in the analysis and design stages. Next, research instruments were developed that would be used in data collection. The instrument used aims to validate the feasibility of the module carried out by experts, and test the usability of the module for guidance and counselling teachers. The process of validating modules developed by researchers is carried out through discussions with experts to consider all aspects of the module design as well as the instruments that will be used to assess the product being designed. Meanwhile, the expert validation test aims to validate the appropriateness of the content and appearance of the module being developed. Validation tests are carried out to validate the suitability of the content and the suitability of the appearance of the module that has been developed. The results of the digital module test for material experts are presented in Table 4.

Table 4. Digital Module Test Results to Material Experts

N.	Amost	Score M	laterials	Total	A	Cotonomica
No.	Aspect	A	В	– Total	Average	Categories
1	Preface	80	85	165	82.5	Worthy
2	Table of Contents	90	87	177	88.5	Very worthy
3	Overview	85	82	167	83.5	Worthy

No.	Aspect	Score M	laterials	– Total	Average	Categories
		A	В	- Totai		
4	Service Materials	80	85	165	82.5	Worthy
5	Language Usage	87	86	173	86.5	Very Worthy
6	Service Plans	90	91	181	90.5	Very Worthy
	Total	512	516	1028	514	
	Average	85.3	86		85.67	Worthy

Based on Table 4, it is known that the overall assessment given by experts to the digital module reached an average of 85.67 in the adequate category. This means that experts provide a positive assessment of the material in the designed module. After obtaining this data, it is necessary to know the suitability of the assessments of the three assessments of the research product. Statistical tests are carried out to see the suitability of the assessment of the research product being developed. Researchers used Kendall Concordance (W) Significance Test analysis using the SPSS version 25 program. The probability score, namely 0.037, is below the significance level of 0.05 (0.037 < 0.05). Thus, it can be interpreted that there is a match between the three experts' assessments regarding the research product. Apart from that, experts also validated the digital module to assess the feasibility of the module regarding the display presented in Table 5.

Table 5. Digital Module Test Results to Display Experts

No.	A === 0.04	Score Materials		Total	Awara	Catagorias	
	Aspect	A	В	Total	Average	Categories	
1	Module Design	87	86	173	86.5	Very Worthy	
2	Visual Communication	83	89	172	86	Very Worthy	
3	Audio	91	89	180	90	Very Worthy	
	Total	261	264				
	Average	87	88		87.5	Very Worthy	

Based on Table 5, it is known that the overall assessment from experts regarding the appearance of the module is 87.5 in the very appropriate category. This means that experts give a positive assessment of the appearance of the designed digital module. Researchers consider various suggestions given as revisions to the modules that have been assessed. Next, to determine the level of agreement between the assessments between experts, a statistical test was carried out. The analysis that researchers used was the Kendall Concordance Significance Test (W). The probability score, namely 0.038, is below the significance level of 0.05 (0.038 < 0.05). It can be concluded that there is a match between experts' assessments of the product being developed. The researcher considered the various suggestions given as a reference for revising the modules that had been assessed, so that they could be implemented by guidance and counseling teachers and counselors at schools.

Fourth, implementation. At this stage, a digital module feasibility test is carried out on guidance and counseling teachers at schools. Data from the feasibility test results are based on the research instrument used, namely in the form of a list filled in by 3 guidance and counseling teachers at the school. The results of the guidance and counseling teacher's assessment of all aspects are contained in the instruments which are collected and used as a reference in revising the products prepared, resulting in the formulation of a digital cognitive behavior modification module to reduce cyberbullying behavior. The results of practicality tests by guidance and counseling teachers at schools are presented in Table 6.

Table 6. Data on Practicality Test Results by Guidance and Guidance Teachers at Schools

No.	Aspect	Expert Score			Expert	Ideal	0/	NI - 4 -
		A	В	C	Score	Score	%	Note
1	Planning (4)	19	20	16	55	60	92	SB
2	Implementation (6)	26	29	24	79	90	88	SB
3	Evaluation (3)	13	15	12	45	45	89	SB
	Total Number	58	64	52	174	195	89	SB

Based on Table 6, it is found that the guidance and counseling teachers' assessment of the usability of digital modules is in the very good category with a percentage achievement of 89%. This result means that the guidance and counselling teacher gave a positive assessment of the digital module as a medium that can be used to help reduce student cyberbullying behavior at school from the aspects of planning, implementation and evaluation. Furthermore, the results of the assessment are carried out with statistical tests to determine the

alignment of assessments between guidance and guidance Teachers regarding the usability of the module. The analysis that the researchers carried out was the Kendall Concordance Coefficient (W) test.

Based on the calculation results, a chi square value of 6.000 and an Asymp. value were obtained. Sig. 0.050, this means that the probability value is <0.05, meaning there is no significant difference in the assessment given. Thus, it can be interpreted that there is harmony in the assessment between guidance and counseling teachers regarding the product being developed. Based on the results of statistical tests, if it is related to the overall average score of 89% which is in the Very Good category and it can be interpreted that there is a positive alignment of assessments from the three guidance and counseling teachers' assessments of the research products being developed.

Fifth, evaluation. At this stage, the product has been tested for feasibility by experts, and has also been implemented by Guidance and Counseling teachers or counselors through a usability test, then an evaluation needs to be carried out. The evaluation stage aims to assess the overall usability aspect of the product being developed. After product revision, the research then re-evaluates whether the product being developed is in accordance with the development plan and needs analysis carried out at the initial stage. Based on the results of the evaluation carried out by researchers, the revised research product has basically met various demands for development planning and needs analysis carried out on the product being developed, so that the researcher concludes that the product has been empirically tested and is ready for use.

Discussion

The results of data analysis show that the digital cognitive behavior modification module to reduce cyberbullying behavior has received excellent qualifications from experts and counselors so it is suitable for use in learning. The digital cognitive behavior modification module is suitable for use in learning, due to several factors. First, the digital cognitive behavior modification module is suitable for use because it can reduce cyberbullying behavior. Cognitive behavior modification is a technique combining cognitive therapy and a form of behavior modification, the individual who will act, is preceded by a thought process (Wahyuningsih & Daengsari, 2020; Yonita & Karneli, 2019). Behavioral change occurs through a sequence of mediation processes involving the interaction of inner speech, cognitive structures, and behavior and its results (Lotfi et al., 2011; Rimvall et al., 2023; Wahyuningsih & Daengsari, 2020; Yonita & Karneli, 2019). The success of the cognitive behavior modification approach carried out is based on the level of concern and creativity in implementing CBT (Cognitive Behavior Therapy) interventions. Counselors without the intelligence, energy, talent, personality and hands-on therapy style may not get the same results even if they follow a counseling protocol, emphasizing the importance of each counselor developing his or her own unique counseling style. The digital module developed helps counselors and guidance counselors with information to reduce cyberbullying behavior, so that various materials read and studied will be processed and used to help alleviate client problems. The digital module material includes substance about reducing cyberbullying behavior using a cognitive behavior modification approach which is structured systematically in communicative language, so that counselors and guidance counselors can understand the material. This is what causes it the digital cognitive behavior modification module can reduce cyberbullying behavior. Previous research findings also reveal that well-developed digital modules can make it easier for users to understand the material presented (Noroozi & Mulder, 2017; Setiyani, Putri et al., 2020; Setiyani et al., 2020).

Second, the digital cognitive behavior modification module is suitable for use because it is practical. In reducing cyberbullying behavior, the cognitive behavior modification approach is packaged in the form of a digital module using technology. The use of technology will provide easy access wherever and whenever users can use it (Kimianti & Prasetyo, 2019; Linda et al., 2018; Maulana et al., 2022; Winatha & Abubakar, 2018). Ease of accessing networks and information technology is an advantage for the world of education (Asrial et al., 2020; Farenta et al., 2016; Kuncahyono, 2018). Digital modules are modifications of conventional modules by combining the use of information technology, so that existing digital modules can be more interesting and interactive. The product developed, namely, "Digital Cognitive Behavior Modification Module to Reduce Cyberbullying Behavior" which has been prepared is declared to have reached an adequate level of usability. Guidance and counseling teachers or counselors can function as facilitators in implementing the activities in this module. E-modules that are arranged systematically can make learning easier (Kristalia & Yerimadesi, 2021; Lumbantobing et al., 2019). Thus, the Digital Cognitive Behavior Modification Module to Reduce Cyberbullying Behavior can be used by guidance and counseling teachers or counselors in practice. It can be carried out by guidance and counseling teachers or counselors at schools.

Third, the digital cognitive behavior modification module is worth using because it is interesting. This digital module is said to be valid in terms of content and appearance related to the module design developed in accordance with content/material and language that is easily understood by guidance and counselling teachers. Previous research findings also confirm that modules must be developed by paying attention to language aspects so that they are easy to understand (Kristalia & Yerimadesi, 2021; Lumbantobing et al., 2019; Muzijah et al., 2020;

Syafa et al., 2022). Apart from that, the appearance of the module is designed to be attractive for reading and use by Guidance and Guidance Teachers in providing group counseling services to students. Attractive digital module packaging can motivate users to learn (Florentina Turnip & Karyono, 2021; Kristalia & Yerimadesi, 2021; Marsitin et al., 2018). The resulting product will be presented in the form of a digital module that utilizes technology and internet access, which will be published on the Google Play page with the keyword "Digital Module for Implementing Cognitive Behavior Modification Group Counseling Services to Reduce Cyberbullying Behavior". This digital module will make it easier for counselors and guidance and counselling teachers to access it, equipped with several images to make it more interesting. Previous findings confirm that appropriate images will attract users' attention (Awwaliyah et al., 2021; Lumbantobing et al., 2019; Rahayu & Sukardi., 2020). The digital module is designed using straightforward language, namely regarding the accuracy of sentence structure, effectiveness of sentences, and standardity of terms. Apart from that, digital modules are made in communicative and interactive language, which is adapted to the reader's development. This is what makes digital modules interesting.

Previous research findings also confirm that E-modules will make learning easier (Febriana & Sakti, 2021; Permadi & Novrianti, 2023). Other research also states that well-developed E-modules will be the right learning resource for students (Astalini et al., 2021; Fadieny & Fauzi, 2021; Kuncahyono, 2018). Digital modules have the advantage of being able to display material using learning media anywhere and any time without taking up time. Apart from that, digital modules are more practical to carry everywhere, are durable and do not get damaged over time, and can be equipped with audio and video in one presentation bundle. The limitations of this research are the digital cognitive behavior modification module only explains several sub-topics to reduce cyberbullying behavior. The implications of this research are the digital module developed helps counselors and guidance and counselling teachers in providing services to their clients. The product developed in this research can be used in the implementation of guidance and counseling services as an effort to reduce cyberbullying behavior using a cognitive behavior modification approach.

4. CONCLUSION

The validation test results of the digital cognitive behavior modification module to reduce cyberbullying behavior seen from the content and appearance of the module developed are in the very feasible category. The results of the practicality test of the digital cognitive behavior modification module to reduce cyberbullying behavior are in the very good category. It was concluded that the digital module prepared was very suitable for implementation or use by guidance and counseling teachers and counselors. The digital cognitive behavior modification module to reduce cyberbullying behavior can be used and is useful for guidance and counseling teachers and counselors to help reduce students' cyberbullying behavior.

5. REFERENCES

- Alzaqebah, M., Jaradat, G. M., Nassan, D., Alnasser, R., Alsmadi, M. K., Almarashdeh, I., Jawarneh, S., Alwohaibi, M., Al-Mulla, N. A., Alshehab, N., & Alkhushayni, S. (2023). Cyberbullying detection framework for short and imbalanced Arabic datasets. *Journal of King Saud University Computer and Information Sciences*, 35(8). https://doi.org/10.1016/j.jksuci.2023.101652.
- Asrial, Syahrial, Maison, M., Kurniawan, D. A., & Piyana, S. O. (2020). Ethnoconstructivism E-Module to Improve Perception, Interest, And Motivation of Students in Class V Elementary School. *Jurnal Pendidikan Indonesia*, 9(1), 30–41. https://doi.org/10.23887/jpi-undiksha.v9i1.19222.
- Astalini, A., Darmaji, D., Kurniawan, D. A., & Wulandari, M. (2021). Male or Female, who is better? Students' Perceptions of Mathematics Physics E-Module Based on Gender. *Indonesian Journal on Learning and Advanced Education (IJOLAE)*, *3*(3). https://doi.org/10.23917/ijolae.v3i3.14830.
- Awwaliyah, H. S., Rahayu, R., & Muhlisin, A. (2021). Pengembangan e-modul berbasis flipbook untuk meningkatkan motivasi belajar siswa SMP Tema Cahaya. *Indonesian Journal of Natural Science Education (IJNSE)*, 4(2), 516–523. https://doi.org/10.31002/nse.v4i2.1899.
- Ayas, T. (2014). Prediction Cyber Bullying with Respect to Depression, Anxiety and Gender Variables Tuncay. *Online Jurnal of Technology Addiction & Cyberbullying*, 1, 1–17.
- Bussu, A., Pulina, M., Ashton, S.-A., & Mangiarulo, M. (2023). Exploring the impact of cyberbullying and cyberstalking on victims' behavioural changes in higher education during COVID-19: A case study. *International Journal of Law, Crime and Justice*, 75. https://doi.org/10.1016/j.ijlcj.2023.100628.
- Chairudin, M., & Dewi, R. M. (2021). Pengembangan Bahan Ajar Buku Saku Digital Berbasis Problem Based Learning pada Mata Pelajaran Ekonomi. *Edukatif: Jurnal Ilmu Pendidikan*, 3(3). https://doi.org/10.31004/edukatif.v3i3.491.
- Chen, J.-K., Lin, L., Hong, J. S., & Wang, L.-C. (2023). Temporal association of parental corporal punishment

- with violence in school and cyberbullying among adolescents. *Child Abuse & Neglect*. https://doi.org/10.1016/j.chiabu.2023.106251.
- Comparitech. (2022). Cyberbullying Facts and Statistics for 2018-2022. Comparitech.
- Dinatha, N. M., & Kua, M. Y. (2019). Pengembangan Modul Praktikum Digital Berbasis Nature of Science (Nos) Untuk Meningkatkan Higher Order Thinking Skill (Hots). *Journal of Education Technology*, *3*(4), 293. https://doi.org/10.23887/jet.v3i4.22500.
- Erisa, H., Hadiyanti, A. H. D., & Albertus, S. (2020). Model project based learning untuk meningkatkan kemampuan berpikir kreatif dan hasil belajar siswa. *Jurnal pendidikan dasar*. https://doi.org/doi.org/10.21009/JPD.012.01.
- Fadieny, N., & Fauzi, A. (2021). Usefulness of E-module Based on Experiential Learning in Physics Learning. *International Journal of Progressive Sciences and Technologies (IJPSAT)*, 25(1). https://doi.org/10.52155/ijpsat.v25.1.2783.
- Farenta, A., Sulton, S., & Setyosari, P. (2016). Pengembangan E-Module Berbasis Problem Based Learning Mata Pelajaran Kimia Untuk Siswa Kelas X Sma Negeri 8 Malang. *Jurnal Pendidikan Teori, Penelitian, dan Pengembangan, 1*(6), 1159–1168. https://doi.org/10.17977/jp.v1i6.6460.
- Favini, A., Gerbino, M., Pastorelli, C., Zuffianò, A., Lunetti, C., Remondi, C., & Cirimele, F. (2023). Bullying and Cyberbullying: Do Personality Profiles Matter in Adolescence? *Telematics and Informatics Reports*. https://doi.org/10.1016/j.teler.2023.100108.
- Febriana, F. D., & Sakti, N. (2021). Pengembangan E-Modul Berbasis Kontekstual Sebagai Pendukung Pembelajaran Jarak Jauh Kelas X IPS. *Jurnal Profit: Kajian Pendidikan Ekonomi dan Ilmu Ekonomi*, 8(1). https://doi.org/10.36706/jp.v8i1.14057.
- Florentina Turnip, R., & Karyono, H. (2021). Pengembangan E-modul Matematika Dalam Meningkatkan Keterampilan Berpikir Kritis. *Jurnal Edukasi Matematika dan Sains*), 9(2), 485–498. https://doi.org/10.25273/jems.v9i2.11057.
- He, D., Liu, Q.-Q., & Li, X.-P. (2023). Parental conflict and cyberbullying among Chinese adolescents: A moderated mediation analysis. *Children and Youth Services Review*, 152. https://doi.org/10.1016/j.childyouth.2023.107084.
- Hidajat, M., Adam, A. R., Danaparamita, M., & Suhendrik, S. (2015). Dampak Media Sosial dalam Cyber Bullying. *ComTech: Computer, Mathematics and Engineering Applications*, 6(1), 72. https://doi.org/10.21512/comtech.v6i1.2289.
- Irwandani, I., Latifah, S., Asyhari, A., Muzannur, M., & Widayanti, W. (2017a). Modul Digital Interaktif Berbasis Articulate Studio'13: Pengembangan pada Materi Gerak Melingkar Kelas X. *Jurnal Ilmiah Pendidikan Fisika Al-Biruni*, 6(2). https://doi.org/10.24042/jipfalbiruni.v6i2.1862.
- Irwandani, Latifah, Asyhari, Muzannur, & Widayanti. (2017b). Modul Digital Interaktif Berbasis Articulate Studio'13: Pengembangan Pada Materi Gerak Melingkar Kelas X. *Jurnal Ilmiah Pendidikan Fisika Al-BiRuNi*, 6(2). https://doi.org/10.24042/jipfalbiruni.v6i2.1862.
- Kimianti, & Prasetyo. (2019). Pengembangan E-Modul IPA Berbasis Problem Based Learning Untuk Meningkatkan Literasi Sains Siswa. *Kwangsan Jurnal Teknologi Pendidikan*, 7(2). https://doi.org/10.31800/jtp.kw.v7n2.p91--103.
- Kristalia, A., & Yerimadesi, Y. (2021). Efektivitas e-modul larutan elektrolit dan nonelektrolit berbasis guided discovery learning terhadap hasil belajar siswa kelas X. *Jurnal Pendidikan Kimia Undiksha*, *5*(2), 54–59. https://doi.org/10.23887/jjpk.v5i2.37910.
- Kuncahyono. (2018). Pengembangan E-Modul (Modul Digital) dalam Pembelajaran Tematik Di Sekolah Dasar. *JMIE* (*Journal of Madrasah Ibtidaiyah Education*), 2(2), 219–231. https://doi.org/10.32934/jmie.v2i2.75.
- Linda, R., Herdini, & SuLinda, R. (2018). Interactive E-Module Development through Chemistry Magazine on Kvisoft Flipbook Maker Application for Chemistry Learning in Second Semester at Second Grade Senior High School. *Journal of Science Learning*, 2(1), 21–25. https://doi.org/10.17509/jsl.v2i1.12933.
- Lotfi, S., Eizadi-fard, R., Ayazi, M., & Agheli-Nejad, M. A. (2011). The Effect of Meichenbaum's Cognitive Behaviour Modification Therapy on Reduction of Test Anxiety Symptoms in High School Girls. *Procedia Social and Behavioral Sciences*, 30. https://doi.org/10.1016/j.sbspro.2011.10.162.
- Lumbantobing, M. A., Munadi, S., & Wijanarka, B. S. (2019). Pengembangan E-Modul Interaktif untuk Discovery Learning pada Pembelajaran Mekanika Teknik dan Elemen Mesin. *Jurnal Dinamika Vokasional Teknik Mesin*, *4*(1), 1–8. https://doi.org/10.21831/dinamika.v4i1.24275.
- Marsitin, R., Sesanti, N. R., & Agustina, R. (2018). Pelatihan IT Melalui Pembuatan E-modul Matematika bagi Guru Matematika SMK Kabupaten Malang. *Abdimas: Jurnal Pengabdian Masyarakat Universitas Merdeka Malang*, 3. https://doi.org/10.26905/abdimas.v3i0.2647.
- Marwanti, E., Wardani, K., & Megawati, I. (2022). Pengembangan Modul Digital Berbasis Team Learning Pada Virtual Classroom Konsep Dasar Ips Sd. *TRIHAYU: Jurnal Pendidikan Ke-SD-an*, 8(2), 1383–1391.

- https://doi.org/10.30738/trihayu.v8i2.11829.
- Maulana, A., Puspita, A. J., Pangastuti, K. K., Daryati, D., & Arthur, R. (2022). The Concept of Literacy Vocational-Based E-Module of Technical Mechanical Subject. *Journal of Physics: Conference Series*, 2377(1). https://doi.org/10.1088/1742-6596/2377/1/012068.
- Mishna, F., Khoury-Kassabri, M., Gadalla, T., & Daciuk, J. (2012). Risk factors for involvement in cyber bullying: Victims, bullies and bully-victims. *Children and Youth Services Review*, *34*(1), 63–70. https://doi.org/10.1016/j.childyouth.2011.08.032.
- Muzdalifah, F., & Deasyanti. (2020). Negative Emotional State dan Cyberbullying Pada Mahasiswa. *JPPP Jurnal Penelitian dan Pengukuran Psikologi*, 9(1), 41–49. https://doi.org/10.21009/jppp.091.07.
- Muzijah, R., Wati, M., & Mahtari, S. (2020). Pengembangan E-modul Menggunakan Aplikasi Exe-Learning untuk Melatih Literasi Sains. *Jurnal Ilmiah Pendidikan Fisika*, 4(2), 89. https://doi.org/10.20527/jipf.v4i2.2056.
- Noroozi, O., & Mulder, M. (2017). Design and Evaluation of a Digital Module with Guided Peer Feedback for Student Learning Biotechnology and Molecular LifeSciences, Attitudinal Change, and Satisfaction. *Biochemistry and Molecular Biology Education*, 45(1), 31–39. https://doi.org/10.1002/bmb.20981.
- Oguz, A., Palvia, P., & Mehta, N. (2023). Safely navigating global virtual teams amid the threat of cyberbullying. *Organizational Dynamics*, *1*. https://doi.org/10.1016/j.orgdyn.2023.101009.
- Paek, S. Y., Choi, Y.-J., & Lee, J. (2023). Exposure to harmful content and cyberbullying perpetration among South Korean adolescents during COVID-19: The moderating role of parental support. *Children and Youth Services Review*, 155. https://doi.org/10.1016/j.childyouth.2023.107280.
- Pasquale, C. De, Martinelli, V., Sciacca, F., Mazzone, M., & Chiappedi, M. (2021). The role of mood states in cyberbullying and cybervictimization behaviors in adolescents. *Psychiatry Research*, 300. https://doi.org/0.1016/j.psychres.2021.113908.
- Permadi, A., & Novrianti, N. (2023). Pengembangan E-Modul Mata Kuliah Fotografi Departemen Kurikulum dan Teknologi Pendidikan FIP UNP. *Jurnal Family Education*, *3*(1). https://doi.org/10.24036/jfe.v3i1.79.
- Quintana-Orts, C., Rey, L., & Worthington, E. L. (2021). The Relationship Between Forgiveness, Bullying, and Cyberbullying in Adolescence: A Systematic Review. *Trauma, Violence, & Abuse*, 22(3), 588–604. https://doi.org/10.1177/1524838019869098.
- Rahayu, I., & Sukardi. (2020). The Development Of E-Modules Project Based Learning for Students of Computer and Basic Networks at Vocational School. *Journal of Education Technology*, 4(4). https://doi.org/10.23887/jet.v4i4.29230.
- Rahmawati, Budiyono, & Wardi. (2017). Pengembangan Modul Pembelajaran Digital Berbasis Visual Basic for Application (VBA) PowerPoint. *Indonesian Journal of Curriculum and Educational Technology Studies*, 5(1). https://doi.org/10.15294/ijcets.v5i1.14248.
- Rimvall, M. K., Vassard, D., Nielsen, S. M., Wolf, R. T., Plessen, K. J., & Bilenberg, N. (2023). Effect modification of an effective transdiagnostic cognitive behavioral psychotherapy in youths with common mental health problems: Secondary analyses of the randomized mind-my-mind trial. *European Neuropsychopharmacology*, 74. https://doi.org/10.1016/j.euroneuro.2023.05.004.
- Sa'diyah, K. (2021). Pengembagan E-Modul Berbasis Digital Flipbook Untuk Mempermudah Pembelajaran Jarak Jauh Di SMA. *Edukatif: Jurnal Ilmu Pendidikan*, *3*(4), 1298–1308. https://doi.org/10.31004/edukatif.v3i4.561.
- Şahin, S. S., & Ayaz-Alkaya, S. (2023). Prevalence and predisposing factors of peer bullying and cyberbullying among adolescents: A cross-sectional study. *Children and Youth Services Review*, 1. https://doi.org/10.1016/j.childyouth.2023.107216.
- Saputra, D., Sayuti, K. H., Nurhabibah, N., Manisa, V. A., Nurhalika, N., A'Yuni, Q., Syahdan, M., & Karisma, S. P. (2022). Pengaruh Cyberbullying Terhadap Kesehatan Mental Remaja. *Cenderawasih Journal of Counseling and Education*, 1(2), 86–94. https://doi.org/10.31957/cjce.v1i2.2642.
- Sari, S. R. N., Nauli, F. A., & Utomo, W. (2020). Gambaran Perilaku Cyberbullying Pada Remaja Di Sman 9 Pekanbaru. *Jurnal Keperawatan Sriwijaya*, 7(2), 16–24. https://doi.org/10.32539/jks.v7i2.15240.
- Satalina, D. (2014). Kecendrungan Perilaku Cyberbullying Ditinjau Dari Tipe Kepribadian Ekstrovert dan Introvert. *Implementation Science*, 02(1), 1–15. https://doi.org/10.22219/jipt.v2i2.2003.
- Setiyani, Putri, D. P., Ferdianto, F., & Fauji, S. H. (2020). Designing a Digital Teaching Module Based on Mathematical Communication in Relation and Function. *Journal on Mathematics Education*, 11(2), 226–236. https://doi.org/10.22342/jme.11.2.7320.223-236.
- Setiyani, Putri, D. P., Ferdianto, F., & Fauji, S. H. (2020). Designing a Digital Teaching Module Based on Mathematical Communication in Relation and Function. *Journal on Mathematics Education*, 11(2), 223–236. https://doi.org/10.22342/jme.11.2.7320.223-236.
- Smith, P. K. (2016). Cyberbullying Across the Globe: Gender, Familiy, and Mental Health. In R. S. Y. & E. L. Navarro (Red), *Cyberbullying Across the Globe*. Springer International Publishing Switzerland.

- https://doi.org/10.1007/978-3-319-25552-1.
- Sutama, I. W., Astuti, W., & Anisa, N. (2021). E-Modul Strategi Pembelajaran Anak Usia Dini Sebagai Sumber Belajar Digital. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 9(3), 449. https://doi.org/10.23887/paud.v9i3.41385.
- Syafa, I. P., Putri, M., Setiawati, N. Z. E., & Marini, A. (2022). Pengaruh Media Pembelajaran Literasi Berbasis E-Modul Terhadap Pembentukan Karakter Siswa Sekolah Dasar (Studi Literatur). *Jurnal Pendidikan Dasar dan Sosial Humaniora*, 2(2), 313–328. https://doi.org/10.53625/jpdsh.v2i2.4228.
- Triyono, & Rimadani. (2019). Dampak Cyberbullying di Media Sosial Pada Remaja dan Implikasinya Terhadap Pelayanan Bimbingan dan Konseling (Studi Kasus pada Klien X di Padang Utara Kota Padang). *Jurnal Neo Konseling*, *I*(1), 1–5. https://doi.org/10.24036/0096kons2019.
- Wahyuningsih, L., & Daengsari, D. P. (2020). Efektivitas modifikasi kognitif perilaku untuk menurunkan kecemasan sosial pada remaja dengan Borderline Intellectual Functioning (BIF). *Persona:Jurnal Psikologi Indonesia*, 9(1), 1–16. https://doi.org/10.30996/persona.v9i1.2782.
- Winatha, K. R., & Abubakar, M. M. (2018). The Usage Effectivity of Project-Based Interactive E-Module in Improving Students' Achievement. *Jurnal Pendidikan Teknologi dan Kejuruan*, 24(2), 198–202. https://doi.org/10.21831/jptk.v24i2.20001.
- Winatha, K. R., Suharsono, N., & Agustin, K. (2018). Pengembangan E-Modul Interaktif Berbasis Proyek Matematika. *Jurnal Pendidikan Teknologi dan Kejuruan*, 4(2), 188–199.
- Yonita, E. N., & Karneli, Y. (2019). The effectiveness of the cognitive behavior modification approach with group settings to reduce bullying behavior. *Jurnal Neo Konseling*, *I*(3), 1–7. https://doi.org/10.24036/00136kons2019.