

The Provision of E-Modules on Adolescent Mental Health Understanding

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ABSTRACT

Mental health frequently receives inadequate attention and is often disregarded by individuals who tend to prioritize physical health over mental well-being. The occurrence of mental disorders in adolescents (aged 15-24 years) is associated with a depression rate of 6.2%. Severe depression tends to lead to self-harm and suicide. Approximately 80-90% of suicide cases can be attributed to depression and anxiety. A comprehensive understanding of adolescent mental health is essential for determining appropriate actions to make adolescents aware that mental health is equally essential. Preventing mental health issues in adolescents is crucial for avoiding further mental disorders or psychological problems. Prevention can be effectively achieved through health education for adolescents, enabling them to comprehend the significance of their mental health. E-modules provide an ideal medium for reaching adolescents, as they adapt conventional modules by incorporating information technology, making them more engaging and interactive. This enhances their appeal as an engaging and interactive learning resource. Digital modules (e-modules) enriched with audiovisual technology are expected to apprehend students' interests and create a conducive learning environment. The research objective was to investigate the effect of E-modules on adolescents' understanding of mental health. The study adopted a quantitative approach, using a quasi-experimental research design with a pre-posttest without control, conducted through intervention with a single group. The study was conducted at SMP 8 Surakarta and data were collected before and after the intervention. Data analysis employed the Wilcoxon test was used to obtain a significant result with a p-value of 0.01 ($p < 0.05$). Based on these findings, E-modules affected adolescents' mental health acquaintances.

Keywords: E-modules, mental health, understanding, adolescents

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1. INTRODUCTION

The incidence of mental health issues in Indonesia exhibits a broad spectrum of variation, affecting individuals across various age groups, from adolescents, adults, and children, to the elderly. Mental disorders are emotional, psychological, and social conditions that arise from dissatisfied actions and poor protection mechanisms in the communication between two individuals. It is understood to be a state of inner well-being and emotional balance [9]. Children and adolescents are the future generation of a nation. The implications of the modern era influence children's and adolescents' development. Adolescence is the final stage of childhood. As successors of a generation, adolescents encounter challenges in the current modern era. Previous research has indicated that adolescents require self-control in their thinking, behavior, and attitudes. Adolescents' mental health is a critical aspect of determining national quality. Adolescents who grow up in a supportive environment are invaluable human resources with the potential to evolve into the nation's most valuable assets.

Mental health is overlooked and receives limited acknowledgment from individuals, as many tend to focus more on physical health than mental well-being. Mental health encompasses a state of well-being that includes happiness, joy, satisfaction, achievement, and expectancy. According to UNICEF reports, the latest data revealed that 1 in 7 adolescents aged 10-19 years live with mental health issues. Globally, the prevalence of mental health issues is 2%. While most adolescents enjoy good physical and mental health, emotional and social changes, including those arising

from poverty, abuse, or violence, can render them vulnerable to mental health problems. Negative experiences and risk factors can influence adolescents' potential for development and impact their physical and mental health. Adolescents living in such circumstances are susceptible to illness [13] [15].

Adolescents experience early psychosis. It is characterized by non-psychotic symptoms, such as reduced concentration and motivation, depression, anxiety, sleep disturbances, and social issues. These issues can be attributed to various factors including genetics, cognitive factors, poor social functioning, past trauma, and stress. Trauma can also make individuals vulnerable to early psychosis. It is necessary for adolescents experiencing early psychosis to receive support from their families, peers, and healthcare professionals. Providing suitable initial assistance can reduce the early signs and symptoms of psychosis. Adolescents desiring support proceed through a process that includes recognizing the problem, making decisions about seeking help, and determining the type of assistance they require [1] [16]. In the adolescent age group (15-24 years), the prevalence of depression was approximately 6.2%. Severe depression can lead to self-harm and suicide. About 80-90% of suicide cases stem from depression and anxiety. In Indonesia, there were approximately 10,000 suicide cases, equivalent to one suicide per hour. According to suicide experts, 4.2% of students in Indonesia contemplated suicide. Among college students, 6.9% had suicidal thoughts, while 3% had attempted suicide. Adolescent depression is triggered by various factors including academic stress, bullying, family conflicts, and financial difficulties.

Understanding mental health in adolescents is essential for determining appropriate actions to ensure that adolescents are acquainted with the importance of mental health. Preventing adolescents' mental health problems is essential for avoiding further mental disorders or issues. Effective prevention can be achieved through health education for adolescents, which enables them to comprehend their mental health. An effective medium is necessary for adolescents to receive and understand information effectively. E-modules are an ideal medium for adolescents because they adapt to conventional modules by incorporating information technology, making them more engaging and interactive. It become an attractive and interactive learning resource. Digital modules (e-modules) enriched with audio-visual technology are expected to capture students' interests, creating a conducive teaching and learning environment [11] [17].

2. METHOD

This study employed experimental research, utilizing a quasi-experimental design with a pre-post test without control. The sampling used a purposive sampling technique. The sample comprised 51 students. The study was conducted at SMP Muhammadiyah 2 Surakarta, with seventh and eighth-grade students as respondents who were present throughout the data collection process, from the beginning to the destiny, and willingly participated as respondents. The research instrument utilized a questionnaire on adolescents' understanding of mental health. In pre-data collection, the questionnaire underwent validity and reliability testing. *Informed consent* was distributed to the respondents before data collection. There was data collection, pre- and post-providing E-modules for the students as respondents. Subsequently, the understanding of mental health was measured using the questionnaire. After collecting data, it underwent analysis using SPSS.

3. RESULTS AND DISCUSSION

1. Results

Characteristics of Respondents

a. Gender

Table 1: Frequency Distribution of Respondent Gender

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	19	37.3	37.3	37.3
	Female	32	62.7	62.7	100.0
Total		51	100.0	100.0	

Source: Primary Data from Respondents 2023

Table 1 presented male respondents of 37.3%, while female respondents were 62.7%.

b. Age

Table 2: Frequency Distribution of Respondents' Ages

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12	2	3.9	3.9	3.9
	13	42	82.4	82.4	86.3
	14	6	11.8	11.8	98.0
	15	1	2.0	2.0	100.0
	Total	51	100.0	100.0	

Source: Primary Data from Respondents 2023

In Table 2, the largest group of respondents was 13 years old, consisting of 42 respondents (82.4%).

c. Students' Level of Understanding Before Receiving the E-Module

Table 3: Distribution of Students' Level of Understanding before receiving the E-Module

		Pretest			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Intermediate	17	33.3	33.3	33.3
	High	34	66.7	66.7	100.0
	Total	51	100.0	100.0	

Table
3

indicated the distribution of students' level of understanding before receiving e-module. There were 17 students (33.3%) with the Intermediate category, while 34 students (66.7%) were in High category.

d. The Level of Understanding After Receiving the E-Module

Table 4: Distribution of Students' Level of Understanding After Receiving the E-Module

		Post-test			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Intermediate	6	11.8	11.8	11.8
	High	45	88.2	88.2	100.0
	Total	51	100.0	100.0	

Based on Table 4, it was evident that the students' understanding levels after receiving the e-module presented six (6) students (11.8%) with the Intermediate category and 45 students (88.2%) with the High category.

e. The Effect of E-Module on Mental Health Understanding

Table 5: The Effect of E-Module on Mental Health Understanding

Test Statistics^a

	Post-test – Pre-test
Z	-2.524 ^b
Asymp. Sig. (2-tailed)	.012

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Based on Table 5.5. It revealed that the data analysis using the Wilcoxon test demonstrates a significance value ($p=0.01$) with $p<0.05$. These results inferred an effect of the e-module on the awareness of mental health in adolescents.

b. Discussion

Knowledge or cognition is a critical domain for developing an individual's actions, as behavior informed by knowledge grows more favorable than those without understanding. Mental health awareness is crucial for enhancing an individual's well-being by improving their community's capacity to engage in self-directed health efforts. Health education promotes awareness, capabilities, and willingness to lead a healthy lifestyle, particularly among adolescents. Providing health education to adolescents facilitates the conveyance of early information. Health education proposes training and enhances adolescents' mental health knowledge [8] [19].

Mental disorders in adolescents can adversely affect their growth and development. These disorders can result in adolescents' inability to establish healthy relationships with their peers, parents, teachers, relatives, and others. This also causes adolescents to be incompetent in managing internal conflicts, leading to a reduction in self-esteem. Mental health awareness is essential to enhance the ability to behave consistently with expectations [12] [18] [24].

The research findings deduced that the e-module had an effect on the understanding of mental health among adolescents. It aligned with the results of the study by [8], which indicated the effect of mental health education on the ability of adolescents to conduct early detection in SMA N 1 Tambangan. The provision of e-modules represents a form of health education delivered through updated media using smartphones, thus keeping pace with technological advancements and offering convenience. It was accessed from any location and enhanced the students' interest in reading. Understanding mental health is crucial, particularly considering that various mental health issues have emerged among students following the COVID-19 pandemic. One solution to address these issues is implementing mental health education in schools by providing *e-modules*.

E-modules are digitized modules presented in a more interactive format, serving as a self-learning medium. They included self-learning instructions and offered content in PDFs, videos, and animations to promote active learning. The e-module used in this research was based on the *Android operating system*, catering to the typical smartphone OS used by students [6] [20] [25].

E-modules can assist students in independent learning by employing electronic media that contain specific subject matter [4] [21]. During the learning process, e-modules supported students in comprehending the material more rapidly. They presented easily comprehensible text and realistic visuals, making it easier for the students to remember the content. Implementing e-modules could be beneficial for students to improve their learning outcomes [14] [22].

Health education is an activity that delivers messages to the public to improve their knowledge using suitable methods aligned with the target audience. The goal of this activity was to promote a healthy lifestyle by influencing the behavior of adolescents, both individually and in groups, through message delivery [8]. The process of modifying one's attitude is a continuation of knowledge transformation. The attitude exhibited by individuals tends to be more positive when they possess reasonable knowledge. However, people with limited knowledge may have negative attitudes. An individual can act or modify their attitude towards a stimulus if they understand the meaning behind that stimulus [4] [23]

4. CONCLUSION

The research findings revealed an effect of E-Module on the understanding of mental health in adolescents. E-modules could enhance students' knowledge more rapidly because of their engaging presentations and manageable accessibility through smartphones from any location.

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