

THE INFLUENCE OF E-MODULES AND DEMONSTRATIONS ON SCHOOL CHILDREN'S INTERNET ADDICTION

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ABSTRACT

The digital era has brought significant changes in the way children interact with technology, especially the internet. This community service (PkM) aims to explore the influence of e-modules and demonstrations as intervention strategies to combat internet addiction in school children. The activity was carried out at SDIT Plenary Cimahi City. This study was carried out by providing education to 57 students. The results of PkM activities showed that 47.4% of children had signs of internet addiction before being given intervention. Post-intervention results showed a significant reduction in the addiction rate to 36.8%. Health promotion sessions provided insight into the definition, contributing factors, symptoms, and preventive measures associated with internet addiction, highlighting the importance of parental involvement and social support. These findings underscore the effectiveness of structured educational interventions in reducing internet addiction among children, emphasizing the important role of community engagement in addressing this increasing problem in the digital era. Suggestions for further community service, it is hoped that the interventions provided can have an impact at the behavioral level.

Keywords: Internet Addiction, School Children, E-Module, Demonstration

1. INTRODUCTION

The digital era has brought significant changes in the way children interact with technology, especially the internet. Although the internet offers various benefits for learning and self-development, excessive use can lead to the worrying phenomenon of internet addiction among school children. Internet addiction is defined as compulsive internet use that interferes with daily life, academic achievement, and psychosocial well-being (Young & De Abreu, 2017)

Based on the latest data from the Indonesian Internet Service Providers Association (APJII) in 2023, internet user penetration in Indonesia reached 77.02% of the total population, with 18.4% of them being school-age children. A study conducted by Saragih (2020) revealed that 35% of school students in Indonesia showed symptoms of internet addiction, with an average internet usage time of 7-8 hours per day.

This phenomenon requires effective and innovative interventions to prevent and overcome internet addiction in school children. E-modules as

interactive digital learning media and demonstration methods have shown promising potential in various educational contexts (Suharyat et al., 2023). E-modules can present learning materials on healthy internet use in a structured and interesting way, while demonstration methods allow students to directly practice time management strategies and responsible internet use.

Several previous studies have examined the effectiveness of using e-modules in learning. Research by Usmeldi et al (2023) shows that the use of e-modules can increase student understanding by 78% in various subjects. Meanwhile, Puspitasari & Noor (2020) found that demonstration methods combined with digital media can increase student engagement in learning by up to 65%.

Based on the urgency of the problem, this community service program is designed to implement a combination of e-modules and demonstrations as an intervention strategy in dealing with internet addiction in school children. This program is expected to make a significant contribution to building students' awareness and skills in using the Internet healthy and productive.

2. PROBLEMS AND FORMULATION OF QUESTIONS

The actual problems that occur in the field according to the results of observations are the high level of internet addiction that occurs in students. This is related to the level of knowledge possessed by students and the educational methods provided by the parties directly related to students.

Question formulation: "How does the use of E-Modules and Demonstrations affect the level of Internet Addiction in school children?"

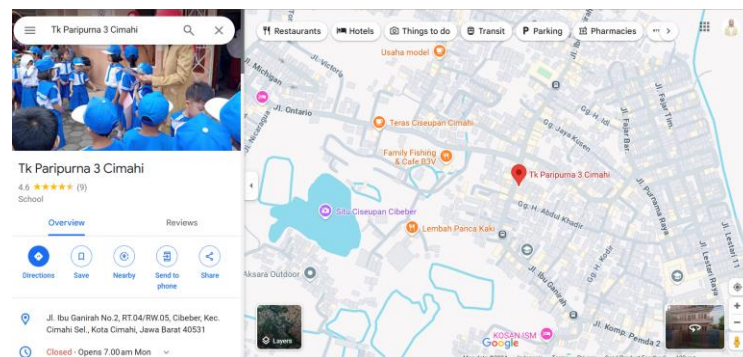


Figure 1. Map of PKM Activity Locations

3. LITERATURE REVIEW

c. Theory and Concept of Internet Addiction

1) Definition

Saragih (2020) said that Internet addiction is a disorder in the form of dependent behavior on surfing activities in cyberspace, such as activities on social media, online gambling, online gaming, pornography or pornoaction, and so on.

2) Influencing factors

Factors that influence Internet addiction according to Khatimah & Irawan (2023), namely:

a) Social factors

Excessive internet use can be caused by individuals experiencing social problems such as individuals having difficulty in interpersonal communication. Individuals will prefer to use the internet to communicate because it is considered safer and easier.

b) Psychological factors

Internet addiction is an attempt to escape from unpleasant things. Because when using the internet, individuals will feel entertained and happy.

c) Biological factors

Montag & Reuter (2015) conducted a study using Functional Magnetic Resonance Image (fMRI) stating that there are differences in brain function between individuals who are addicted to the internet and those who are not. Individuals who are addicted to the internet show that in processing information much slower, it is difficult to control themselves.

According to Pradona & Qarni (2023), Several factors cause internet addiction, namely:

1) Free internet access

A student or college student will get a free username and password from their school or campus to access the internet for free.

2) Lots of free time

Most students are in class for 12-16 hours per week. Students usually spend their free time studying, hanging out with friends, shopping, and accessing the Internet.

3) New experiences without parental control

When accessing the internet, most parents cannot control their children. Individuals can freely interact with anyone on the internet.

4) There is no monitoring and cannot monitor what individuals do while online.

5) Internet addiction indicators

Young & De Abreu (2017) there are several indicators of individuals addicted to the internet, including:

a) Attention is focused on the internet

b) Internet usage continues to increase

c) Unable to control internet usage

d) Online longer than expected

e) Feeling uncomfortable when offline

6) Impact of Internet addiction

Masruroh et al (2023) said that internet addiction has quite serious impacts on students, such as:

a) Academic achievement decreases.

b) Ignoring or being indifferent to going to school.

c) Students skip to going access the internet just to play online or sometimes open pornographic content.

d) Individuals who are addicted to the internet will also use their pocket money, which should be used for school needs but is instead used to access the internet.

e) Individuals assume that their parents do not know and do not understand the activities they do while on the internet.

b. Theory and Concept of E-Modules

1) Definition

According to Khusna et al (2024), E-modules are teaching materials that are arranged based on teaching material components that are packaged in one unit and arranged systematically so that they can be studied independently by students. E-modules are an application of a digital module learning device and can be operated via mobile devices and computers. Some of the advantages of E-modules are that they are more practical, attractive, and efficient to carry anywhere, durable, and equipped with images, audio, and video in their presentation (Usmeldi et al., 2023)

2) Characteristics

A good e-module has several specific characteristics. According to the Ministry of National Education (2008), the characteristics of e-modules include:

- a) Self-instruction, is a teaching material that can be used and studied by students
- b) Self-Contained is a module that is arranged based on material that is sequential, complete, and packaged in one unit
- c) Stand - alone is a teaching material that does not depend on other media or teaching materials
- d) Adaptive is a characteristic of a module that follows the development of science and technology.

c. Demonstration Theory and Concept

1) Definition

The demonstration method is a way of presenting lessons by showing students a certain process or object being studied, either real or imitation, which is often accompanied by an oral explanation.

2) Advantages of the demonstration method

- a) Students' attention can be more focused on the lesson being given.
- b) Mistakes that occur when the lesson is lectured can be overcome through observation and concrete examples, by presenting real objects.
- c) The concepts received by students are deeper so that they last longer in their souls.
- d) Provide strong motivation for students to be more active in learning because students are involved in the lesson.
- e) Students can participate actively

3) Benefits of the demonstration method

- a) Students' attention can be more focused.
- b) The student learning process is more directed at the material being studied.
- c) Experiences and impressions as a result of learning are more embedded in students

d. Theory and Concept of School-Age Children

School-age children are those aged 7-12 years. Elementary school is also called the final stage because during this period children are expected to obtain basic information that is very important to prepare and adapt to their future lives. During this period, children are expected to acquire

certain skills such as self-help skills, social skills, school skills, and play skills (Puspitasari & Noor, 2020)

4. METHOD

The method or approach used in this activity is education and health promotion, the target will be to obtain material about internet addiction accompanied by measuring the level of internet addiction experienced by participants using the internet addiction diagnostic questionnaire (KDAI). The inclusion criteria for participants who take part in this activity are: 1) Children aged 8 - 12 years, 2) Children who are registered at SDIT plenary school, 3) Can Read, 4) Can Write. The number of participants who took part in this health education and promotion was 57 children. The activity begins with a pre-test and ends with a post-test.

The steps of PKM and the steps for implementing this activity are:

a. Preparation stage

At this stage, we first surveyed the activity location and asked about the needs there through the school after agreeing to determine the date of implementation. After knowing the needs there, we prepared the material with PPT, E-Module, and infocus media and prepared other equipment.

b. Implementation stage

The implementation of this Health Education and Promotion was carried out on Friday, September 13, 2024, from 07.30 to 11.30 WIB, at SDIT Paripurna Kota Cimahi Jl. Mrs. Ganirah No.2 RT 04 RW 05, Cibeber, South Cimahi which was attended by 57 students. It began with an opening from the school representative, the Head of the Community Service Team, then a pre-test was conducted to measure the level of internet addiction before Health Education was given, continued with the provision of material on internet addiction by showing E-Modules and Demonstrations and then a discussion and Q&A were held.

c. Evaluation stage

After the material delivery session was completed, the students worked on the post-test questions again and the results, counseling was carried out on 57 participants including 32 male students and 25 female students. This counseling was carried out on students in grades 3-6 of elementary school. Before the counseling, a pre-test was carried out first, the results were that 27 participants (47.4%) experienced internet addiction. After the counseling, a post-test was carried out again, the results were that 21 participants (36.8%) experienced internet addiction. This shows that there are significant changes that occur after the counseling is carried out on students.

5. RESULTS AND DISCUSSION

a. Results

Community service activities (PKM) through Demonstration and education through E-Modules aim to prevent and reduce the incidence of internet addiction in school children. In the process, this counseling was carried out directly at SDIT Paripurna Cimahi City which was attended by students in grades 3, 4, 5, and 6, teacher representatives, and the Community Service team for nursing FPOK UPI. Based on the results of

data analysis before the counseling, out of 57 participants, 27 participants (47.4%) experienced internet addiction. And after the counseling, out of 57 participants, 21 participants (36.8%) experienced internet addiction. This was a significant decrease or change after the counseling was carried out on the participants who attended.

In the counseling process, participants were provided with an explanation of the definition, influencing factors, signs and symptoms, impacts, and how to prevent themselves from becoming addicted to using the internet.



Figure 1. Internet Addiction Measurement Process (pre-test & post-test)

Starting with an opening from the school representative, the Head of the Community Service Team, then a pre-test was carried out to measure the level of internet addiction before providing Health Education.



Figure 2. E-Module appearance counseling process and demonstration

This was followed by providing material regarding internet addiction by showing E-Modules and Demonstrations and then holding discussions and questions and answers.



Figure 3. Discussion Stage with Participants

After the material giving session was completed, the students worked on the post-test questions again and as a result, counseling was conducted on 57 participants including 32 male students and 25 female students.

b. Discussion

Community service activities carried out through demonstrations and education using E-Modules at SDIT Paripurna, Cimahi City aim to prevent and reduce the incidence of internet addiction in school children. Internet addiction is an increasingly widespread problem among children, especially in the current digital era, where access to information technology is very easy. Based on the results of data analysis, before counseling, 47.4% of participants experienced internet addiction, while after counseling, this figure decreased to 36.8%. This decrease indicates a significant change that can be attributed to the effectiveness of the counseling program implemented.

Tabel 1

| | | Frequency | Percentage |
|-----------|-----------------------|-----------|------------|
| Pre-Test | No Internet Addiction | 30 | 47,4 % |
| | Internet Addiction | 27 | 52,6 % |
| Total | | 57 | 100% |
| Post-Test | No Internet Addiction | 36 | 36,8% |
| | Internet Addiction | 21 | 63,2% |
| Total | | 57 | 100% |

The Importance of Education and Counseling

Education is one of the important approaches to preventing internet addiction. According to research by Kuss & Griffiths (2012), well-designed education programs can increase children's awareness of the risks of excessive internet use and help them develop skills to manage their screen time more effectively. In addition, education also provides

knowledge about the signs of addiction and its negative impacts, which are very important for encouraging behavioral change.

Factors Causing Internet Addiction

In the counseling, participants were given an understanding of the factors that influence internet addiction. Research by Young (2004) showed that environmental factors, such as social support and parenting patterns, play a major role in determining the level of internet addiction in children. By providing information about these factors, it is hoped that participants can realize the importance of the role of parents and the surrounding environment in preventing addiction.

Impact of Internet Addiction on Children

The negative impacts of internet addiction are very diverse, ranging from mental health disorders to academic problems. According to research by Williams et al (2007) excessive internet use can cause problems such as anxiety, depression, and decreased academic achievement. Therefore, this counseling does not only focus on prevention but also on understanding the long-term consequences of addictive behavior.

Internet Addiction Prevention Strategy

In the counseling process, participants are also taught ways to prevent themselves from becoming addicted to using the Internet. This is in line with the findings by Lissak (2018) which states that prevention strategies involving the development of time management skills and setting limits on the use of digital devices are very effective in reducing the risk of addiction. By providing practical tools and techniques to participants, they are expected to be able to apply them in their daily lives.

6. CONCLUSION

Overall, PKM activities through demonstrations and education using E-Modules showed positive results in reducing the incidence of internet addiction in children at SDIT Paripurna, Cimahi City. The decrease from 47% to 36.8% shows that educational interventions can have a significant impact in increasing children's awareness and understanding of healthy internet use. Through a holistic approach that includes education about causal factors, negative impacts, and prevention strategies, this program has the potential to be applied more widely in other communities. Suggestions for further community service, it is hoped that the interventions provided can have an impact at the behavioral level.

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