E-Counseling Development Prototype as an Effort to Handle Student Mental Health and Student Academic Functions

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	ABSTRACT
	Mental health is a critical issue that affects individuals, families, and students at all levels of
	society. In the post-pandemic era, mental health challenges remain significant, particularly
ARTICLE INFO: Received	among students experiencing learning-related stress. However, traditional guidance and
August 26, 2024	counseling services continue to face obstacles due to the lingering impact of health protocols,
Revised	limiting face-to-face interactions. Cybercounseling through platforms like Zoom, Google Meet,
September 09, 2024	WhatsApp, Facebook, and Skype has been widely utilized as an alternative. This research aims
Accepted	to develop a dedicated mobile application for guidance and counseling services, specifically
December 16, 2024	focusing on E-Counseling. The research employs the ADDIE method (Analysis, Design,
KEYWORDS: Cybercounseling, E-Counseling,	Development, Implementation, and Evaluation), prioritizing design based on user needs.
Mental Health	Currently, this study has reached the design phase, providing a conceptual framework for an
	effective and user-friendly counseling platform. The developed application is expected to offer
	accessible, flexible, and safe counseling services to support mental health, particularly in
	adapting to the new normal in the post-pandemic period.

INTRODUCTION

In the post-pandemic era, mental health remains a critical issue, particularly among students. Although the acute phase of COVID-19 has passed, its lingering impacts continue to affect mental well-being. Students are still adapting to new norms in education, such as hybrid learning models, which can create stress and anxiety (Hendar, 2019). Previous studies have highlighted that mental health issues, including depression and anxiety, significantly increased during the pandemic (Dhawan, 2020). However, in the post-pandemic period, challenges have shifted. Many students now struggle with re-socialization, academic pressure, and the psychological impacts of prolonged isolation (Orgiles et al., 2020).

Research indicates that students may experience anxiety related to returning to physical classrooms, maintaining social relationships, and catching up with academic demands (Islam et al., 2020). Additionally, studies in Indonesia show that the post-pandemic transition has not been entirely smooth, with a notable percentage of students experiencing anxiety and stress as they adjust to new educational and social environments. Therefore, continued attention to students' mental health is crucial to ensure they receive adequate support in this recovery phase (Zhai & Du, 2020).

Maintaining students' mental health remains crucial in the post-pandemic era, especially in higher education institutions. While the immediate crisis of COVID-19 has passed, the aftereffects still influence stress and anxiety levels among students (Werner & Woessmann, 2023). Educational institutions play a significant role in promoting mental well-being through effective guidance and counseling services. To adapt to the evolving needs of students, educational counselors must implement innovative strategies to maintain strong connections with students, ensuring their mental and emotional needs are addressed (Fitri et al., 2023).

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One effective strategy involves utilizing Information and Communication Technology (ICT) to enhance counseling services. Previous research highlights the potential of ICT in the counseling process, including electronic discussion forums, accessing student information, offering individual and group counseling sessions, and securely storing data for research purposes (Majdi, 2024). By leveraging technological advances, counselors can continue to provide accessible and flexible mental health support, especially as students transition back to in-person learning and navigate the new normal of academic and social environments (Noviza et al., 2022).

Maintaining student mental health is a critical priority, especially in the post-pandemic era. As higher education institutions continue to provide guidance and counseling services, there is an increasing need for innovative solutions to address mental health challenges (Prasetiawan, 2016). One effective approach is developing a mobile application specifically designed to support student mental well-being. The ADDIE method (Analysis, Design, Development, Implementation, and Evaluation) is a suitable development framework for this purpose, as it emphasizes creating solutions based on thorough user needs analysis (Moeleong, 2014). This ensures the application meets real-world demands and provides effective mental health support for students (Ribeiro et al., 2020).

The post-pandemic era presents new challenges in various sectors, including education, mental health, economy, and social dynamics. In this context, media plays a crucial role as a tool for communication, education, and community empowerment (Sopah et al., 2023). Whether in digital, print, or audiovisual form, media serves as an information bridge that helps society adapt to post-pandemic conditions. It provides reliable information about health protocols, government policies, and the latest developments in recovery efforts. Accurate information from the media can prevent the spread of misinformation and enable the public to make informed and wise decisions (Crisna, 2024).

Moreover, media also supports mental health by offering educational and inspiring content to address stress, anxiety, and other psychological impacts of the pandemic (Majdi, 2024). In education, media facilitates remote and hybrid learning, ensuring that educational quality is maintained despite the challenges. Additionally, media revitalizes the economy by promoting small and medium enterprises (SMEs) through digital platforms, expanding market opportunities, and boosting local economic recovery. Overall, the effective and strategic use of media is essential for anticipating and overcoming the challenges of the post-pandemic era, leading to a more resilient and adaptive society.

Objectives

This study aims to explore the critical role of media in anticipating and addressing the challenges of the post-pandemic era, focusing on its impact in promoting accurate information, supporting mental health, facilitating education, and enhancing economic recovery. By analyzing how various media forms contribute to public awareness, resilience, and adaptation, this study aims to provide insights into effective media strategies that can empower communities to navigate the complexities of the post-pandemic world.

METHODS

Research Design

This research adopts a developmental research design using the ADDIE development model, which comprises five stages: Analysis, Design, Development, Implementation, and Evaluation (Creswell, 2014; Sugiyono, 2015). However, this study focuses specifically on the design stage, which is aimed at creating a conceptual framework and initial planning for a cyber counseling application that supports mental health services in higher education post-pandemic.

Research Procedure

The research procedure is limited to the Design stage of the ADDIE model, with the following steps:

Analysis Stage

In the analysis stage, a needs assessment was conducted to identify the necessity for a cyber counseling application in higher education. This stage involved reviewing the literature, conducting surveys with educational counselors, and analyzing the mental health needs of students post-pandemic.

Design Stage

The design stage focused on developing a detailed blueprint of the application, including the design of features, user interfaces, and the application's operational workflow. This stage produced wireframes, user flowcharts, and design prototypes that aligned with the identified needs. The design prioritizes ease of use, accessibility, and the effectiveness of counseling features through technology.

Research Instruments

The instruments used in this research include. Needs Assessment Questionnaire: Distributed to educational counselors and students to gather data on the need for digital counseling services. Expert Validation Sheet: Used to assess the design quality of the application, involving experts in counseling and educational technology. Design Evaluation Rubric: Employed to measure the effectiveness, functionality, and user-friendliness of the application prototype.

Data Analysis

Data collected from the needs assessment questionnaire and expert validation sheets were analyzed quantitatively using descriptive statistics to determine the level of necessity and the feasibility of the application design. The design evaluation rubric results were analyzed qualitatively to gather insights into design improvements and to validate the alignment of the application design with counseling service standards.

RESULT AND DISCUSSION

Results

Apart from using the application software, Research has also been carried out in health circles regarding the influence of application use M-Health towards reducing complaints of nausea and vomiting in pregnant women where the results of the study revealed that there was a significant difference before and after the application was given M-Health on reducing complaints of nausea and vomiting in pregnant women (Puspitasari, 2019). Further other research The Modality and Redundancy Effecting Multimedia Learning in Children with Dyslexia the role of multimedia is more efficiently applied to children with dyslexia because there is audio or hearing support (Knoop-van et al., 2018).

Seeing the application that has been developed to facilitate the process of providing learning and health services, this research seeks to carry out developments that can be used to reduce the provision of guidance and counseling services using the application software specifically, which will later function as a form of online counseling service for students. To help students avoid poor mental health conditions or study stress, this application was developed to continue providing counseling services during the COVID-19 pandemic while maintaining health protocols. The application design plan for E-Cybercounseling will be created as shown below.



Pictures. 1 Application Plan to be developed

Analysis Stage

This research focuses on the need for guidance and counseling services during the COVID-19 pandemic, particularly to maintain students' mental health through E-Cybercounseling services. The study references previous literature on the use of M-Health applications in healthcare, the effectiveness of multimedia for children with dyslexia, and the importance of online counseling services during the pandemic. There is a clear need for a dedicated platform to support online counseling (cybercounseling) that enhances learning and promotes students' mental well-being.

Design Stage

The design of the E-Cybercounseling application includes several key features: Assessment Tools: Instruments to measure students' mental health conditions. Counseling Services: Options for direct consultations through chat and video conferencing. Educational Content: Resources and information to help students manage stress effectively. Interaction Model: Combines interactive and non-interactive cybercounseling through short messages, chat, and video calls to offer flexible support.

Development Stage

The development process involves building a mobile or web-based E-Cybercounseling application using widely used platforms like Zoom, Google Meet, and WhatsApp. The application integrates multimedia elements to support counseling, including learning modules, self-help resources, and real-time communication features with counselors. Initial testing is conducted to ensure that the application's features function correctly and meet the specific needs of guidance and counseling services.

Implementation Stage

During implementation, the application is introduced to students as a tool to support online counseling throughout the pandemic. Counseling sessions are conducted online, individually and in groups, following health protocols. Counselors use the application's chat and video conference features to provide real-time support and share educational materials for stress management.

Evaluation Stage

The effectiveness of the E-Cybercounseling application is evaluated by comparing students' mental health conditions before and after using the app. Evaluation instruments include mental health assessment scales and user satisfaction surveys. Research findings indicate that the application effectively supports counseling services during the pandemic. Students report improved stress

management and mental health, while counselors find the platform beneficial in facilitating online counseling sessions.

Discussion

Mental health is a crucial thing to pay attention to; mental health problems can attack all levels of society and can cause many victims, individuals, families, and society (Gould, 2010). During the COVID-19 pandemic, many significant changes occurred in learning, especially at the tertiary level (Lee et al., 2021). The COVID-19 pandemic has raised concerns among students, who are also involved in thinking about the health problems of their families and their friends (Brown & Kafka, 2020).

It is very necessary to review the mental health of students. The results of previous research revealed that during the pandemic period, many students experienced stress (Huckins et al., 2020; Kecojevic et al., 2020). During the pandemic, nursing students in Brazil experienced moderate to high stress levels (Ribeiro et al., 2020). Sustained exposure to stress over long periods can psychologically and physiologically impact individuals (Holman et al., 2019).

During the COVID-19 pandemic, many obstacles may be experienced by students in carrying out their responsibilities as students, which can affect students' mental health. Previous research revealed that stress symptoms in students increased during the Covid-19 pandemic (Kartika, R. (2020). During the pandemic, the implementation of learning strategies underwent a change from face-to-face to online learning, so during the current COVID-19 pandemic, it was found that 28.3% of students experienced learning stress problems (Mediana, 2020).

Previous research revealed that to maintain the mental health conditions of students, the role of Higher Education Institutions and professionals in the field of mental health is significant. By providing psychosocial support to students to get through the current crisis, one form of support that can be supplied is online counseling services, providing education on managing stress (Zhai & Du, 2020).

Cybercounseling is a professional counseling practice that occurs when the counselee and counselor are located separately and utilize electronic media to communicate via the Internet (Prasetiawan, Hardi 2016). Cybercounseling is divided into two parts: cybercounseling, which is non-interactive, and cybercounseling, which is interactive. Non-interactive, in the form of sites containing information and sources or self-help, and interactive synchronous, is a direct counseling service that includes short messages, chats, and video conferences (Petrus & Sudibyo, 2017).

The ideal concept of online counseling services (cyber counseling) can be done if the counselor has a website that can be used to provide online counseling services (Susanto, 2012). Online counseling sites specifically utilize various other online media that can be used to provide online counseling, such as social networks, for example, Facebook, Twitter, myspace, email, and several application programs for chatting (instant messing) like Skype, messenger, google talk, window live messenger, even telephone use and cellphone as well as special media teleconference other (Ifdil et al., 2013).

Other research also reveals that guidance and counseling teachers certainly have a permanent obligation to provide services to students during the current pandemic, and providing these services can be done through several applications, some of which are generally used, namely Zoom, Google Meet, and WhatsApp (Frida & J.f, 2020). Previous research revealed that strategies must be considered when implementing guidance and counseling services in the era of globalization, namely by using information communication technology (ICT) or collaborating guidance and counseling with technological advances currently developing (Syakir et al., 2016).

Cybercounseling currently utilizes available technological media such as Facebook, Skype, and Messenger, so developing a counseling application specifically for guidance and counseling services at the University is necessary. The use of applications in learning media is generally found frequently, as in previous research regarding Multimedia Mobile Learning Applications for Children's Education:

The Development of Mfolktales, a multimedia application used for learning folklore in Malaysia (Ibrahim et al., 2015). Other research also uses software applications in the educational sector, namely the Development of an intelligent mobile application for teaching English pronunciation Intelligent mobile application used for studying English pronunciation The focus of this research is to change the concept of learning, which was previously very traditional, into adaptive learning by utilizing innovative applications (Cavus, 2016).

Implication

E-Cybercounseling offers a practical solution for supporting students' mental health during the COVID-19 pandemic, providing accessible and flexible counseling services remotely, and enhancing the effectiveness of school counselors.

Limitation

E-Cybercounseling offers a practical solution for supporting students' mental health during the COVID-19 pandemic, providing accessible and flexible counseling services remotely, and enhancing the effectiveness of school counselors. However, limitations include potential technical issues, digital literacy gaps among users, and challenges building rapport through online interactions.

CONCLUSION

Mental health is a crucial aspect that needs attention across all groups, including students. Good mental health enables students to carry out their daily activities effectively. However, many students still face mental health challenges, compounded by psychological barriers that make it difficult for them to seek help. Limited access to information and support services often exacerbates this issue. Therefore, developing an E-Cybercounseling application is essential to provide accessible online counseling services. Further research should explore how e-cyber counseling can effectively reduce student stress and enhance academic performance.

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