Evaluating the Effectiveness of Cybercounseling Interventions for Social Anxiety

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E-ISSN: 2656-1050 ABSTRACT: Social anxiety is a prevalent mental health issue in modern society, significantly affecting the quality of life of those impacted. However, access to mental health services, including traditional counseling, is often limited by various factors. This study aims to evaluate the effectiveness of a cybercounseling application in addressing social anxiety. The application, developed as part of this research, provides clients with the ability to consult counselors without the constraints of distance and time. Key features include real-time chat with counselors, mental health articles as "self-help" resources, and a tool for measuring social anxiety levels. This research follows a Research and Development (RnD) design, comprising three stages of testing: (1) expert validation, which confirmed the model as valid for use; (2) limited empirical testing, where the application showed significant effectiveness in reducing social anxiety based on Wilcoxon statistical tests (p < 0.05); and (3) large-scale testing, which further confirmed the application's effectiveness with similar significant results (p < 0.05). These findings suggest that the cybercounseling application is a viable tool for treating social anxiety in the digital era.

INTRODUCTION

Psychological disorders can attack anyone at any time. Moreover, in the digital era, psychological disorders have become a trend and need to be watched out for, most of the sufferers are young people. Among the various types of anxiety, social anxiety often affects teenagers, with a prevalence of 10% in individuals in late adolescence, and 90% of individuals in early adulthood. This survey was conducted in seven countries in the world, including Indonesia (Jefferies & Ungar, 2020).

Social anxiety has increased following the Covid-19 pandemic. According to World Health Organization (WHO, 2022), the prevalence could reach 25% globally. The most common sufferers of social anxiety are women and young people. Women have differences in their brains and hormones related to female reproduction, such as menstruation, pregnancy and menopause, this causes women to be more susceptible to social anxiety (Fadli, 2020). Meanwhile, young people (adolescents) are entering a phase of life full of emotional upheaval, so their mental health is vulnerable to disruption (Kemdikbud, 2024). Social anxiety often appears during adolescence when peer groups become very important as a source of identity and recognition (Loades et al., 2020).

Many articles describe the amount of anxiety experienced by Indonesian people, including research by Rusman et al. (2021), which produced data showing that more than 50% of respondents in South Sulawesi experienced anxiety due to COVID-19. Research by Alfaini et al. (2021) found that the average member of the youth organization in Buaran, South Tangerang, experiences anxiety characterized by isolating themselves, not participating in youth organization activities, and feeling

fearful and anxious about the outside world. Pasongli and Malinti (2021) examined the anxiety experienced by families of health workers due to the COVID-19 pandemic, revealing that more than half of the respondents (67.05%) experienced anxiety, ranging from mild to severe, with most cases occurring among women aged 19–39 years. Shofiyah and Sovitriana (2021) conducted research on anxiety disorders among female inmates in Jakarta prisons. Suwandi and Malinti (2021) reported that there was no relationship between the level of knowledge and the level of anxiety among teenagers regarding COVID-19, as teenagers with both sufficient and high knowledge still experienced anxiety. Research by Ikawati and Murtiwidayanti (2021), involving 38 respondents using incidental sampling in Yogyakarta, revealed that almost all respondents experienced various kinds of anxiety due to COVID-19. Similarly, Rinaldi and Yuniasanti (2020) found that among 731 participants, all experienced anxiety, ranging from low to moderate levels. Muyasaroh et al. (2020) reported that people in Cilacap experienced anxiety, with 69% of female respondents and 31% of male respondents experiencing anxiety due to the COVID-19 pandemic. Putri et al. (2021) investigated teenagers' anxiety about COVID-19 vaccination, finding that 48.1% of teenagers felt anxious about vaccination, with their willingness to take the vaccine influenced by their level of anxiety.

In the Pekalongan, Indonesia, several articles present the anxiety experienced by the community, including research by Natalya (2020) whose results show that 70.3% of respondents from the Comal community, Pemalang Regency, experienced mild, moderate, severe and very severe anxiety. The author has not yet found research on the anxiety of the people of Pekalongan City and Pekalongan Regency. However, that doesn't mean there is no anxiety in society. As the author found at UIN K. H. Abdurrahman Wahid Pekalongan, several students complained of anxiety, especially social anxiety, characterized by fear of carrying out daily activities, such as meeting strangers, fear of the threat of disease, fear of starting conversations, fear of attending offline lectures, avoiding or worrying excessively about social activities, such as group conversations, eating together, and parties, often feels anxious when doing something he finds embarrassing, for example blushing, sweating, or appearing incompetent, finds it difficult to do things when other people are watching, because he may feel he is being watched and judged all the time, fear of criticism, avoid eye contact or have low self-confidence, often have symptoms, such as feeling sick, sweating, shaking or having a pounding heart (palpitations), and experiencing panic attacks.

Social anxiety should not be ignored, this will have a negative impact on decreasing mental health. There needs to be intervention steps, one of which is counseling services. Social anxiety causes individuals to not dare to face strangers. The right counseling step is to offer online counseling through a cybercounseling application. Through the application, students can get extensive services regardless of distance and time. Intervention efforts can be carried out more quickly. Action can also be taken more quickly. If communication is required, this cybercounseling application will connect to the personal WhatsApp of the appointed counselor or psychologist, or you can make an appointment for offline counseling if online services are no longer possible.

In the industrial era 5.0, the internet has become a necessity because it facilitates all human needs, including learning activities (Kristiyanti, 2010). Similarly, social media allows all groups to access it easily without limitations of space, time, and cost (BPS, 2018). Everything can be easily accessed via smartphones, computers, or tablets (Ussolikhah, 2017; Sutijono, 2018; Kirana, 2019; Saputra, 2020). This also has a major influence on guidance and counseling service media (Sumarwiyah & Zamroni, 2016) as both a strategy and a challenge in providing services to clients in the current millennial era (Petrus & Sudibyo, 2017). One of the developments in guidance and counseling media in the industrial era 4.0 is the use of online media in handling client problems, known as e-counseling (Gibson, 2008) or cybercounseling/virtual counseling. This refers to long-distance counseling services conducted by counselors with clients who are not in the same room or face-to-face, using internet-connected technology (Bastemur & Bastemur, 2015; Pasmawati, 2016; Prahesti & Wiyono, 2017). Several studies have shown the effectiveness of cybercounseling in

addressing various problems (Pedhu, 2014; Prasetiawan, 2016; Wibowo, 2016; Ussolikhah, 2017; Refa'i, 2017; Prasetya et al., 2019; Farmawati et al., 2020; Arizona et al., 2022), making cybercounseling a valuable complement to traditional counseling.

Since the term cybercounseling was coined, many applications have been developed to support guidance and counseling services in Indonesia (Ifdil, 2009), including the Student AUM (Problem Expression Tool) Application Program, DCM (Problem Checklist) Program, E-Sociometry and so on, including the birth of sites that providing virtual counseling services via networking, email, social media such as massager, Instagram, Facebook, WhatsApp, and so on (Ifdil, 2013; Pujiyanti, 2018). This kind of program is very important to support guidance and counseling services as well as adapt to technological sophistication.

Providing counseling services that can be accessed online, anytime, anywhere has many benefits for individuals who are having problems, especially those who have obstacles in providing direct and face-to-face communication with a counselor. There is a feeling of reluctance, shame, doubt, feelings of closure, and discomfort if you have to directly express all the problems you are experiencing. He prefers to remain silent if he has to face a counselor or therapist, even though he needs help immediately (Ifdil, 2013; Petrus and Sudibyo, 2017). Especially during the Covid 19 pandemic some time ago, cybercounseling became one of the innovations in digital-based counseling services to help intervene in problems experienced by the community without having to meet face to face. Moreover, the problems experienced by people during the pandemic and post-pandemic are increasingly complex, from personal, learning, social and career problems.

One of the problems that has emerged in the post-Covid 19 pandemic era is the problem of social anxiety or social phobia. This research aims to create a cybercounseling application that can be widely accessed by the public in the form of self-help, chat with a counselor by selecting an available counselor, as well as an introduction to various counseling approaches used to intervene in problems. Starting with the social anxiety problem of UIN student K.H. Abdurrahman Wahid Pekalongan. Furthermore, it is hoped that this application can develop and reach all the problems experienced by students and society in general.

This application will be tested first on students, before it can be accessed by the wider community. Before the trial, the author first carried out a needs assessment or assessment of the students' needs. Positive responses from students when the author conducted a survey of 100 students regarding cybercounseling applications in the UIN Gus Dur Pekalongan environment. A total of 91 people agreed that there was a cybercounseling application that could be accessed by UIN K.H. students. Abdurrahman Wahid Pekalongan in general to get help with the problems they are experiencing. From the explanation above, the author is interested in conducting research on the preparation and development of cybercounseling application models to overcome social anxiety. It is hoped that with this application, individuals can easily access counseling services so that they can help in solving the social anxiety problems they are experiencing. The purpose of this study is to evaluate the development of a cybercounseling application designed to address social anxiety in the digital era, and to assess the effectiveness of this application model in overcoming social anxiety.

METHODS

Design

This study employs a Research and Development (RnD) research design comprising 10 stages. The RnD approach aims to produce a product and test its effectiveness. To develop a specific product, needs analysis research is conducted. To verify the product's effectiveness for broader community use, further research is conducted to test the product (Sugiyono, 2015). The ten stages of the research are: The research process begins with the Potential Problem Exploration Stage (Preliminary Research/Evaluation Study), where the researcher identifies the social anxiety of students at UIN K. H. Abdurrahman Wahid Pekalongan, along with the existing conditions and counseling services

available on campus. Next, in the Planning Stage for Developing a Cybercounseling Application, a plan is created to develop a cybercounseling application aimed at reducing social anxiety, based on the evaluation study results. Following this, during the Design and Development Stage, a website-based cybercounseling application is designed and developed to address students' social anxiety. In the Design Validation Stage (Feasibility Test of the Hypothetical Model), expert and practitioner testing is conducted through discussions to assess the hypothetical model's feasibility. This is followed by the Design Revision Stage (Improvement of Tested Hypothetical Model I), where revisions are made to the model based on test results. If the model does not meet expectations, further development occurs, and if satisfactory, the model is deemed ready for implementation.

The process then moves to the Limited Field Testing Stage (Empirical Testing), where the model undergoes limited empirical testing involving participatory research with guidance and counseling lecturers in planning, executing, and reviewing field tests. After this, in the Product Revision Stage, improvements are made to the model based on the results of the limited-scale testing, leading to a refined cybercounseling application model. Subsequently, during the Large-Scale Trial Stage, feedback from this trial is used to further refine the model. This leads to the Final Product Revision Stage, where final revisions are made based on large-scale trial feedback, resulting in the finalized cybercounseling application model. Finally, the process concludes with the Mass Production Stage, where the final version of the cybercounseling application model for reducing social anxiety is prepared for widespread use.

Participants

The sampling technique used in this study was accidental sampling, which is a sampling technique based on coincidence, anyone who accidentally registers for counseling services via the cybercounseling application can be used as a sample if the person who happened to be met is considered suitable as a data source. In the accidental sampling technique, sampling is not determined in advance. The researcher immediately collects data from the sampling units encountered (Sugiyono, 2019).

This development research involved two participant groups: a limited test group and a large-scale test group. The limited test group consisted of 7 female students, aged 18-20, from the Islamic Guidance and Counseling program at K.H. Abdurrahman Wahid Pekalongan State Islamic University, all from a lower-middle socio-economic background. The large-scale test group included 14 participants (10 females and 4 males), aged 17-21, from the Faculty of Ushuluddin, Adab, and Da'wah, also from a lower-middle socio-economic background. All participants, both in the limited and large-scale groups, had social anxiety, were registered as clients on a website-based cybercounseling application, and received online counseling services through the platform.

Instruments

To collect data for this study, various instruments were developed and tested in the form of social anxiety scales, interview guides, and validation instruments. The data collection instruments prepared for the development and implementation process of this cybercounseling application model consist of three parts, namely 1) interview guides to reveal data on the implementation of counseling at the KH.Abdurrahman Wahid State Islamic University of Pekalongan, 2) social anxiety scales for students' social anxiety, 3) validation instruments to assess: a) the effectiveness of the cybercounseling application model design to overcome social anxiety, b) the quality of the cybercounseling application model construct, and c) the quality of the cybercounseling application model guide to overcome social anxiety. The interview guide for the implementation of counseling services carried out by lecturers in Counseling Guidance and Psychology at KH. Abdurrahman Wahid State Islamic University, Pekalongan was developed through the following stages: 1) Determining the Topics to be Revealed based on the implementation of counseling services on campus.

The development of the Social Anxiety Scale is carried out through two things, Determining the Attribute Construct to be Measured and Compiling the Grid of the Social Anxiety Scale. The anxiety scale to be developed is the student social anxiety scale. Therefore, the attribute construct to be measured is the social anxiety of students at the KH. Abdurrahman Wahid State Islamic University of Pekalongan. However, this social anxiety scale can also be used to measure social anxiety in the general public, especially at the adolescent to adult level. The social anxiety scale construct developed is based on social anxiety theories consisting of 3 factors: (a) Fear of Negative Evaluation, the fear of negative judgment from others, (b) Social Avoidance and Distress in New Situation, reflects the presence of social avoidance and feelings of distress in new situations in a person, (c) Social Avoidance and Distress-General, this factor is related to the presence of social avoidance and feelings of distress experienced in general (Nolan & Walters, 2000), also based on Butler's theory in Pratiwi, Mirza and Akmal (2019) about social anxiety which consists of 4 symptoms, namely symptoms in thinking physical/body (Physique), symptoms in symptoms in psyche/emotional (Psychic/emotional), and symptoms in behavior (behavior). The social anxiety scale is compiled using a Likert scale with five options, namely strongly disagree, disagree, neutral, agree, and strongly agree. The instrument has gone through validity and reliability tests. Based on the construct of social anxiety above, a grid of students' social anxiety scale was compiled. In addition to the instruments mentioned above, researchers also used validation instruments, readability and feasibility tests by selected experts and users/practitioners and scientists of guidance, counseling and psychology. The purpose of this readability and feasibility test is to obtain input, suggestions and ideas to improve the model before conducting a field trial. The assessment sheet reveals an assessment of the model framework, hypothetical model and guidelines for implementing the cybercounseling application model to overcome social anxiety developed by researchers.

Intervention

The intervention in this study consisted of a series of cybercounseling sessions conducted through a website-based cybercounseling application. Each participant attended the sessions online, utilizing asynchronous chat as the primary mode of communication. For participants requiring additional support, follow-up sessions were conducted via WhatsApp chat, ensuring accessibility and personalized assistance. Participants were involved in a minimum of 3 sessions, this is in accordance with research by Barak & Grohol (2011) that the effectiveness of e-counseling or online-based therapy was seen in changes in decreasing social anxiety after 3-6 sessions, especially in text-based or asynchronous online formats. Every session was structured into three stages: the initial stage, the activity stage, and the final stage (See Table 1).

The use of asynchronous chat on the website-based application provided participants with a flexible and accessible counseling experience, allowing them to engage at their own pace. The integration of WhatsApp chat for additional support ensured that participants received tailored assistance when needed, creating a holistic and responsive intervention framework. This approach was effective in addressing social anxiety while accommodating the unique needs of each participant.

Data Analysis

In line with the research procedure, the data analysis in this study is conducted in three stages:

First Stage Data Analysis

The analysis of research data at this stage is carried out quantitatively and qualitatively. The quantitative procedure is carried out by calculating the percentage of the level of social anxiety. The qualitative procedure is carried out to interpret the description of objective conditions regarding (a) the need for alleviation of social anxiety problems, (b) the implementation of counseling services at the KH. Abdurrahman Wahid State Islamic University of Pekalongan.

Second Stage Data Analysis

The data analysis at this stage uses qualitative procedures. The form of analysis is to examine objective conditions: the client's need for alleviation of social anxiety problems, and the implementation of counseling services as a basis for formulating an "initial" model of cybercounseling services to overcome social anxiety problems. This analysis is sharpened with input and validation results.

Third Stage Data Analysis

The third stage research data is analyzed using qualitative and quantitative procedures. The form of qualitative analysis carried out is to examine the model implementation process and is used as a basis for compiling a "final" model of cybercounseling applications to overcome social anxiety problems. Meanwhile, quantitative analysis was conducted by calculating the percentage of social anxiety levels of students at the KH. Abdurrahman Wahid State Islamic University of Pekalongan in the initial conditions (pre-test) and final conditions (post-test) after being given cybercounseling services, and by using SPSS 22, through non-parametric analysis techniques in the form of the Wilcoxon test which is used to analyze differences in acquisition scores based on aspects of social anxiety who receive counseling services through website-based cybercounseling applications.

Tabel 1. Description of counseling activities

Stage	Description	Activities		
Initial	Focused on building rapport and setting the foundation for the	a) Greeting and welcoming the participant in the online environment to create a comfortable and safe space.		
	session.	b) Reaffirming confidentiality and ethical guidelines, emphasizing data security.		
		c) Conducting a brief check-in via chat.		
		d) Outlining session objectives and ensuring alignment with the participant's goals.		
Activity	The core part of the session where intervention techniques were applied to address social anxiety.	a) Exploring thoughts, feelings, and behaviors related to social anxiety through guided questions and reflection via asynchronous chat.		
		b) Implementing counseling techniques like cognitive restructuring or relaxation techniques.		
		c) Encouraging sharing of experiences and practicing coping or communication skills.		
		d) Providing synchronous follow-up via WhatsApp chat for complex issues.		
Final	Focused on summarizing the session and preparing for the	a) Summarizing key points and insights to reinforce understanding.b) Discussing homework or follow-up tasks, sharing resources via the		
	next steps.	platform or WhatsApp.		
		c) Encouraging participant feedback to enhance future sessions.		
		d) Closing with positive reinforcement and reminding participants of		
		the next session's schedule.		

RESULTS AND DISCUSSION

Results

The cybercounseling application model has passed three tests, namely (1) expert test (rational) with valid results (model can be used), (2) limited test (empirical) with the results obtained an effective cybercounseling application model to reduce social anxiety disorders of students in the Islamic Guidance and Counseling study program, as seen from the Wilcoxon statistical test which was stated as significant (probability <0.05), (3) large-scale test with the results obtained an effective website-based cybercounseling application model to reduce social anxiety of students at the Faculty of Ushuluddin, Adab and Da'wah, K.H. Abdurrahman Wahid State Islamic University, as seen from the

Wilcoxon statistical test which was stated as significant (probability <0.05), this indicates that the cybercounseling application model is effective in overcoming social anxiety disorders in the new normal era.

Hypothetical testing

Table 2. Paired test pre-test and post-test on social anxiety level on total score (limited)

Data	Min	Max	Z	р	Description
Pre Test	83	114	-2,371	0,018	significant
Post Test	62	90			

Table 2. shows that students' social anxiety decreased between the period before and after receiving cybercounseling services. This is indicated by a probability value of less than 0.05. In the statistical test, the Asymp. Sig. (2-tailed) column lists a value of 0.018, but since this study uses a one-tailed test, the probability becomes 0.009. As this probability is below 0.05 (0.009 < 0.05), it can be concluded that the cybercounseling application model is effective in reducing social anxiety. Testing the effectiveness of the cybercounseling application model in addressing social anxiety across various aspects—1 (cognitive symptoms), 2 (physical symptoms), 3 (psychological symptoms), and 4 (behavioral symptoms)—yields the same result. The probability remains below 0.05, affirming that the cybercounseling application model is effective in reducing social anxiety on a limited scale test.

Table 2. Paired test of pre-test and post-test on the level of social anxiety on the total score (large)

Data	Min	Max	Z	р	Description
Pre Test	65	127	-3,299	0,001	significant
Post Test	46	90			

Table 2 shows that students' social anxiety decreased between the period before and after receiving cybercounseling services. This is indicated by a probability value of less than 0.05. In the statistical test, the Asymp. Sig. (2-tailed) column lists a value of 0.001. Since this study uses a one-tailed test, the probability is 0.001 divided by 2, resulting in 0.0005. As this probability is below 0.05 (0.0005 < 0.05), it can be concluded that the cybercounseling application model is effective in reducing students' social anxiety in the digital era. Testing the effectiveness of the cybercounseling application model in addressing social anxiety across various aspects—1 (cognitive symptoms), 2 (physical symptoms), 3 (psychological symptoms), and 4 (behavioral symptoms)—yields the same result. The probability remains below 0.05, affirming that the cybercounseling application model is effective in reducing social anxiety on a large scale test

Discussion

Initial conditions at UIN KH. Abdurrahman Wahid Pekalongan showed that counseling services had not fully addressed the specific needs of students with social anxiety. Although general counseling services were available, they did not specifically target social anxiety, which was a concern for students. This lack of targeted support made it difficult for students to manage symptoms that affected their daily lives and academic performance. Students showed a variety of symptoms of social anxiety, including cognitive problems such as fear of being judged, physical symptoms such as sweating and shaking, psychological symptoms such as increased anxiety, and behavioral problems, including avoiding social situations.

To address this gap, the current study developed a cybercounseling application specifically designed to reduce social anxiety among students. The application underwent a rigorous multi-stage testing process. Each test was conducted with a pre-test and post-test using a proven social anxiety

measurement tool, and in the middle of it, cybercounseling services were carried out with the following stages: 1) service preparation stage (preparing hardware and software to be used in online counseling), 2) counseling service process stage such as face-to-face counseling, 3) counseling results evaluation stage and follow-up (Cahyo & Wibowo, 2017).

During the Limited Field Testing Phase, a participatory research approach was used, involving lecturers in the guidance and counseling and psychology departments to plan and conduct testing. This limited trial allowed the research team to gather initial feedback on the usability and effectiveness of the application. The trial was conducted with a small group of students who showed symptoms of social anxiety. The results from this stage were quite promising, indicating a decrease in social anxiety symptoms among participants. However, several technical issues and areas for improvement in the application interface and content were identified.

After revisions based on the limited field test, the research continued to the Large-Scale Trial Phase. This stage involved a wider sample of students to ensure the effectiveness of the application across a more diverse group. Feedback from this trial was critical in further refining the model. Students reported significant improvements in managing their social anxiety symptoms, with probability values consistently below the 0.05 threshold, underscoring the effectiveness of the intervention. The app proved to be a flexible and accessible platform that allowed students to engage with counseling services at their own convenience, which was particularly beneficial for those who may be reluctant to seek face-to-face assistance.

Results from both the limited-scale and large-scale testing phases highlighted the app's potential as an effective tool for reducing social anxiety, as previous relevant research conducted by Yuniarsih (2021) found that online counseling can reduce social anxiety. The iterative testing and revision processes ensured that the final product was user-friendly and able to meet the unique needs of students with social anxiety. The success of this approach suggests that cyber counseling can be a valuable complement to traditional face-to-face counseling services at UIN KH.Abdurrahman Wahid Pekalongan, particularly for issues that students may be reluctant to discuss face-to-face.

Implications

The findings of this study have important implications for both educational institutions and mental health practitioners. The demonstrated effectiveness of cybercounseling in reducing social anxiety among students suggests that digital counseling platforms could be a critical resource for addressing mental health challenges, particularly in the new normal era where physical interactions are limited. By integrating cybercounseling services, institutions can offer flexible, accessible, and scalable mental health support to students, overcoming barriers such as geographical distance and time constraints. For mental health practitioners, the success of cybercounseling in mitigating various dimensions of social anxiety—cognitive, physical, psychological, and behavioral—highlights the potential of this approach to provide comprehensive support. Cybercounseling may also serve as a gateway for students who might otherwise avoid seeking help due to stigma or anxiety related to face-to-face counseling sessions. This study thus advocates for the broader adoption and normalization of digital counseling services as a complement or alternative to traditional therapy methods. Future policy considerations should also focus on the development of standardized protocols and training for cybercounselors to ensure the quality and effectiveness of online interventions. As cybercounseling becomes more widely implemented, it is essential to evaluate and address any ethical and privacy concerns associated with digital mental health services, ensuring that these services remain a safe and supportive environment for users.

Limitations and Further Research

Although this study provides valuable insights into the effectiveness of cybercounseling for reducing social anxiety among college students, several limitations should be acknowledged. First,

the sample size of this study was limited to a specific student population, which may affect the generalizability of the findings. Future research should include larger, more diverse samples to validate these results across different demographics and cultural contexts. Additionally, this study focused only on short-term outcomes. The long-term effectiveness of cybercounseling in reducing social anxiety remains uncertain. Further research is recommended to evaluate the ongoing impact of cybercounseling over an extended period and to assess whether initial improvements are maintained.

Another limitation is the reliance on self-reported measures, which may be subject to response bias. Future research may benefit from incorporating a mixed-methods approach, combining quantitative measures with qualitative interviews to provide a more comprehensive understanding of participants' experiences with cybercounseling. Further research could also explore the impact of different cybercounseling methods, such as video calls, text-based chat, or virtual reality platforms, to determine which approaches are most effective in reducing social anxiety. Investigating other mental health conditions, in addition to social anxiety, would also be beneficial in understanding the broader application of cybercounseling. In addition to the limitations mentioned above, general limitations also need to be considered: (a) the success of counseling is determined by the availability of an internet network (Haryati, 2020); (b) counselors have difficulty building a therapeutic relationship with clients (Shaw & Shaw, 2006); (c) in Indonesia there is no clear law regarding online counseling services; (d) many counselors still lack the skills to use internet services; and (e) there is little research on the benefits of online counseling (Bloom, John W., Walz, Garry, 2004).

CONCLUSION

This study confirms the effectiveness of cybercounseling as a therapeutic tool for reducing social anxiety among students in the digital era. The statistically significant decrease in social anxiety levels after the intervention underscores the potential of digital counseling platforms to provide accessible and effective mental health support. By successfully addressing the cognitive, physical, psychological, and behavioral symptoms associated with social anxiety, cybercounseling offers a holistic approach to mental health care that aligns with the growing demand for flexible and remote services. The implications of these findings suggest that educational institutions and mental health practitioners should consider cybercounseling as a viable option to complement traditional face-to-face counseling methods. With its adaptability and convenience, cybercounseling can overcome barriers to access and provide timely support, especially for those hesitant to engage in in-person therapy. While this study contributes to the understanding of cybercounseling's efficacy, further research is necessary to explore its long-term effects and its potential across diverse populations. Overall, this study highlights the valuable role of cybercounseling in the evolving landscape of mental health services, emphasizing its promise as a tool for supporting student well-being in a digitally connected world.

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AUTHOR CONTRIBUTIONS STATEMENT

SP and CHS agree to the final version of this article.

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