



## DISTANCE EDUCATION: THE PROVISION OF REMOTE PSYCHOLOGICAL SUPPORT IN HIGHER EDUCATION

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### **Abstract:**

Modern educational institutions of Higher Education implement various actions to improve the mental health of students, which are based on the use of ICT. Online counseling helps students express their experiences and opinions in both contemporary and asynchronous settings and is a viable solution for counseling adults. The study examines the effectiveness and students' perceptions of the distance psychological counseling service in tertiary institutions. The increasing need to provide mental health services in academic settings, particularly in distance education contexts, prompted this research to analyze the access, satisfaction, and overall impact of these services on student well-being. A quantitative research approach was adopted; data were collected using a set of structured questionnaires, and responses were analyzed using statistical tools such as t-tests and ANOVA to measure various dimensions of service effectiveness. Results suggest that remote counseling helps promote the availability of psychological help specifically for students living in remote or underserved areas, however, there are challenges of technology use and personal involvement that affect overall effectiveness. The research highlights the importance of continuous improvement in service provision and infrastructure development to meet the demands of such a large and diverse student body. Other research recommendations are the thorough study of the implementation of hybrid models of counseling and a more detailed examination of the long-term effects of remote psychological services.

**Keywords:** mental health, higher education, online counseling, remote learning

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## 1. Introduction

Modern educational institutions of Higher Education implement various actions to improve the mental health of students, which are based on the use of ICT (Karfaki & Armakolas, 2019). As reported by Zhai and Du (2020), who studied the mental health of students in China after the outbreak of the pandemic, in higher education, in addition to distance education, student counseling is implemented either by phone or through the internet so as to help students with their academic performance, support students who have been most affected by the pandemic, as well as students who are facing financial issues. According to Sheperis *et al.* (2020), online counseling helps students express their experiences and opinions in both synchronous and asynchronous settings and is a viable solution for counseling adults. The positive attitude of students towards online counseling was also mentioned by Tannous (2017), who argued that the development of ICT and the internet has significantly affected the way counseling services are provided. For this reason, he examined the opinions of 210 students in Jordan and observed that the participants had sufficient knowledge about online counseling, while most of them preferred online over face-to-face counseling. Finally, according to most of the participants, online counseling could help them manage everyday problems (Tannous, 2017). Even though distance counseling services are now also implemented in the field of Higher Education, there are conflicting findings regarding their effectiveness. A study carried out by Celia *et al.* (2022) demonstrated that online counseling applied to 32 healthy undergraduate students in Italy was associated with an improvement in positive emotions and perceived well-being, as well as coping with symptoms of anxiety and psychological distress, considering the students' mental state after the outbreak of the COVID-19 pandemic. Similarly, Savarese *et al.* (2020) studied the psychological difficulties and mental health problems faced by 266 students in Italy and concluded that the remote online counseling services received by the participants contributed to the strengthening of resilience and the faster identification of possible psychological problems.

Similar results were reached by Yurayat and Seechaliao (2022), who studied the attitude of students towards distance counseling, examining a sample of 417 undergraduate students in Thailand. The survey showed that participants had a positive attitude towards online counseling as it was a method that could help manage stress and anxiety and be implemented despite the limitations of the COVID-19 pandemic. However, gender differences were found, as female participants had more positive attitudes than males, as did students with low academic performance.

However, other research has come to different results regarding the well-being of online counseling services on student well-being, as Zeren *et al.* (2020) studied the effectiveness of distance counseling services provided to 60 students in Turkey and observed that there was no statistically significant difference in the perceived well-being of students who received distance counseling compared to participants who attended in-person sessions. Accordingly, in a study conducted on 409 students in Malaysia, it was

shown that most of the participants preferred live counseling services to remote counseling services, and further investigation into the effectiveness of online counseling on student well-being was suggested (Wong *et al.* 2018).

It turns out that lifelong counseling can bring significant benefits for Greek students, according to Kounenou *et al.* (2022), who studied the effectiveness of a lifelong counseling program on 34 students in Athens, while 35 students were the control group. According to the results of the study, the implementation of the counseling program contributed to the improvement of the positive emotions of the intervention participants. It is observed, therefore, that distance counseling in Higher Education has attracted research interest from international studies, but there are no available findings regarding the Greek educational context and its effect on the well-being of Greek students. It is noted that online counseling in Higher Education in Greece has been investigated by Mouratoglou and Zarifis (2021), who, however, focused on the impact of ICT on online counseling and examined the counseling career and not its effect on student well-being. The present study is motivated by this research gap and by the results of previous studies that prove that Greek students have undergone changes in their mental health status, especially after the outbreak of the pandemic (Kaparounaki *et al.* 2020; Patsali *et al.* 2020), as well as an increase in symptoms of anxiety and depression (Konstantopoulou, *et al.*, 2020; Sazakli *et al.*, 2021; Kavvadas *et al.* 2022). Remote counseling shows promise for clients whose access to care is otherwise hindered by situational factors, including rural location, physical health status, and transportation options (Elhai & Frueh, 2016). Customers can video conference at home or at work, making private session content potentially visible to family members or colleagues (Iliou, T., *et al.*, 2022). In addition, some patients may need personal assistance before starting telemedicine. Practitioners should assess client privacy in these cases and be transparent about the features and risks during informed consent processes (Zhao *et al.*, 2017). Several studies consider it imperative that both the student and the counselor feel comfortable using the technology platform to provide psychological services (Elhai & Frueh, 2016; Stoll *et al.*, 2020).

The advantages of online counseling (Schlenger *et al.*, 2022) are flexibility in Time and Place as online counseling allows people to access counseling services from anywhere, whenever it is convenient for them, without the need to go to an office. People can maintain their anonymity, which can facilitate communication and open dialogue. Online counseling is more accessible for people who have difficulty getting around because of a disability, remote location, or other limitations. People can choose from a wide range of professional counselors regardless of their geographic location (Staikou, Armakolas & Panagiotakopoulos, 2023). While the disadvantages of online counseling (Tirel *et al.*, 2020) are the lack of physical presence may mean that some non-linguistic cues and communication elements that are important for understanding are missed. Technical difficulties, such as a wireless connection, can create problems when implementing online counseling. Online counseling may face security risks such as leaking sensitive information. The absence of physical contact with the counselor can make it difficult to build trust and feel connected (Amakolas & Karfaki, 2020). Online

counseling may be a great option for some but may not be suitable for others, depending on individual needs and preferences (Tirel *et al.*, 2020; Papadopoulou, Parlapani & Armakolas, 2022).

This research aims to systematically evaluate the effectiveness of distance psychological services provided to higher education students. A quantitative methodology was chosen for its precision in systematic measurement and analysis of variables and for its ability to produce statistically significant data, which are critical to validating the impact of such services on a diverse student population.

## **2. Materials and Methods**

The purpose of the research is to study the opinions of students regarding remote mental health services. Specifically, through the study of young people's knowledge and experiences of online counseling, its rates and eligibility factors compared to traditional in-life counseling as well as in what ways their personal data is protected, they can help mental health specialists to design personalized services for young people but also contribute to better informing and designing online counseling services among the university community.

## **3. Research Questions**

The aim is to study students' knowledge about remote mental health services and the frequency of their choices. For what reasons they would or would not choose online counseling over traditional face-to-face counseling and how personal data protection is ensured during remote counseling. To study the ways that universities can meet the needs of students by providing online counseling. The research questions are more specifically:

- 1) What is the level of students' knowledge regarding remote mental health services, and how frequently do they choose them?
- 2) For what reasons would they choose or not choose online counseling compared to traditional face-to-face counseling?
- 3) How is the protection of personal data ensured during remote counseling?
- 4) In what ways can universities meet students' needs for online counseling services?

## **4. Design**

A quantitative research methodology was chosen, which facilitates a structured investigation of relationships between specific variables, focusing on the provision of psychological services for distance learning and their impact on student's mental health and academic achievement. The research process began with the development of an overall hypothesis predicting the potential benefits of distance psychological services on student academic and psychological outcomes. Variables selected for examination

included measures of academic achievement, levels of psychological well-being, and accessibility of services. These were operationalized through the creation of a structured data collection instrument that allowed for quantitative measurement and analysis. Data collection was carried out using a rigorously designed questionnaire. The methodology was informed by several key sources, including Payne *et al.* (2020), who discuss psychological support at a distance, and Markowitz *et al.* (2021), who explore the nuances of online psychotherapy. The comprehensive literature review also incorporated information from Chen *et al.* (2021), who consider the deeper connections fostered through tele-psychotherapy, ensuring a robust and reliable tool capable of capturing the effects of these services on students' mental health and academic performance. The sampling method was carefully chosen to reflect the demographic composition of the student population, including factors such as age, course of study and previous exposure to psychological services; The questionnaire included several sections to explore different aspects of students' experiences with remote psychological services, such as demographics to tailor responses and scaled items to assess perceived effectiveness and accessibility of services. Open-ended questions were also used, allowing participants to articulate the impact of these services on their mental health and academic pursuits, providing qualitative insights alongside quantitative data. A pilot test was conducted with a small segment of the target population to refine the questionnaire based on feedback that led to adjustments in wording, question order, and scaling options. This optimized the usability of the tool and minimized potential response biases. The research sample was 111 people who were students from Greek universities, either at the undergraduate or postgraduate level. The questionnaires were completed during the period February 2024 - March 2024 and the research was approved by the committee of the Department of Education and Social Work Sciences. The final version of the questionnaire was administered electronically, chosen for its convenience and broad appeal within the dispersed student population. Statistical analysis tools were used to process the collected data, with techniques such as regression analysis, t-test, and ANOVA used to identify associations and assess the strength of relationships between service delivery and outcomes.

## 5. Analysis of Results

111 students participated, of which 72 (64.9%) were women and 38 (24.2%) were men. Overall student demographics are given in Table 1. Of the total students, 55.9% (n = 62) were undergraduate level, while 44.1% (n = 49) were graduate level. In addition, 43.2% (n = 48) were students in the Humanities and Social Sciences departments, 17.1% (n = 19) were students in the Health Sciences departments, 15.3% (n = 17) were students in the Technological Sciences departments, and 14.4% (n = 16) were students in science departments. From the rest of the demographic data, it follows that 73% (n = 81) of the students were single, and 24.3% (n = 27) were married. Additionally, 67.6% (n = 75) of the students were employed. Finally, the data show that 9% (n = 10) of students had poor or

very poor mental health, and 9.9% (n = 11) of students had poor or very poor physical health. In contrast, 56.7% (n = 63) of students had good or very good mental health, and 54% (n = 60) of students had good or very good physical health.

**Table 1:** Sample demographics (N = 111)

No.	Category	n	%
<b>1.</b>	<b>Gender</b>		
	Male	38	34.2%
	Female	72	64.9%
	Other	1	0.9%
<b>2.</b>	<b>Age*</b>	<b>28.4</b>	<b>9.2</b>
<b>3.</b>	<b>Education level</b>		
	Undergraduate level	62	55.9%
	Postgraduate level	49	44.1%
<b>4.</b>	<b>Marital status</b>		
	Single	81	73.0%
	Married	27	24.3%
	Divorced	3	2.7%
<b>5.</b>	<b>Employed</b>		
	Yes	75	67.6%
	No	36	32.4%
<b>6.</b>	<b>Field of study</b>		
	Humanities and Social Sciences	48	43.2%
	Technological Sciences	17	15.3%
	Natural Sciences	16	14.4%
	Health Sciences	19	17.1%
	Other	11	9.9%
<b>7.</b>	<b>How would you rate your mental health?</b>		
	Very poor	1	0.9%
	Poor	9	8.1%
	Fair	38	34.2%
	Good	45	40.5%
	Very good/excellent	18	16.2%
<b>8.</b>	<b>How would you rate your physical health?</b>		
	Very poor	2	1.8%
	Poor	9	8.1%
	Fair	40	36.0%
	Good	42	37.8%
	Very good/excellent	18	16.2%

\*For age, the mean and standard deviation have been calculated.

Overall, all dimensions of the questionnaire showed Cronbach's  $\alpha$  above 0.7 and are considered reliable. 49.5% (n = 55) of students had received face-to-face mental health/counseling services, and 29.7% (n = 33) of students had received mental health/counseling services online. The results of the t-test show that the students' opinions on the remote provision of mental health services do not differ significantly in terms of their level of education ( $p > 0.05$  in all four comparisons). Students with poor or very poor mental health (mean = 2.8, SD = 0.9) feel more discomfort in life counseling

compared to students with moderate (mean= 2.2, SD = 0.8) or good/excellent mental health (mean = 1.9, SD = 0.7),  $F(2, 107) = 5.806$ ;  $p < .05$ .

The results of the one-way ANOVA show that the students' opinions on the remote provision of mental health services do not differ significantly in terms of their level of physical health ( $p > 0.05$  in all four comparisons). Essentially, this shows that students, regardless of their physical health (good, average or bad), have the same perceptions about the provision of remote and live counseling services for mental health issues. So, there is no one group that has a more negative or a more positive perception of remote psychic services. Essentially, both students in good physical health and students in poor physical health recognize the benefits of in-person and remote mental health counseling to the same extent.

According to Table 2, students recognize as the most important reason for receiving mental health services in their lifetime the symptoms of depression (mean = 4.1, SD = 0.9, MD = 4.0) followed by reasons such as problems with alcohol/drug use (mean = 4.0, SD = 0.9, MD = 4.0), bereavement/loss of a loved one (mean= 4.0, SD = 1.0, MD = 4.0) and anxiety/stress symptoms (mean = 3.9, SD = 0.9, MD = 4.0). Financial problems (mean = 3.4, SD = 1.1, MD = 4.0), and concerns about university-related issues (mean = 3.5, SD = 1.0, MD = 4.0) are recognized as the least important reasons for receiving mental health services in the lifetime. and concerns about weight or appearance (mean = 3.5, SD = 1.1, MD = 4.0).

**Table 2:** Results for the reasons for using remote mental health services

No.	Statement	1	2	3	4	5	Mean	Standard Deviation (SD)	Median (MD)
14.	I would use remote mental health services if I had:								
14.1.	Symptoms of depression	2.7%	13.6%	13.6%	46.4%	23.6%	3.7	1.1	4.0
14.2.	Symptoms of anxiety/stress	0.9%	15.6%	20.2%	46.8%	16.5%	3.6	1.0	4.0
14.3.	Problems with alcohol/drug use	5.5%	24.8%	11.9%	36.7%	21.1%	3.4	1.2	4.0
14.4.	Problems with my diet (e.g., bulimia)	2.8%	20.2%	11.9%	47.7%	17.4%	3.6	1.1	4.0
14.5.	Concerns about weight or appearance	1.8%	27.5%	17.4%	40.4%	12.8%	3.3	1.1	4.0
14.6.	Problems in developing close friendships (e.g., not having close friends)	3.7%	20.2%	20.2%	43.1%	12.8%	3.4	1.1	4.0
14.7.	Grief/loss of a loved one	2.8%	21.1%	16.5%	43.1%	16.5%	3.5	1.1	4.0
14.8.	Concerns related to university issues	1.9%	22.2%	19.4%	46.3%	10.2%	3.4	1.0	4.0

14.9.	Unwanted sexual experiences	8.3%	22.0%	14.7%	37.6%	17.4%	3.3	1.2	4.0
14.10.	Questions/concerns about gender identity	3.7%	21.1%	14.7%	45.0%	15.6%	3.5	1.1	4.0
14.11.	Concerns about relationships (e.g., with parents, partner, friends)	1.8%	16.5%	14.7%	52.3%	14.7%	3.6	1.0	4.0
14.12.	Financial problems	3.7%	26.6%	16.5%	42.2%	11.0%	3.3	1.1	4.0
14.13.	Breakup from a long-term relationship	4.6%	22.0%	11.0%	45.9%	16.5%	3.5	1.1	4.0

According to Table 3, undergraduate students are more likely to agree that universities could provide valuable support through online counseling,  $t(109) = 2.466$ ;  $p < .05$ , and with universities having the appropriate infrastructure to offer online counseling support,  $t(109) = 2.646$ ;  $p < .05$ . In contrast, graduate students are more likely to agree that universities should provide support for technical problems that students may encounter during online counseling sessions,  $t(109) = -2.129$ ,  $p < .05$ . Students with good or excellent mental health are less likely to agree that universities should provide support for technical problems that students may encounter during online counseling sessions,  $F(2,108) = 3.230$ ;  $p < .05$ . The results showed that remote counseling positively affects the availability and accessibility of psychological help. Students reported high levels of satisfaction with distance counseling services, noting that these services help alleviate barriers to access, such as geographic distance and time constraints. However, the study also identified challenges related to technology use and personal involvement, which can affect the overall effectiveness of distance counseling.

**Table 3:** Opinions on the methods of providing online counseling by universities based on education level

Statement	Education Level	N	Mean	Standard Deviation (SD)	t	p
Universities could offer valuable support through online counseling	Undergraduate	62	4.1	0.8	2.466	0.015
	Postgraduate	49	3.7	1.3		
Universities have the appropriate infrastructure to offer support through online counseling	Undergraduate	62	3.0	1.1	2.646	0.009
	Postgraduate	49	2.4	1.2		
Universities should provide support for technical issues students may encounter during online counseling sessions	Undergraduate	62	4.1	0.6	-2.129	0.036
	Postgraduate	49	4.4	0.7		
Universities should be flexible and adapt to the various needs of students	Undergraduate	62	4.4	0.6	-1.903	0.060
	Postgraduate	49	4.6	0.5		
Universities should have reliable platforms and equipment for the sessions	Undergraduate	62	4.5	0.6	-0.843	0.401
	Postgraduate	49	4.6	0.6		



## 6. Conclusions

This study not only validated the importance of distance counseling in the academic setting, but also highlighted the broader impact of these services on student well-being and academic success. The effectiveness of these services, as perceived by students, shows that distance counseling can indeed effectively meet various mental health needs. Students appreciate the flexibility and anonymity offered by distance counseling services, which can reduce stigma and encourage more young people to seek help. Findings also demonstrate that when implemented with careful consideration of privacy and security measures, online counseling can be as effective as traditional face-to-face interactions in supporting the mental health of the higher education population. Data analysis shows that students generally have good knowledge about remote mental health services. More specifically, most are aware of the existence and potential of online counseling and consider its services a viable alternative to traditional face-to-face sessions. Quite a large proportion of young people in higher education have received online counseling services in the past and are willing to turn to it again in the future if their mental or physical condition needs to be addressed. Even those students who have never received psychological support say they would attend sessions if they were provided free of charge. These findings prove that students, who are a very large part of the population, face several psychological and/or physical difficulties in their daily life and need support and counseling.

The frequency of choosing remote services varies according to personal preferences and needs. Most students seem to prefer using online services in cases where access to in-person support is difficult due to geographical, financial, or time constraints. Reasons for choosing online counseling over traditional face-to-face counseling include the accessibility, flexibility, and anonymity offered by online counseling. Students report that the ability to attend sessions from the comfort of their own homes and at flexible times are important factors in choosing distance counseling. Additionally, the anonymity afforded by online counseling allows students to express their concerns and feelings more freely without fear of social stigma. However, those who prefer traditional face-to-face counseling often cite a need for personal contact and a better understanding of counselors' nonverbal cues.

Regarding the various problems faced by students, it seems that anxiety disorders, depression, bereavement, and the use of addictive substances are the main factors for seeking psychological support. Social anxiety, difficulty in establishing interpersonal relationships, and concerns about weight and appearance especially direct female students to the choice of online counseling, since their life causes more anxiety and lack of self-confidence. This highlights the need for appropriate counselor training to address the specific needs of students based on gender and other demographic characteristics. Conversely, students who experience eating disorders, alcohol/drug addiction, or have suffered unwanted sexual experiences avoid remote counseling and prefer face-to-face interaction. This can be attributed to the sensitivity of these issues and the fear of leaking

information, leading them to choose the more direct, warm, less impersonal, and safe counseling.

The protection of personal data during remote counseling is one of the main concerns of students and is a criterion for its choice, which was also shown by the data analysis. Given the sensitive nature of psychological counseling, universities must prioritize the security and privacy of student data. Students significantly recognize the need for support with technical problems during online counseling sessions. Universities can address the need for online counseling services by developing and implementing comprehensive strategies that include improving technology infrastructure, training staff, and tailoring services to student needs. They should invest in strong technological infrastructures, stable internet connections, reliable, friendly, and secure platforms, and integration with other student services. They must also offer flexible session times and provide ongoing technical support to address any issues that arise. Additionally, offering multi-channel communication options such as video calls, phone conversations, and text messages can help meet the diverse preferences and needs of the student population. Another area in which universities should invest is in the continuing education of counselors in the nuances of remote service delivery. This training should cover not only technical skills but also methods of building relationships on digital platforms and handling sensitive discussions through virtual media. Counselors must develop and use communication strategies that are specifically tailored for online interactions. Techniques may include the use of graphics during sessions, interactive tools to monitor mood, and asynchronous communication options for ongoing support. Finally, distance services must be designed and delivered in a manner that is sensitive to the cultural background of a diverse student population. Counselors should be trained in cultural competency to better understand and address the unique challenges faced by international students or those from diverse cultural backgrounds.

### **6.1 Limitations of the Study**

While this research provides important insights into the effectiveness and student perceptions of distance psychological services in higher education, it is important to acknowledge the study's inherent limitations. Acknowledging these limitations is crucial to accurately interpreting the results and provides a framework for future research to capitalize on and address these gaps. Reliability analysis of the questionnaire showed that most dimensions had Cronbach's alphas above 0.7, indicating high reliability. However, sampling limitations and limited geographic focus may affect the results. Although efforts were made to ensure a diverse sample, participants mainly came from a few selected universities, which may not represent the wider student population in different regions or types of institutions. This limitation could affect the generalizability of the findings. Furthermore, the sample size, although adequate for statistical analysis, is still relatively small considering the global scope of higher education, potentially limiting the robustness and extrapolation of the results. Also, the sample was

predominantly female, which may have influenced the results, thus highlighting the need for more diverse and representative sampling in future studies.

The study was conducted over a relatively short period of time, which does not allow for the evaluation of the long-term effects of remote psychological services on students' mental health and academic performance. Longitudinal data would provide a deeper understanding of effects over time, including any lagged effects of interventions.

### **Conflict of Interest Statement**

The authors declare no conflicts of interest.

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