The Acceptance of Digital Health: What about Telepsychology and Telepsychiatry?

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Abstract

Technology is a solution to many issues, particularly in healthcare settings. Thus, using it in mental health is gaining greater prominence in clinical practice and is being provided by many institutions. The outbreak of the COVID-19 epidemic increased its adoption. There is an apparent disparity between the availability and uptake of e-mental health interventions in real-world uptake. Although this issue has largely been ignored in studies, evaluating the acceptability and perceptions of telepsychology and telepsychiatry to the individual is crucial. This study aimed to examine people's acceptance and use of telepsychology by adopting a technology acceptance model (TAM) that integrates perceived usefulness and perceived easiness. It is also to determine the advantages of this electronic health care based on the individual's perceptions and identify the most common mental disorders. The researchers carried out a cross-sectional study. This study aimed to examine the individuals' acceptance and use of telepsychology by adopting TAM that integrates perceived usefulness and perceived easiness. It also investigates the advantages of this type of care based on the individual's perceptions and identifies the most common mental disorders. The researchers carried out a cross-sectional study. The researchers performed a cross-sectional study. Multiple social media applications used, including Twitter and Telegram, distributed the survey among the respondents by (n = 444). Our findings supported the TAM model for predicting and explaining participants' acceptance and use of telepsychology. The result indicates that only 13.3% of respondents visited a psychiatrist or psychologist. Two hundred twenty-three respondents believe they have a psychological problem. Most view telepsychiatry and telepsychology services as useful, effective, and accessible. Moreover, according to the respondents' responses, telepsychology and telepsychiatry offer better privacy than the traditional method. Only four respondents lack access to electronic devices and the Internet. The security and privacy of patient's information should be investigated further when utilising telepsychology and telepsychiatry services. A longitudinal study is necessary for an accurate understanding of the TAM model's causal effects and stability over time.

Keywords: telehealth, telepsychology, telepsychiatry, online therapy, attitudes.

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Introduction

Human health has never been less critical throughout history. The survival of any society is dependent on the health of its individuals. Numerous initiatives are being undertaken worldwide to improve the population's health, particularly mental health. Increasingly, technology surrounds us and is used in a variety of ways. Electronic health (eHealth) capabilities are an excellent example of how technology can benefit individuals. By utilizing information and communication technology capabilities, individuals and communities can benefit from e-health by improving their quality of life and well-being. E-health, called telehealth, refers to providing health services remotely via technology and the internet. Technology refers to various technologies, from the simplest, such as email, to the most advanced. The overall level of satisfaction with telehealth services have been high among patients, providers, and health college students (Gros et al. 2018).

Nevertheless, healthcare workers and people outside the healthcare industry are unfamiliar with telehealth. Improved care delivery, reduced costs, and improved health outcomes can be achieved through telehealth (Totten et al. 2016). In Saudi Arabia, telehealth services can provide healthcare professionals with the ability to consult with caregivers in rural areas and provide behavioural interventions and other forms of support (Alkhalifah and Aldhalaan, 2018). Telehealth's ability to coordinate and deliver care was demonstrated in Saudi Arabia during the COVID-19 pandemic (Muzafar and Jhanjhi 2020; Rahman and Al-Borie 2021)

Mental health disorders are prevalent worldwide; many people suffering from mental disorders remain untreated or receive inadequate treatment (Kao et al. 2006). It is difficult for many people to access mental health services. However, some people can receive treatment and services as needed. South Asia has a substantial burden of depression among the region's populations (Ogbo et al. 2018). About one in five individuals in post-conflict settings have psychological disorders (Charlson et al. 2019). Depression is associated with a higher suicide rate among mental disorders (Moitra et al. 2021). Among the many documented consequences of not treating mental health problems are suicide, divorce, substance abuse, child neglect and abuse, and delinquency (Kim et al. 2001). Therefore, allowing individuals to have multiple methods for improving their general health, particularly their mental health, is an obvious requirement for achieving better population health.

It is common for college students to suffer from pre-matriculation disorders, which contribute to college attrition and are often untreated. It may reduce attrition and improve academic and psychosocial functioning during college years by detecting and treating these disorders early (Auerbach et al. 2016). Covid-19 has a negative impact on people's mental health on a global scale and locally; for instance, Saudi university students experienced depression, anxiety, and stress during the COVID-19 pandemic. Saudi Arabian university students should access psychological counselling and support (Mohammed et al. 2021). A study found that Saudi medical students are frequently stressed and sleep poorly (Almojali et al. 2017). Technological advancements have been tremendous in the past century, so this is a perfect time to utilize this technology to facilitate services that improve human health. Therefore, implementing and operating online healthcare is vital to address various individuals with different needs and locations. One valuable solution to treating and improving people's mental health is telepsychology and telepsychiatry methods.

Telepsychology refers to psychological services delivered via communication technology, such as mobile phones, email, messages, video conferencing, smartphone applications, and Internet-based software (for the Development, 2013). Many countries have implemented video-therapy services to assist those who require mental health care (Liu et al. 2020). The onset of the COVID-19 pandemic has resulted in a substantial change in the delivery of digital psychiatric services in the Arab MENA region, with many clinics and hospitals converting to digital mental health systems. There are also non-governmental organizations that provide remote counselling and support. There were three obstacles to

using telepsychiatry related to the patient, the healthcare system, and the system itself (El Hayek et al. 2020).

We found significant evidence supporting the use of telepsychology; for instance, patients with anxiety and depression showed clinical improvement and symptom reduction after six to eight weekly online web Cognitive behavioural therapy (Poletti et al. 2021). According to a group of therapists, a key advantage of telepsychology is its ability to reach geographically distant patients (Gordon et al. 2016). A growing body of research signalling a low willingness to engage in e-mental health interventions, either because people fail to use them or because they are not accepted, emphasizing the need to investigate these cases in greater depth (Eichenberg et al. 2013; Kaltenthaler et al. 2008)**.** The acceptance of such services has been largely overlooked in previous studies. Additionally, Hailey et al. (2008) indicated inadequate evidence regarding the long-term viability and benefits of telepsychiatric services as an integrated component of existing mental health systems (Hailey et al. 2008)**.** Moreover, examining the strengths and weaknesses of telepsychology applications for providing individual and group mental health care deserves more research attention (Egede et al. 2009). The socio-cultural factors that prevent individuals from embracing digital mental health also require further examination (El Hayek et al. 2020)**.**

This study examines respondents' perceptions of telepsychology and telepsychiatry services. Furthermore, to determine the most common mental disorders among the participants.   As part of this study, recommendations will be offered to improve telepsychology and telepsychiatry practice utilization. The main research questions are:

1- What are the individuals' perceptions of the usefulness of telepsychology and telepsychiatry services?

2- What are the individuals' perceptions of the ease of use of telepsychology and telepsychiatry services?

3- What are the most common mental disorders among the respondents?

The perceptions will be determined by applying the technology acceptance model (TAM) based on the survey responses.

Literature Review
Telepsychology and Telepsychiatry

Literature regarding telepsychology (particularly video conferencing) has grown exponentially in recent years (Simpson 2009). However, to our knowledge, no studies have specifically examined people's acceptance of telepsychology and telepsychiatry in Saudi Arabia. Using a telecommunication device for diagnosing and treating patients who are geographically distant from their physicians is known as telemedicine (Kuo et al. 2011). Telemedicine allows hard-to-reach patients to be diagnosed, referred, constantly monitored, and directly intervened (Hill et al. 2010).

Conducting a carefully planned evaluation of needs is an essential first step in implementing telemedicine services(AlDossary et al. 2017). The same applies to all telehealth services. The same applies to all electronic mental health services. The method of electronic mental health services was developed in psychiatry and has been widely used for many years, beginning in 1959 at the Nebraska Psychiatric Institute (Hyler and Gangure, 2002). Patients, therapists, and society can benefit from telepsychology through reduced healthcare costs (Morland et al. 2015). In recent years, mental illness patients have accessed a rising number of computer-based services (Walker 2006). Some evidence suggests that therapists found video conferencing to be an efficient means of communicating with children and teenagers (Himle et al., 2012) .In online therapy, the therapist and consumer quickly adapt to this type of communication. Online telepsychology is anonymous, and only relevant personnel will be aware that a patient has requested the service (Bauman and Rivers 2015).

Moreover, a therapeutic relationship can be strengthened through online communication, and online psychotherapy is often regarded as equal to or superior to in-person therapy (Mishna et al. 2017). Patients benefit from online psychotherapy by being flexible to change therapists at any time (Finfgeld 1999). Another advantage of online psychotherapy is its ease of maintaining records and making transcripts available to all authorized parties, decreasing the risk of malpractice and litigation. (Norman 2006; Li et al. 2013).

During the COVID-19 pandemic, patients highly rated telepsychiatry services as part of the university's online mental health services. Participants were satisfied with the structure, process, and outcome, and 94.3 % were pleased with the overall experience. Online psychotherapy may be a suitable treatment option in the event of psychiatric conditions that prevent traditional in-person services, such as agoraphobia, social anxiety, or other illnesses that preclude physical contact. (Fitzgerald et al. 2010). In patients with schizophrenia, it appears possible to utilize phone, internet, and videoconferencing modalities. According to preliminary evidence, these modalities improve patient outcomes (Kasckow et al. 2014). Online psychotherapy can also be used with in-person therapy or as an alternative solution (Johnson 2014). Research and program development in telepsychology will develop specialized mental health services for outpatient clinics through videoconferencing technology with an empirical demonstration of its superiority and cost-effectiveness (Egede et al. 2009). It has been demonstrated that online psychotherapy is less expensive (Barnett and Scheetz 2003). There is no discernible difference between telephone, videoconference, or face-to-face sessions regarding empathy or therapeutic (Reese et al. 2016).

Most consumers indicated that the telehealth models are valuable and should be maintained. A videoconferencing technology was not an obstacle; however, electronic health record documentation did pose a challenge (Howland et al. 2021). Telepsychology providers may work when they are unavailable during the usual working hours. Due to telehealth, healthcare workers can work on weekends, evenings, and holidays. Access to healthcare providers can be helpful for consumers in times of need, but it can also be cumbersome for healthcare providers (Drum and Littleton 2014). Traditional health care organizations may improve therapeutic relationships, reinforce appropriate therapeutic boundaries, and provide their patients a sense of security and safety (Knapp and Slattery 2004). A telepsychology service is not always provided in a proper professional setting; there is a potential for some healthcare providers to work in not an adequate environment.

Some critiques of this electronic mode have been, including concerns about privacy, HIPAA compliance, and legal implications (Sampaio et al. 2021). Gordon et al. (2015) and Schulze et al. (2019) pointed out that psychotherapists' attitudes toward telepsychology were surveyed, and videoconferencing treatments were seen as less effective than face-to-face therapies (Gordon et al. 2015; Schulze et al. 2019). Research does not support a sustained adoption of behaviour therapy online or in a blended method (van Leeuwen et al., 2021). Often, people with mental health issues, including the elderly, lack the necessary knowledge of technology (Robotham et al. 2016).

Moreover, the lack of nonverbal cues during therapeutic interactions is undoubtedly one of the most frequently discussed disadvantages, mainly when text-based media or telephones. It can lead to misunderstandings and miscommunications (Bauman and Rivers, 2015). Non-verbal communication, particularly body language, can convey powerful messages. A message is influenced by more than just the tone, pitch, volume, quality, and speed of the voice. Body language can contradict the message conveyed with words, substitute for the verbal message, or contribute to its meaning.

Postdoctoral students performing telepsychology faced technical difficulties and inadequate connectivity. They also had difficulty deciding whether to provide services to a client unsuitable for outpatient telepsychology, but they had few other options (Dopp et al. 2021). Telepsychology group training was not without its challenges, and mainly family interruptions were more common than in-person training. Distracted caregivers only listen to parts of the group discussion and respond off-topic,

disruptively, or disorganized. Furthermore, caregivers may have difficulty distributing handouts and other materials to clients (Fogler et al. 2020). The uncertainty surrounding ethical and legal issues is a significant barrier to expanding online psychotherapy (Chakrabarti 2015). Recent obstacles impeded COVID-19's transition to telepsychology, including insufficient healthcare organizations' capacity, scheduling conflicts, technological limitations, and accessibility issues (Perrin et al. 2020). In light of the COVID-19 pandemic, specific population segments have received little attention, despite well-documented health disparities and mental illness risks (Pankey et al. 2021).

Ethical and Legal considerations

Numerous patients seek psychotherapy online, and therapists must consider the ethical implications (Cipolletta and Mocellin 2018). Thus, due to the differences between online and in-person therapy, online therapy requires a different type of informed consent than in-person therapy (Maheu et al. 2013). Online psychotherapy can pose privacy, confidentiality, and security concerns if conducted using unencrypted, unsecured websites or commercially available software that can easily be hacked (Childress and Asamen 1998; Fantus and Mishna 2013; Heinlen et al. 2003). Besides being well versed in ethical principles and standards, therapists should also be familiar with legal and regulatory requirements (Johnson 2014). There are inadequate or no telepsychology regulations and standards in some parts. Online psychotherapy is not guided by explicit ethical guidelines, leading to many ethical concerns (Finfgeld 1999). Saudi Arabia's regulations governing the implementation of telepsychology services exist and indicate that to practice this healthcare method, multiple processes and procedures must be implemented, including all legal and ethical requirements applicable to psychologists practicing the traditional method. Ensure that telepsychology service organizations adhere to all applicable legal requirements. Telepsychology in Saudi Arabia must be video based. A synchronization process is not necessary. Telepsychology practices must abide by Saudi Arabia's policy for exchanging health information, including all applicable security and privacy requirements. Telepsychology training is mandatory for all psychologists before they can practice telemedicine (Alqahtani et al. 2021).

Technology Acceptance Model (TAM)

TAM is a model proposed by Davis (1989) that explains or predicts the factors that affect a user's decision to accept or reject information technology. Many models, including the TAM, examine people's attitudes, behaviours, and social intentions. Furthermore, the intention to use a particular system influences people's behaviour toward adopting information systems (Aldosari et al. 2018; Durodolu, 2016). Specifically, Davis (1989) identifies two primary beliefs that affect how people use information technologies: the perception of their usefulness and the perception of their ease of use. An individual's perception of a system's usefulness is defined as the degree to which he or she believes the system will improve his or her performance at work (Davis 1989). A person's perception of ease of use refers to the degree to which he or she believes using a particular system would be effortless (Davis 1989). Figure 1 describes the TAM by (Davis 1989). Figure 2 shows the conceptual model of this study.
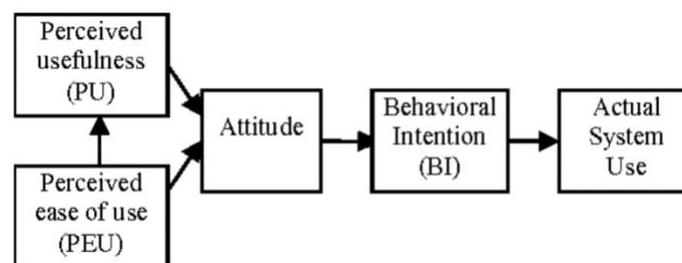
Figure 1. Technology Acceptance Model (TAM) (Davis, 1989)
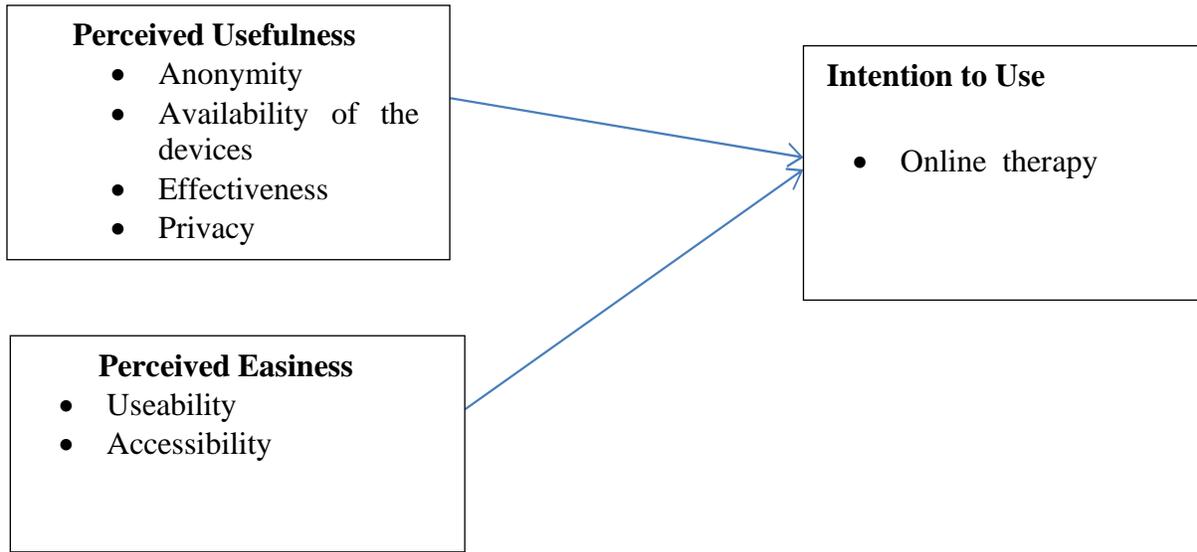
Figure 2. Source: Developed by the author based on literature review (2022)

Methodology

Research Design, Data Collection Procedures, Population and Sample

In this study, the researchers performed a cross-sectional study. *Multiple social media applications, including Twitter and Telegram, distributed the survey among the respondents. The questionnaire was assessed and evaluated by a group of experts at the University of Hail before being disseminated to the population. A random distribution method was used for the distribution of the survey.* The survey included fifteen items and the results aligned with the study objectives. Participants in the survey were asked demographic questions to provide essential study information, including their age and location. The second part was centred on obtaining telepsychology and telepsychiatry data in Saudi Arabia. The researchers applied the TAM by Davis (1989). Four indicators determine the perceived usefulness and the perceived easiness by two.

Additionally, the study seeks to determine respondents' general perceptions of their mental health. An expert in educational psychology and school counselling, assisted in developing and evaluating the questionnaire questions. Before the survey's release, necessary adjustments and interpretations were made to clarify the survey. On November 23, 2021, the survey was distributed to the population, and individuals with varying characteristics attempted to acquire reliable evidence (Figure 3).

Figure 3. Research Study Approach

Data Analysis

In order to verify the accuracy and validity of the survey results, we have tested the data several times. An examination of the perceptions of the sample has been undertaken through descriptive analysis. The statistical software package SPSS was employed to analyze the data in this study. Measurements were evaluated for their reliability and construct validity. It was necessary to conduct the reliability analysis to ensure the internal validity and consistency of the items used in each variable.   Cronbach alpha values of 0.6 to 0.7 are deemed acceptable by Hair et al. (1992). Alpha values of 0.7 and greater represent homogeneity, and the same constant is being measured. The measurement scales are shown in Table 1.

Demographics of Respondent

Table 1 indicated 115(25.9%) males and 329 (71.1%) females. Most of the respondents are under the age of 30, and there are only two respondents over the age of 48. The mean age was 31.52 (SD 10.29) years. 30% of the respondents live in the country's north, while 29.5% live in the centre. Twenty-two per cent of the area is in the West, fourteen per cent is in the South, and only four per cent is in Estren.

Table 1. Respondent Demographics

Demographics		Number of Respondents	Percentage
Gender	Males	115	25.9%
	Females	329	71.1%
Age	From 18 to 23	222	50%
	From 23 to 28	101	22.7%
	From 28 to 33	46	10.4%
	From 33 to 38	39	8.8%
	From 38 to 43	25	5.6%
	More than 43	9	2%
The location of the city in Saudi Arabia	In the centre of Saudi Arabia	131	29.5%
	West of Saudi Arabia	94	21.2%
	North of Saudi Arabia	133	30%
	South of Saudi Arabia	66	14.9%
	Eastern of Saudi Arabia	20	4.5%

Results

The researchers developed the second section of the questionnaire to obtain information about individuals' mental health perceptions and attitudes toward telepsychology and telepsychiatry. On the first item of the questionnaire, we inquired whether the participants had ever visited a psychiatrist or

received psychological counselling. Figure 4 shows that most respondents (86.7%) (385) had not sought mental or psychological support during their lives, while only 13.3% (59) had. In general, women are more likely to participate in surveys and fill them out than men. Furthermore, when distributing the survey on social media applications, researchers observed that most users on social media were women.

I have seen a psychiatrist or a psychological counselor during my life.

Yes, 59

No, 385

■ No ■ Yes
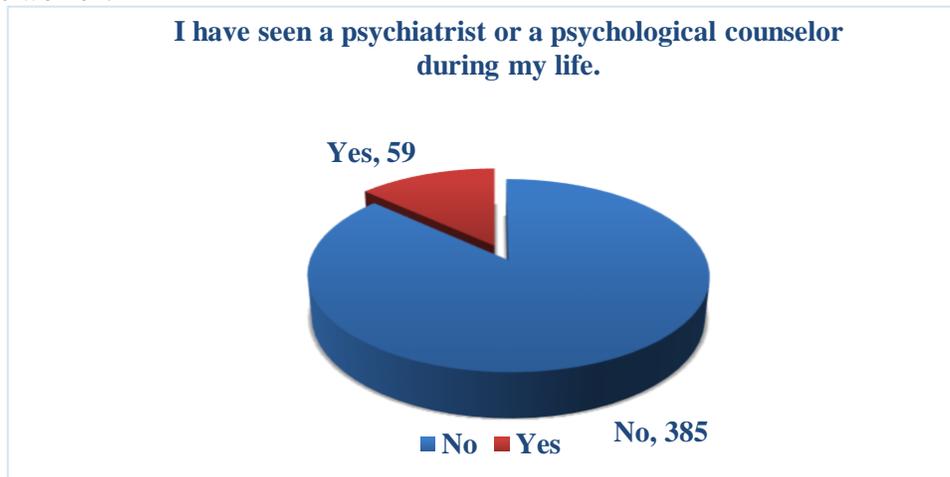
Figure 4. The visit of a psychologist and psychiatrist.

From the data in Table 2 regarding the first item, most of those surveyed indicated agreement in believing that they have a psychological problem, with 223 respondents. More than half the participants, 65.3%, do not consider embarrassment and fear of public opinion the significant factors for not seeking mental health support. Three hundred five people consider online psychological counselling a valuable tool, whereas 48 disagree. Furthermore, 294 respondents reported that remote psychological counselling would provide greater privacy than face-to-face counselling, and only 72 disagreed with the statement. Item 4 below aimed to assess the availability of electronic devices and the internet; 419 out of 444 participants agreed to have the required technology to access the electronic services. Moreover, 411 claimed they are familiar with using the technology. Most of them indicated that they would not require transportation when using these electronic health services by 414 respondents, and only nine claimed otherwise. Table 3 describes the Cronbach Alpha values.

Table 2. Participants' perceptions of their mental health and telepsychology and telepsychiatry services.

No.	Item	Scale					Mode	Mean	Std. Deviation
		1(f)	2(f)	3(f)	4(f)	5(f)			
1	Embarrassment and fear of society are two main reasons preventing going to a therapist/counsellor.	151	139	57	50	47	1	1.331081	1.328903
2	I Feel that remote psychological counselling is an effective way to avoid and treat many problems.	177	128	91	36	12	1	2.840090	1.018615
3	Using technology such as electronic devices in psychological treatment/counselling instead of going to the concerned centres will provide much higher privacy than the traditional method.	136	158	78	47	25	2	2.750000	1.16306
4	I have the electronic devices and internet needed to access telepsychology and telepsychiatry services	403	16	5	2	11	1	1 1.213964	0.764142
5	I am familiar with using technology and mobile application	408	3	0	9	10	1	1 1.491984	0.9104142
6	By adopting the telepsychology and telepsychiatry services, I do not need transportation to reach a therapist, a psychological counsellor/ psychiatric	414	4	15	1	8	1	2 1.411964	0.964142

Note: 1: total disagree, 2: disagree, 3: neutral, 4: agree, 5: total agree, f=frequency

Table 3. Cronbach's alpha

Scale	Cronbach's alpha	Items
Perceived Usefulness	0.806	4
Perceived Easiness	0.859	2

The result below is analysed and interpreted based on the items above from the questionnaire. Table 4 provides insights into the participants' perspectives on the six determinants for the advantages of telepsychology and telepsychiatry services: anonymity, availability, effectiveness, privacy, useability and accessibility. The perceived usefulness accounted for the availability by solid agreement, while the perceived easiness was the accessibility higher than ease of use by 69% and 66.3%, respectively.

Table 4. Perceived Usefulness and Perceived Easiness

Perceived Usefulness	Anonymity	Availability	Effectiveness	Privacy
Mean	1.3311	1.213964	2.9101	2.7500
Mode	4 (agree)	5 (strongly agree)	4 (agree)	4 (agree)
Median	1.0000	1.0000	3.0000	3.0000
Std. Deviation	1.32890	0.764142	1.01861	1.16306
Perceived Easiness	Useability		Accessibility	
Mean	2.8401		1.411964	
Mode	4 (agree)		5 (strongly agree)	
Median	2.0000		1.0000	
Std. Deviation	1.01861		0.964142	

Table 5 indicates the prevalence of conditions among respondents. General anxiety was the most prevalent condition (41.4%), followed by social anxiety (26.3%) and depression (23%).24.3% of respondents reported that they did not have psychological or behavioural problems, and 11.7% had other disorders than what was given in the survey. Only 14 out of 404 participants reported dealing with aggression, a minor disorder.

Table 5. The distribution of disorders

No	Distribution of Disorders Among Respondents	Frequency	Percentage
1	Depression	102	23%
2	General anxiety	184	41.4%
3	Social anxiety	119	26.8%
4	Aggression	14	3.2%
5	Daydream	45	10.1%
6	Sleeping *disorders*	106	23.9%
7	Eating disorders	68	15.3%
8	Obsessive-compulsive disorder (OCD)	44	9.9%
9	I do not have any psychological or behavioural problems	108	24.3%
10	Others	52	11.7%
▪ Mean			4.631579
▪ Std. Error of Mean			0.108213
▪ Median			3.000000
▪ Std. Deviation			3.056902

The researchers included a statement intended to assess the perceptions of the family regarding the acceptance of mental health services in general. Interestingly, most respondents (64%) believe their families do not refuse and accept assistance from mental health professionals when needed. Only 12% disagree, as demonstrated in Figure 5.

My family is reluctant to go to a therapist or counsellor.

53

108

283

■ Yes ■ Netural ■ No
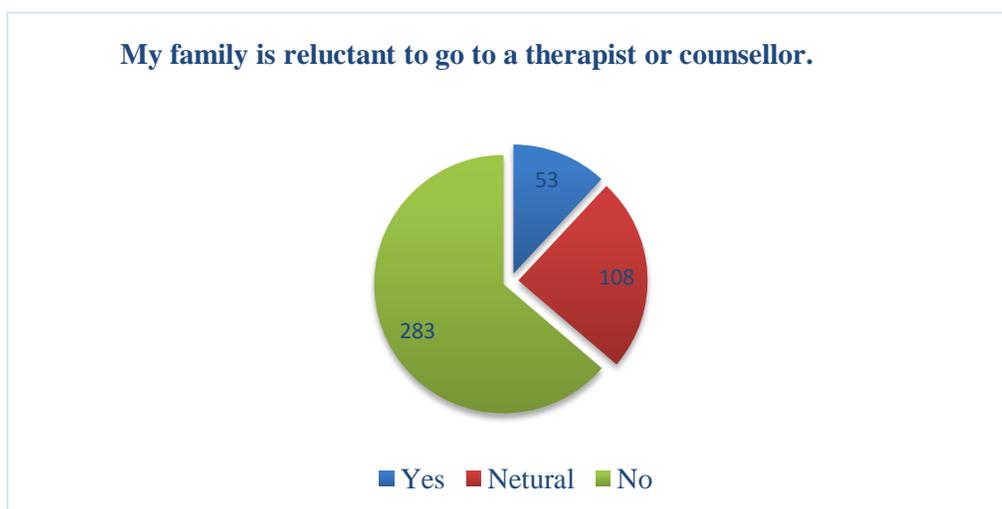
Figure 5. Family acceptance of the mental and psychological services

Table 6 is about the availability of devices and internet access. To identify the rate of participants who have independent, smart devices and access to online services, we have asked the following question in

the survey: Do you have your smart electronic device (mobile, iPad, or laptop) with an internet connection? As expected, only a fraction of them did not have access to their own electronic devices and did not have access to the internet, which is relatively consistent with a recent study in the country (Alhur 2021). Of 440 respondents, merely four were without such devices and internet connectivity.

Table 6. Smart devices and internet availability

Do you have an internet connection with your smart electronic device (mobile, iPad, laptop)?		
Yes, I do	440	99.1%
No, I do not	4	0.9%
Mean		222.000000
Std. Error of Mean		218.000000
Std. Deviation		308.298557

Considering that the analysis is based on respondents' opinions, we can conclude that one of the primary motivations for using remote mental health services is higher privacy than physical attendance. Moreover, since online mental and psychological services do not require transportation, individuals can access them whenever and wherever they want, followed by the ability to use and access the electronic mental services even if the family or guardian does not approve or believe in them.

Discussion
As far as we know, no study has investigated the individuals' attitudes toward telepsychology or telepsychiatry in Saudi Arabia. According to this study, only 59 out of 444 respondents visited mental and physical health providers; multiple factors may lead the individuals not to ask for mental or psychological assistance, including religion; according to several researchers, significant religious factors prevented religious individuals from receiving this type of support (Nakash et al. 2019). Moreover, young adults are unaware of mental health problems and treatment options, contributing to mental care barriers (Vanheusden et al. 2008). According to a recent study, the stigma associated with mental illness is one of the significant obstacles to seeking mental or psychological support (Martinez et al. 2020). Researchers found that COVID-19 negatively impacted friendships and loneliness, contributing to anxiety and psychological distress among Australian adolescents. The pandemic affected the work of half of those surveyed, and the remaining majority indicated that societal fear was not a significant obstacle (Li et al. 2021).In contrast, Martinez et al. (2020) discovered that stigma associated with mental illness prevents many individuals from seeking treatment (Martinez et al. 2020).

A closer inspection of table 2, item 3 reveals that remote psychological counselling and support effectively avoids and treats many problems. It is revealed that 68.7% fall between strongly agree and agree while only 10.7% fall between strongly disagree and disagree. Our results share many agreements on the effectiveness of online mental support findings. Additionally, 2020 in that even the use of ICT in school counselling does not cause any negative feelings or anxiety among counsellors, which indicates it is practical and an effective endorsement for employing this practice. Regarding privacy and security concerns with providing health care by using technology, researchers concluded that telehealth systems might not improve healthcare access, quality, and effectiveness when privacy and security concerns are not addressed. In our findings, various respondents reported that telepsychology and telepsychiatry have more privacy than face-to-face visits. Therefore, it is wise to consider consumers' privacy as one of the critical aspects of using this type of support. Watzlaf (2017) suggested that health care providers must implement standard best practices for all types of telehealth services to address privacy and security concerns. Prior to using a telehealth system, a privacy and security evaluation must be conducted to

ensure the privacy and security of the patient's health information (Watzlaf et al. 2017).

There is a high rate of anxiety, and alcohol-related problems among Italian adults, while in our analysis, we found that the highest percentages were general anxiety, social anxiety, and sleeping disorders, respectively (de Girolamo et al. 2006). Mental disorders may adversely affect young people's ability to obtain an education, start a family, and enter the workforce (Gustavson et al. 2018). Thus, multiple necessary actions need to be taken to ensure that the young individuals and all the population, in general, have a superb mental health condition; one conceivable way is utilizing the available and affordable technology. Based on the results, we found a much higher level of family acceptance and understanding of mental health issues than those reported by Vicente et al. (2013); it appears to be hard for a family to accept a patient with a mental illness at home. Families should cope with and assist any family members dealing with any mental issue (Vicente et al., 2013).

Conclusion

Through this study, we examined participants' perceptions of telepsychology and telepsychiatry. We use the TAM model to describe why people accept technology use (telepsychology), which considers TAM factors (usefulness), and the other factor is perceived benefits. Besides assessing device availability and internet access, the researchers also assessed the prevalence of mental health disorders among respondents. These results confirm the validity of the TAM model in measuring telepsychology and telepsychiatry acceptance and use. The current study indicates that the usefulness and ease of use predict the acceptance of telepsychology and telepsychiatry. Research findings on telepsychology and telepsychiatry are in accordance with the extensive literature on the acceptance and use of new technology, particularly eHealth acceptance and use (Hennemann et al., 2017; Mattila et al., 2017)

The availability of electronic devices and the internet and its perceived advantages also played a relevant role in increasing telepsychology and telepsychiatry acceptance and use. These factors determined participants' perceptions of telepsychology's usefulness, which affected their acceptance of using it. Our study focuses on increasing understanding of the factors influencing consumers' eHealth technology acceptance instead of focusing on the acceptance of health care professionals. However, further research should be carried out to understand specific barriers and perceived usefulness when the intervention involves minimal or nonexistent contact with professionals.

There are several limitations to the current study, including the fact that all the measures were completed by participants, making it likely that differences between measures would occur. It would be beneficial to use other measures in future studies. Furthermore, this study used a cross-sectional research design. Therefore, causality could not be inferred. A longitudinal study is required to determine the causal effects and stability of the TAM model over time.

The third limit is that we collected data using convenience sampling, restricting our findings' extrapolation, particularly in clinical settings. Moreover, 71.1% of the sample was female. The composition of our sample could have affected our results, making generalizing them to a male population difficult. Nevertheless, psychotherapy services are also more prevalent among women than men. Replication and validation of our findings will be needed.

It is crucial to conduct more research on telepsychology and telepsychiatry, particularly from the users' perspectives. In order to provide interventions that meet consumers' needs and minimize perceived barriers, consumers are a vital part of the improvement of tools and platforms. Optimizing the engagement of participants in interventions is a key aspect of achieving successful treatment outcomes. A significant component of successful treatment outcomes is optimizing participant engagement during interventions. As a result of the pandemic crisis, consumers and professionals may have begun to

perceive online psychotherapy differently. Our study found that telepsychology requires a positive perception focusing on its benefits. Most of the participants reported positively regarding telepsychology and telepsychiatry. Van Voorhees et al. (2013) demonstrated that clinicians' attention to consumers-centred information aimed at intrinsic motivation led to greater adoption of an e-mental health intervention in this area.

These results emphasize the importance of investigating consumer needs to achieve a higher rate of adoption. We recommend that healthcare providers carefully consider a wide range of aspects before implementing remote health services, especially in mental health, which includes ensuring the appropriateness of the online sessions of both parties are proper and do not contain any distractions. Furthermore, during the implementation of this method of mental health care, the providers must ensure the privacy of the individuals' health information by some vital measures such as avoiding using public Wi-Fi networks to protect consumers' health information from unauthorized individuals.

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