PAPER

Students' Perception of Using ChatGPT in Counseling and Mental Health Education: The Benefits and Challenges

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ABSTRACT

ChatGPT is an artificial intelligence (AI)-based chatbot that has expanded in popularity among users in several fields. It could transform education and support achieving sustainable development goals. Providing counseling and mental health services is a vital national goal for maintaining sustainable goals. As evidence of innovative technology's ability to support sustainability in the digital era, no study has been found to investigate ChatGPT in counseling and mental health education based on students' perceptions and experiences. Consequently, this study aimed to explore undergraduates' perceptions in terms of the benefits and challenges of using ChatGPT in counseling and mental health education. The study adopted a descriptive quantitative approach using a purposive sample comprising 210 respondents who enrolled in the counseling and mental health program at the University of Jordan and experienced ChatGPT in their learning. The results reported that 81.9 percent of respondents perceived ChatGPT as a beneficial learning tool for counseling and mental health ($M = 4.10$); they perceived their ability to support most of the primary counseling skills and therapeutic conditions as the counseling dispositions and behaviors expected for reflection on meaning skills, empathic care, setting boundaries with colleagues, openness to feedback, congruence and genuineness, ability to record-keeping and task completion, and non-verbal skills. Furthermore, the findings reported that students experienced moderate challenges and concerns while utilizing ChatGPT ($M = 3.21$). The study's findings suggest educators in counseling and mental health employ ChatGPT in the teaching and learning process. In addition, it proposes that decision-makers at the University of Jordan consider student concerns about ChatGPT.

KEYWORDS
ChatGPT, counseling, mental health, perception, chatbot, education

1 INTRODUCTION

Providing access to high-quality healthcare services for all individuals is a national objective. Moreover, mental health or counseling services relate to sustainable development in all countries [1]. Therefore, higher education institutions (HEI) try to enhance the quality of counseling and mental health programs to provide communities with competent counselors and therapists who have the essential competencies of counseling to practice the counseling profession and promote the well-being and development of individuals, which ultimately helps a nation develop economically and socially.

The accrediting organization helps ensure an acceptable level of quality in degree programs in HEI, more particularly in counseling education; the Accreditation of Counseling and Related Educational Programs (CACREP) has developed standards to ensure that students who complete accredited counseling degree programs have the essential knowledge and skills for entry into practice [2]. Furthermore, these standards have explicitly illustrated technology integration with counseling, highlighting their influence on the counseling process and clinical supervision [3]. Therefore, counselor instructors and supervisors should employ effective technology in their practices and teaching methods to prepare their students for counseling and acquire the essential ethics, knowledge, and skills of counselors. Consequently, researchers and counseling instructors have utilized numerous technological resources to improve educational and clinical results in counseling [4]. Despite this, the intention of utilizing technology in counseling is mainly as a platform for transferring information or as a channel for communication (i.e., between instructors and students or counselors and clients) [4]. This highlights the need to conduct a study that involves the ability to employ innovative technology in counseling education, i.e., ChatGPT.

ChatGPT is a recently developed innovative technology based on artificial intelligence (AI). Researchers have investigated their potential and advantages in several educational fields, such as language learning, dentistry, pharmacy, public health, mathematics, engineering, marketing, science, and medicine [5–12]. But no study has been conducted that involved students experienced in using ChatGPT in counseling education, despite the importance of this educational field. Therefore, this study is aimed at investigating students' perceptions of using ChatGPT in counseling and mental health education among the counseling and mental health undergraduates at the University of Jordan and exploring their challenges while using it in their learning.

The following section analyzes the theoretical framework and the recent previous studies related to using ChatGPT in counseling and mental health education; the next section explores the research methodology; then the research results are presented and discussed; and finally, the paper ends with a conclusion.

2 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 ChatGPT in the educational context

Open AI developed and released ChatGPT as a conversational AI chatbot in November 2022 [13]. It has gained the attention of 100 million users within two months [14], has been trained on extensive amounts of data, and generates text based on user prompts. In addition, it is programmed to comprehend human speech and respond appropriately to questions [15].

The promise of ChatGPT in the field of education lies in its ability to provide students with tutoring and help, promote tailored learning experiences, offer research support, and boost students' involvement [16]. ChatGPT enables the retrieval of information, addresses particular inquiries, and aids in the generation of codes, calculations, and statistical analyses [15]. A study [17] has shown that ChatGPT has the capability to revolutionize the field of medical writing. This is attributed to its ability to provide a rapid and effective approach, extract pertinent information, assist in doing literature searches, and develop a first draft. Additionally, this tool enhances the efficiency of medical writers' workflow, enabling them to concentrate on the process of improving and elaborating the material. Furthermore, the scholarly study authored by [18] outlined the supplementary advantages of ChatGPT in the realm of education. These include its ability to facilitate individualized and interactive learning, provide formative assessment, and provide valuable feedback.

Prior studies have indicated that the capabilities of ChatGPT exhibit variability across different academic disciplines. For instance, [13] conducted a review study that covered 50 papers. Through content analysis, it was shown that the proficiency of ChatGPT exhibits variability across different academic fields, ranging from outstanding to unsatisfactory. Additionally, the findings of the study indicated that ChatGPT has the potential to serve as a virtual tutor for students. As a result, researchers have conducted research using various study approaches to investigate the limitations, prospects, or future capabilities of ChatGPT within distinct academic disciplines [5–12].

In the domain of medical education, Sallam (6) conducted a comprehensive review of 60 scholarly articles. Through their analysis, Sallam identified various capabilities for utilizing ChatGPT in medical research and practice. These include the potential for cost reduction, personalized treatment approaches, enhanced health literacy, improved customized learning experiences, and the facilitation of problem-based learning. Additionally, the study identified other concerns, such as copyright infringement, potential prejudice, instances of plagiarism, accuracy deficiencies, insufficient information, improper citation practices, and legal and ethical dilemmas pertaining to security. Furthermore, [19] demonstrated that ChatGPT provides an interactive educational experience that fosters a secure setting for medical learners to practice their communication skills and diagnostic techniques by simulating interactions with patients; additionally, it aids in the improvement of reading and writing skills by summarizing scholarly articles and generating abstracts, while also assisting with assignments and exam readiness. Conversely, the research underscored ethical considerations pertaining to the inappropriate utilization of ChatGPT, such as engaging in academic dishonesty by using it to cheat on assignments or tests, thus impeding students' ability to engage in critical thinking and foster creativity.

The research conducted on ChatGPT primarily employed an exploratory study approach, wherein interviews were conducted with ChatGPT and its responses were afterward analyzed to assess both the potential and limits of the system. As an illustration, descriptive research was undertaken by [7] to examine the benefits and drawbacks of employing ChatGPT in the field of medical education, as well as to evaluate its content through expert evaluation. The prompts fed into ChatGPT were formulated by experts in the medical domain. The examination of ChatGPT's responses to these prompts yielded findings that indicate the potential for ChatGPT to augment individualized learning and clinical reasoning, as well as facilitate the understanding of intricate medical ideas. However, the findings underscored several constraints, such as apprehensions over privacy, the possibility of prejudice and erroneous information, and the peril of diminishing abilities in communication and

critical thinking. In a similar vein [20], the creator and publisher of JMIR Publications carried out research that used an interview with ChatGPT to look at its capabilities in medical education. The examination of the dialogue underscored the capacity of the individuals involved to provide tailored educational encounters, provide a simulated patient experience in a digital format, and develop quizzes for students studying medicine.

The literature on ChatGPT also revealed cultural differences; in this regard, [21] carried out a study to gauge ChatGPT's efficacy globally. The research examined the replies generated by ChatGPT in order to assess the extent of variances in human cultural differences. The findings suggest a preference for the American cultural environment in ChatGPT since it exhibits a high degree of alignment with American culture and a relatively lower level of adaptation to other cultural settings. However, some research has shown several limitations of ChatGPT. These drawbacks include the lack of empathetic capabilities, limited contextual understanding, challenges in scalability, and the need for human supervision [22]. A study by [23] revealed that ChatGPT lacked emotional intelligence, which made it difficult to recognize and react to emotional signals accurately. Additionally, [24] emphasizes that the system's domain knowledge is only applicable to the training data.

Previous research on students' perspectives and experiences of utilizing ChatGPT in educational settings was found to be limited. Consequently, researchers turned to studies that have explored generative AI technologies, namely chatbots, for relevant insights. Chan and colleagues [25] performed descriptive research in Hong Kong to investigate students' attitudes regarding the utilization of generative AI (GenAI) technologies in the field of education. The study encompassed a sample of 399 undergraduate and postgraduate students across several academic disciplines, revealing generally positive attitudes towards the utilization of GenAI technologies in the context of education. Nevertheless, the student's perceived its potential to support individualized learning, writing, and research, and the study identified several difficulties pertaining to validity, privacy, and ethical aspects. Furthermore, a two-stage study was undertaken by Shoufan [26] to examine the attitudes of 56 senior students in a computer engineering program about the utilization of ChatGPT for educational purposes. During the initial phase of the study, participants actively participated in a learning exercise, after which they proceeded to offer their assessments of ChatGPT. Subsequently, the assessments conducted were subjected to analysis in order to construct a questionnaire, which was subsequently administered to the participants during the subsequent phase of the study. The results of the study indicated that students had a perception that ChatGPT was characterized by qualities such as engagement, motivation, and educational value. The participants reported a perception of ease in utilizing ChatGPT; nonetheless, a notable proportion expressed apprehensions over the veracity of the data supplied by the system.

Additionally, [27] conducted a sentiment analysis study with the objective of analyzing the experiences of learners in an informal context through interactions with many chatterbots on the Internet. The findings of the study indicate that individuals exhibit an interest in and a willingness to engage in dialogue with chatbots. In a similar vein, research undertaken by [28] aimed to examine the perceptions and intentions of students towards the utilization of ChatGPT inside a university in Ghana. The study employed a mixed-methods approach, gathering both quantitative and qualitative data. The subsequent analysis of the data indicated that students had a favorable view toward the utilization of ChatGPT. Nevertheless, existing scholarly works on ChatGPT have yet to explore students' experiences of using ChatGPT within the realms of counseling and mental health education.

2.2   Counseling and mental health education

Counselor education is an academic discipline rooted in educational and vocational guidance, counseling, human development, supervision, and clinical practice. The core of counselor education programs is to prepare and provide training for students to become professional counselors by equipping them with the necessary skills, knowledge, and ethics to effectively practice [3]. A competent counselor indicates she or he possesses the essential ethics, skills, and knowledge for the counseling profession [29]. Accrediting organizations established standards to assess the caliber of educational programs provided by HEIs; for instance, the American Mental Health Counseling Association (AMHCA) [30] set standards for the practice of mental health counseling and the Council for Accreditation of Counseling and Related Educational Programs (CACREP) set standards for counselors [31]. Regardless of the type of accrediting agency, it must apply and impose standards that guarantee the adequate quality of the educational programs offered by an HEI [32]. CACREP means a commitment to maintaining excellence in counseling programs [3]. However, counselor educators are responsible for preparing their students for the profession, so they should follow up on their students' developments, assess their counseling competencies, and provide them with feedback and support.

Competency measures were developed to help counselors, instructors, and supervisors assess students' counseling competencies. These measures indicate the areas of weakness and strength that the students had. Therefore, researchers developed instruments to evaluate counseling competencies, but the majority of these instruments assess specific areas of competencies [33–34]. For example, [35] developed a measure for the Cross-Cultural Counseling Inventory (CCCI) based on the American Psychological Association Division (APAD). In contrast, [34] developed a valid and reliable counseling competencies scale (CCS) that comprised 23 items distributed over two subscales: a) counseling skills and therapeutic conditions (12 items) and b) counseling dispositions and behaviors (11 items). CCS helps counselor educators prepare highly qualified, competent counselors and therapists. However, counselors, instructors, and supervisors should use the latest pedagogical methods to ensure the best instructional practices.

In light of the above literature, HEI should keep enhancing the quality of counseling and mental health programs they offer by aligning their program's learning outcomes with the international standards for the counseling profession and periodically evaluating their counselor students' competencies using a valid, reliable measure. In addition, innovative technology, i.e., ChatGPT, could support counseling education; therefore, it could help HEI prepare qualified students to become productive individuals in their society and support their country's sustainable development.

2.3   Technology integration in counseling and mental health education

There has been a dramatic rise in the incorporation of digital tools into the curriculum of counseling education during the past two decades [4]. As well as the enrollment in counseling distance education programs [36]. With this indicating a rising trend to adopt distance education in higher education counseling, CACREP imposed standards for the digital delivery of substantive change to ensure the quality of education. Whereas the findings of a recent research review conducted by [37] that comprised 139 articles published in professional counseling journals during 2019 emphasized the need to perform additional research on online teaching and

school counselor supervision; however, the International Society for Technology in Education (ISTE) highlighted the benefits of employing technology for learning and set standards for students, educators, and leaders based on their abilities to create high-impact, sustainable, scalable, and equitable learning experiences for all learners [38]. Therefore, HEI has been generally mandated to utilize innovative technology and pedagogy to enhance student learning outcomes [2], as scholars prove this ability for technology [39–42].

Researchers and educators in counseling education have employed several types of technology to enhance the quality of counseling services and learning. First, they practiced through social media, video games, robots, and virtual reality [43–46]. They also utilized innovative pedagogy and techniques such as online learning, cyber counseling, and flipped learning [47–49]. However, the most common application in counseling is online counseling, where the Internet is the delivery medium [4] [48].

Researchers conducted several studies to explore the impact of using technology in the counseling and mental health fields; for example, [49] conducted a quasi-experimental study that revealed the flipped learning method returned higher career counseling self-efficacy and active engagement among students than the lecture method. Further, [47] conducted a descriptive study among Turkish counselors; the study involved 542 counselors who are members of the Turkish Psychological Counseling and Guidance Association. The study found that counselors had a positive perspective on online counseling as they perceived it as a viable technique in Turkey. Despite the beneficial impact of employing technology in learning, there is resistance to utilizing technology in counseling education, attributed to several influences such as counselors' value of personal contact, body language, listening to vocalizations (i.e., searching for contradictions or inconsistencies), and building rapport with clients [50]. It is necessary for career counselors to actively develop and foster their personal growth and adopt sustainable development and sustainable careers that are linked to continuous learning (lifelong learning) [51]. Lifelong learning relies on the abilities of individuals to be independent, use open educational resources and practices, control their own learning and personal growth, customize their education according to their individual needs and objectives, and utilize innovative technology to achieve their goals effectively. These skills are becoming essential for employment in different fields and sectors. Technology based on AI, such as ChatGPT, could support self-directed learning and lifelong learning [16].

Based on the literature above, researchers and educators of counseling and mental health programs should employ modern instructional practices and innovative technology. ChatGPT has the potential to prepare students for the counseling profession and sustainable careers that contribute to the country's sustainable development. However, despite the beneficial ability of ChatGPT in several fields of education, no study has explored students' experiences using ChatGPT in counseling and mental health education. This highlighted the novelty and importance of this study in filling the research gap in the literature on using ChatGPT in counseling and mental health. This study is specifically trying to answer the following research questions:

RQ1: What is the undergraduate students' perception of the benefits of using ChatGPT in counseling and mental health education at the University of Jordan?
RQ2: What challenges do undergraduate students face in using ChatGPT in counseling and mental health education at the University of Jordan?

3 METHODOLOGY

3.1 Design, participants, and procedures

The research implemented a descriptive quantitative research methodology using purposive sampling. A web-based questionnaire was developed to collect data and investigate the students' perceptions in terms of the benefits and challenges of using ChatGPT in counseling and mental health education among undergraduates from the faculty of educational sciences at the University of Jordan. A purposive sampling method is efficient for investigating a particular domain with knowledge-able specialists or selecting experienced experts within that field [52], i.e., under-graduates with experience employing ChatGPT in learning.

The study population includes all undergraduate counseling and mental health students who were registered in the second semester of the academic year 2022–2023; there were 402 students. The researchers set the inclusion criteria for the study sample, which are: 1) undergraduate counseling and mental health students who were registered in the second semester of the academic year 2022–2023; 2) enrolled in at least one compulsory course; and 3) had at least one month of experience employing ChatGPT in their learning process. The necessary consent was obtained from the institutional board at the University of Jordan and the participants before conducting the study. The counseling and mental health program instructor distributed the questionnaire's URL on learning platforms and encouraged students to join the study. The data were collected over two weeks at the end of the second semester.

In total, 210 students joined the study and met the inclusion criteria, including 199 females and 11 males. The GPAs of the respondents varied from excellent to less than good. Also, first-year students constituted 9.5% of the respondents, while second-, third-, and fourth-year students accounted for 21.4%, 32.9%, and 36.2% of the respondents, respectively. This purposive sample was appropriate and sufficient for the objective of this study, being more than the required sample size specified by Thompson's equations [53] with a confidence level of 95% and a margin of error of 5%. Table 1 shows the demographic characteristics of the study participants.

Table 1. The demographic characteristics of the participants

No	Characteristics		F	P
1	Gender	Female	199	94.8%
		Male	11	5.2%
2	GPA	Excellent	20	9.5%
		Very good	151	71.9%
		Good	40	19%
		Less than good	19	9%
3	School Year	First	20	9.5%
		Second	45	21.4%
		Third	69	32.9%
		Fourth	76	36.2%

3.2   Study instrument

A web-based, self-administered questionnaire for the student's perception of using ChatGPT in counseling and mental health education, PCCMHE, was developed to collect data about students' experiences using ChatGPT. The PCCMHE questionnaire comprised 38 items divided into three parts: the first part includes demographic information (3 items) that gathers data about respondents' gender, GPA, and academic level, and the second part contains the students' perceptions of the benefits of using the ChatGPT scale, comprised of 29 items to assess undergraduates perceptions about using ChatGPT in supporting counseling and mental health education. It includes three subscales, which are: 1) Students' perceptions regarding the benefits of using ChatGPT in enhancing counseling skills and therapeutic conditions subscale (PB-CSTC) that comprised 12 items adopted from the primary counseling skills and therapeutic conditions list [34]. 2) Students' perceptions regarding the benefits of using ChatGPT in enhancing the counseling dispositions and behaviors subscale (PB-CDB), which comprised of 11 items adapted from the primary counseling dispositions and behaviors list [34]. 3: Students' perceptions regarding the benefits of using ChatGPT in learning counseling and mental health topics (PB-LC) comprise six items. And the last part contains the students' challenging scale, consisting of six items that investigate the challenges undergraduates face while using ChatGPT in counseling and mental health education. The questionnaire took about 30 minutes for the respondent to complete. It utilized a 5-point Likert scale ranging from 1: strongly disagree to 5: strongly agree.

The content validity of both the scales measuring the perception of benefits and the perception of challenges was established through the evaluation of eight experts hailing from various universities in Jordan; they specialized in curriculum and instruction, educational psychology, counseling and mental health, and educational technology. Their internal validity and reliability were also confirmed by conducting a pilot study with a sample of 35 undergraduate students from the study population and outside the study sample. For the perception of the benefits scale, researchers extracted Pearson's correlation coefficients between each item of the scale and the total degree of belonging subscale; they were between 0.40 and 0.88, and all were statistically significant at $p < 0.05$. Further, Pearson's correlation coefficients between each item of the scale and the total degree of the perception of the benefit's scale were extracted, ranging between 0.83 and 0.85. All were statistically significant at $p < 0.05$. Moreover, Pearson's correlation coefficients between the total degree of each perception of the benefit's subscale and the total degree of perception of the benefit's scale were extracted, ranging between 0.75 and 0.89. In addition, all were statistically significant at $p < 0.05$.

Similarly, Pearson's correlation coefficients between each item of the perception of the challenges scale and the total degree of the perception of the challenges scale ranged from 0.68 to 0.78. They were all statistically significant at $p < 0.05$. Cronbach's alphas were computed for both the perceptions of benefits and challenges scales, as shown in Table 2, indicating that the research instrument is both valid and reliable.

Table 2. Cronbach's alphas for PCCMHE questionnaire

Scale	Subscale	Cronbach's Alphas
Perception of the Benefits (29 items)	PB-CSTC (12 items)	0.87
	PB-CDB (11 items)	0.95
	PB-LC (6 items)	0.90
	Total (29 items)	0.96
Perception of the Challenges (6 items)		0.89

3.3 Data analysis

The research questions were responded to by obtaining descriptive statistics to discover the undergraduate students' perceptions of the benefits of using ChatGPT in counseling and mental health education. Similarly, the descriptive statistics also investigate the students' perceptions of the challenges of using ChatGPT in counseling and mental health education. The analysis used the Statistical Package for the Social Sciences program, version 25.

4 RESULTS AND DISCUSSION

RQ1: What is the undergraduate students' perception of the benefits of using ChatGPT in counseling and mental health education at the University of Jordan?

To answer the first research question, the descriptive statistic means, standard deviations, frequencies, and percentages of the study participants responses on perception subscales PB-CSTC, PB-CDB, and PB-CL, were calculated.

Counseling skills and therapeutic conditions: The counseling skills and therapeutic conditions (PB-CSTC) subscale concerns how students perceive using ChatGPT to support counseling skills and therapeutic conditions. Table 3 shows the descriptive statistics for the PB-CSTC subscale. More than 70% of the undergraduates indicated that ChatGPT enhances their reflection of meaning skills, ability to respect and accept clients, focus on counseling and client therapeutic goal accomplishments, paraphrasing, and confrontation skills. This could be attributed to several factors. First, ChatGPT allows students to explore and discuss complex topics through virtual simulation and case studies that take them to a deeper level of counseling and allow counselor students to investigate the clients' experiences and perspectives. Reflecting on meaning is considered an advanced skill that includes reflection on clients' values and core beliefs that take counseling to a deeper and more meaningful level [54].

Second, ChatGPT is an AI model, a virtual being that could offer individuals a non-judgmental context [55]. This environment (i.e., non-judgmental and unbiased) is a suitable setting to facilitate open communication and discussion that assist students in respecting and accepting clients. This aligns with a study by [56], which revealed undergraduate students who realized ChatGPT's non-judgmental nature and capability to create responses like humans. Additionally, ChatGPT helps students focus in counseling sessions through its ability to provide procedures, strategies, and guidance to enhance these skills. It offers students' virtual practical counseling sessions that could help undergraduates link theory with practice. The aforementioned studies [19] [20] have demonstrated the efficacy of ChatGPT in enhancing medical education, thereby corroborating its promise in this domain. The previously mentioned studies have provided evidence to support the notion that ChatGPT possesses the capacity to provide a secure educational setting through the provision of virtual patient simulation. This finding suggests that ChatGPT exhibits the potential to facilitate the integration of theoretical knowledge with real-world practicality.

Further, ChatGPT offers customized and interactive help, personalized support direction, and feedback [57] that could help students focus on specific questions and problems [58]. This could help them work towards achieving of the therapeutic goal. ChatGPT can simulate client interactions in clinical settings, allowing students to practice skills in a controlled and safe learning environment [19] [59]. This ability

to provide virtual case simulations can foster students' ability to reflect on content and paraphrase as they have opportunities to practice these skills according to their needs and help them develop confrontation skills by providing challenging virtual scenarios and case studies and offering assistance and constructive feedback.

More than 80% of undergraduates agreed that ChatGPT develops their summarization skills, the ability to use appropriate open and closed questions, and proficiency in establishing collaborative and reasonable therapeutic goals with clients. Further, 57.6% of undergraduates agreed that ChatGPT develops their encouragement skills. These skills could be enhanced by the virtual practical opportunities that ChatGPT offers for counseling students. These findings are consistent with previous studies that found chatbots enhanced students' communication skills and encouraged collaborative learning [60–62]. On the other hand, 58.6% of undergraduates indicated that ChatGPT does not improve their ability to be empathic and caring, as it doesn't help them to facilitate the therapeutic setting and employ proper reactions and responses with the clients. Furthermore, the majority of undergraduates, 90%, reported that ChatGPT couldn't enhance their reflection of feelings. Also, 77.1% of undergraduates said ChatGPT couldn't improve their nonverbal skills. The observed results could be attributed to the inherent limitations of ChatGPT as a language model, which hinder its ability to perceive and interpret empathetic, emotional, and nonverbal cues such as sentiments and body language. This discovery is consistent with an earlier study [22] that highlighted some constraints associated with ChatGPT in relation to this matter. These limits encompass the lack of empathetic capabilities, restricted contextual understanding, challenges in achieving scalability, and the imperative need for human supervision. Moreover, according to the findings of [23], it has been shown that ChatGPT lacks the ability to accurately recognize and respond to emotional cues.

Table 3. Descriptive statistic for undergraduate's responding on PB-CSTC subscale

Statements	SD	D	N	A	SA	M ± D
4. Enhances my reflection of meaning skill.	1.4%	11%	13.3%	44.8%	29.5%	3.90 ± 0.99
5. Develops my summarization skill.	1.4%	4.8%	13.3%	48.1%	32.4%	4.05 ± 0.88
6. Enhance my ability to use an appropriate open and closed questioning.	1.4%	2.9%	13.3%	47.6%	34.8%	4.11 ± 0.85
7. Develops my capability to establish collaborative and suitable therapeutic goals with clients.	3.3%	1.9%	12.4%	49.5%	32.9%	4.07 ± 0.91
8. Develops my confrontation proficiency and ability to challenges clients to identify and estimate inconsistencies.	2.9%	5.2%	19%	45.2%	27.6%	3.90 ± 0.96
9. Improve my ability to be empathic and care, help me to facilitate the therapeutic setting and employ proper reactions and responses with the clients.	16.2%	42.4%	29.5%	10.5%	1.4%	2.39 ± 0.93
10. Enhance my reflection of feeling skill.	46.7%	43.3%	8.1%	1.4%	0.5%	1.66 ± 0.73
11. Boosts my ability to focus in counseling and clients' therapeutic goal accomplishment.	2.9%	9.5%	17.1%	42.4%	28.1%	3.83 ± 1.03
12. Enhance my proficiency in paraphrasing.	1.4%	7.1%	15.7%	46.7%	29%	3.95 ± 0.93
13. Enhance my ability to respect and accept clients.	1.9%	11%	11.4%	41.9%	33.8%	3.95 ± 1.03
14. Enhance my nonverbal skills.	28.1%	49%	13.8%	7.6%	1.4%	2.05 ± 0.92
15. Develop my encourager's skill.	4.8%	15.2%	22.4%	32.4%	25.2%	3.58 ± 1.16

Counseling dispositions and behaviors dimension: The counseling skills and therapeutic condition (PB-CDB) subscale considers how undergraduates perceive using ChatGPT to enhance counseling dispositions and behaviors. Table 4 shows the descriptive statistics for the PB-CDB subscale. 75.2% of students didn't agree that ChatGPT helps them set and maintain appropriate boundaries with their colleagues, peers, and clients. 86.2% of undergraduates reported that ChatGPT could not help them develop their ability to be authentic and genuine with the client. Further, 70.5% of students indicated that ChatGPT could not support their record-keeping and task-completion knowledge. These results highlighted the limitations of ChatGPT in supporting three primary counseling dispositions and behaviors: 1) professional and personal boundaries; 2) record-keeping and task completion; and 3) congruence and genuineness. These results are related to the fact that ChatGPT is an AI language model and doesn't possess the capacity to comprehend emotions and feelings [22]. As it is trained and depends on prior data that limits their creativity and originality [17], it could also decline students' creativity [19], such as if they rely on it to solve their problems.

Overall, 79.1% of the undergraduates agreed that ChatGPT helps them become more open to feedback and supervision, and 77.6% agreed that it improves their knowledge and awareness of how to deal with, respect, and appreciate the different cultures of colleagues and clients. ChatGPT's ability to provide information, explanation, discussion, and examples about a different culture raises their awareness in this context. ChatGPT also provides students with scenarios and case studies that help them practice multicultural counseling sessions, as well as guides and feedback on how to deal with cultural differences that allow them to be more open and respect others' cultures when providing input and supervision. But educators and students in counseling should consider the study findings [21], which found ChatGPT biased toward American culture.

Further, more than 72% of undergraduates reported that ChatGPT helps them to boost their ability to effectively interact with clients, enhances their motivation to learn counseling and mental health topics, fosters their ability to adapt and deal with new situations and unexpected events, enhances their knowledge of the ethical guidelines for the psychological counseling profession (i.e., guidelines for NBCC and APA), boosts their self-confidence, and enhances their awareness and admiration for all counseling site and course policies. This could be attributed to ChatGPT's capabilities in supporting educational fields by providing a secure, private learning environment that promotes individual learning and addresses students' inquiries and questions. ChatGPT could facilitate students' motivation through engaging in discussion, which could boost their intrinsic motivation to learn about counseling and mental health topics. This finding aligns with the study done by [26], which shows that the use of ChatGPT motivates students to engage in the learning process. Furthermore, it substantiates and corroborates the discovery presented in the aforementioned study [27], which revealed that learners display an interest in and are willing to participate in conversation with chatbots.

ChatGPT can provide examples, explanations, and virtual training based on the learner's capabilities, which means that it supports self-directed and individualized learning, allowing students to learn based on their abilities and needs [63] [64]. These features could foster students' deep understanding of counseling and mental health topics and expand their knowledge across several related topics, such as ethical evidence, which promotes their awareness and the ability to admire all counseling sites and course policies, helping them efficiently interact with others and allowing them

to effectively handle unexpected situations. These capabilities for ChatGPT explain its ability to support most of the primary counseling dispositions and behaviors, which are requirements for each counselor.

Table 4. Descriptive statistic for undergraduate's responding on PB-CDB subscale

Statements	SD	D	N	A	SA	M ± SD
16. Helps me to set and maintain appropriate boundaries with my colleagues, peers, and clients.	33.3%	41.9%	15.7%	7.6%	1.4%	2.02 ± 0.96
17. Develops my consistent and openness to feedback and supervisory.	1.9%	4.3%	14.8%	48.6%	30.5%	4.01 ± 0.89
18. Improve my proficiency in effectively interacting with clients.	2.4%	5.2%	21%	49.5%	21.9%	3.83 ± 0.91
19. Enhance my ability to be authentic and genuine with the client.	51%	32.2%	10%	2.4%	1.4%	1.68 ± 0.86
20. Fosters my motivation to learn counseling and mental health topics.	1.4%	2.4%	17.1%	50%	29%	4.03 ± 0.83
21. Fosters my ability to adapt and deal with new situations and unexpected events.	1.9%	5.2%	16.7%	44.8%	31.4%	3.99 ± 0.93
22. Enhance my knowledge of the ethical guidelines for the psychological counseling profession such as NBCC, APA.	1.4%	1.4%	14.3%	51.9%	31%	4.10 ± 0.80
23. Boost my self-confidence.	2.4%	3.8%	19%	45.2%	29.5%	3.96 ± 0.92
24. Enhances my awareness and admiration to all counseling site and course policies.	2.9%	8.1%	14.8%	46.7%	27.6%	3.88 ± 1.00
25. Enhance my ability of record Keeping & Task Completion.	28.1%	42.4%	25.7%	2.4%	1.4%	2.07 ± 0.87
26. improves my knowledge and awareness in dealing respecting and appreciative to different cultures of colleges and clients.	2.4%	3.3%	16.7%	48.6%	29%	3.99 ± 0.90

Learning Counseling and Mental Health Topics Dimension: The counseling and mental health topics (PB-LC) subscale is related to how undergraduates perceive using ChatGPT to learn counseling and mental health topics. Table 5 shows the descriptive statistics for the P-LC subscale. More than 86.2% of the undergraduates indicated that ChatGPT satisfied their curiosity in learning counseling and mental topics, where curiosity is a basis for intrinsic motivation that promotes learning [65]. This finding is in line with the previous result that confirmed the potential ability of chatbots to stimulate curiosity [27] [66]. Further, 82.8% of undergraduates reported that ChatGPT facilitates learning the challenging topics in counseling and mental health by providing them with additional information, explanations, and examples, offering personalized learning. This aligns with the previous studies [16] [18] [20] [25]. Also, 74.8% of undergraduates agreed that ChatGPT offers them guidance, directions, and support to attain academic success and accomplish their educational goals, which indicated the potential ability of ChatGPT to support learning success; this is aligned with previous results that confirmed the ability of ChatGPT to serve as a virtual tutor for students and support their learning [13].

More than 83% indicated that ChatGPT helps them achieve their learning tasks by providing answers and feedback, in addition to offering them a virtual experience that enhances their learning. This result is attributed to ChatGPT's potential ability to support the learning experience and success, corroborating findings from a study conducted by [19] that revealed ChatGPT aids students in assignment and exam preparation, provides constructive feedback, and offers cost-effective virtual simulation.

Table 5. Descriptive statistic for undergraduate's responding on PB-LC subscale

Statements	SD	D	N	A	SA	M ± SD
27. Satisfies my curiosity in learning about counseling and mental health issues.	1.9%	1.9%	10%	50%	36.2%	4.17 ± 0.83
28. Facilitates learning the challenging topics in counseling and mental health by providing additional information, explanations, and examples.	1.4%	3.8%	11.9%	49.5%	33.3%	4.10 ± 0.85
29. Offers me guidance, directions, and support to attain academic success and accomplish my academic goals.	1%	6.2%	18.1%	41.9%	32.9%	4.00 ± 0.92
30. Assist in achieving m learning tasks by answering questions and provide feedback.	1.9%	3.3%	12.9%	40%	41.9%	4.17 ± 0.91
31. Enhance learning experiences by providing virtual counseling practicum opportunities.	1%	2.9%	12.9%	48.6%	34.8%	4.13 ± 0.81
32. In general, I perceived ChatGPT as an effective learning tool for counseling and mental health majors.	3.3%	2.4%	12.4%	45.2%	36.7%	4.10 ± 0.94

In general, 81.9% of undergraduates perceived ChatGPT as a practical learning tool for counseling and mental health majors. This perception can be due to the several pedagogical benefits offered by ChatGPT, which encompass several characteristics commonly seen in effective learning environments. Numerous scholarly studies have been conducted to examine the characteristics of effective learning environments, with one such attribute being openness, which support cooperative learning, engagement, and motivation; provides immediate feedback; meets students' needs; and supports individualization [63] [64] [67]. This result proved that counseling and mental health undergraduates see ChatGPT as a useful learning tool that helps them do well in school, meet the learning program goals, and learn most of the counseling competencies, such as primary counseling skills, therapeutic conditions, and primary counseling dispositions and behaviors.

This discovery has motivated decision-makers at HEIs and instructors of counseling and mental health students to incorporate the use of ChatGPT into their educational practices. The findings align with the research done by [25], as students perceived the potential use of generative AI technologies, such as ChatGPT, as facilitators in their learning. Furthermore, the present finding corroborate the conclusions drawn in a previous study [28], which demonstrated that students exhibited a positive perception toward utilizing ChatGPT as a tool in their learning process.

RQ2: What challenges do undergraduate students face in using ChatGPT in counseling and mental health education at the University of Jordan?

To answer the second research question, the descriptive statistic means, standard deviations, frequencies, and percentages of the study participants' responses on challenging scales were calculated as shown in Table 6.

<div align="center">Table 6. Descriptive statistic for undergraduate's responding on challenges scale</div>

Statements	SD	D	N	A	SA	M ± SD
33. I have limited ICT literacy affect my benefit from ChatGPT.	22.4%	41.9%	25.7%	6.7%	3.3%	2.27 ± 0.99
34. I would not discuss my personal or psychological matters with ChatGPT due to privacy and confidential issues.	1.4%	3.8%	14.3%	47.6%	32.9%	4.07 ± 0.87
35. ChatGPT is slow in generated data regarding Arabic terms in counseling and mental health.	1.9%	11.4%	27.6%	39%	20%	3.64 ± 0.99
36. The generated data in the context of counseling and mental health is not suitable for Arab social customs, traditions, and culture.	2.9%	9%	20%	45.7%	22.4%	3.76 ± 0.99
37. I feel a fear or dislike of using new technology.	65.7%	24.8%	5.2%	2.9%	1.4%	1.5 ± 0.84
38. I have concerned in the validity of the generated data.	1.4%	4.8%	16.2%	45.7%	31.9%	4.02 ± 0.90
Total						**3.21 ± 0.93**

Regarding ICT literacy, only 10% of undergraduates reported that having limited ICT literacy affected their benefit from ChatGPT services; this encourages decision-makers at the University of Jordan to conduct workshops or training for those students with poor ICT literacy and skills that may hinder them from taking advantage of utilizing technology in learning. Further, 80.5% of undergraduates agreed that they would not discuss their personal and psychological matters with ChatGPT regarding their concerns about privacy and confidentiality issues. These concerns could be attributed to several factors, such as their limited cybersecurity or technology awareness, which played a vital role in their intention to use innovative technology and discuss their personal issues, which could also hinder online counseling. However, counselor students should be knowledgeable about cybersecurity to practice cyber counseling in their future careers. Also, this highlights the need to conduct quantitative research to investigate this issue and encourages educators to foster awareness about properly using web-based technology. Moreover, this concern may stem from apprehensions over ChatGPT's status as an AI language model, which may not provide the same degree of privacy assurance as a human counselor or therapist. ChatGPT differs from human counselors in that the latter are bound by ethical principles and confidentiality restrictions, while the former is not subject to such constraints. This study's results align with the findings of the study by [6] that reported concerns about using ChatGPT, such as cybersecurity and ethical and legal issues. Furthermore, the findings of this study align with previous research done by [7] and [25], which highlighted the significance of privacy and ethical concerns while adopting ChatGPT.

In relation to fear of using new technology, a mere 4.3% of undergraduate students expressed agreement with experiencing fear or dislike of using new technology. This fear or dislike may be attributed to technophobia concerns, which have the potential to impede students from utilizing innovative technology and reaping its educational benefits. However, this issue could be addressed through the promotion of technology awareness and the implementation of cognitive behavioral therapy (CBT). Nevertheless, these findings align with the results of research done by [68] among undergraduate students from the School of Educational Sciences at the University of Jordan. The study discovered that out of the 398 participants, 29.2% exhibited technophobia. The research conducted by [69] also identified a notable prevalence of technophobia among undergraduate students enrolled in the School of Educational Science at the University of Jordan.

In terms of the response time for ChatGPT to Arabic prompts, 59% of the under-graduates agreed with the statement, "ChatGPT is slow in responding to Arabic in-queries and prompts related to consoling and mental health." These results could be attributed to the limited free ChatGPT service or the capacity of the Arabic pre-data feed. Furthermore, 68.1% of undergraduates agreed that the generated data in the context of counseling and mental health is not suitable for Arab society, customs, traditions, and culture; this could be related to the bias in the pre-data fed for ChatGPT, which is consistent with study findings by [21] that revealed that ChatGPT is biased for American culture.

About 77.6% of students expressed their concerns regarding data validity. This might be attributed to a number of things, including the lack of a list of references and citations and the bias in the training data. This finding corroborates and expands upon the results found by [6], which highlighted many concerns regarding the reliability of data produced by ChatGPT. These concerns covered issues related to transparency, potential bias, absence of originality, inaccuracies, limited expertise, and the potential for infodemics. In alignment with the findings of the aforementioned study (26), it was observed that students expressed concerns regarding the reliability of the data provided by ChatGPT. Moreover, scholarly studies conducted by researchers [7] and [25] have shown similar concerns about the inaccurate content and validity of data produced by ChatGPT.

The overall mean for the scale of the challenge was 3.21 (Table 6), which indicates a moderate level of challenges faced by undergraduate students when using ChatGPT in their learning process. The most dominant concern was confidentiality issues, followed by the validity of the generated data. Also, the response time to the Arabic queries was one of the students' dominant challenges.

Nonetheless, the discovery of moderate challenges in using the novel technology ChatGPT coincides with the difficulties that students in the Faculty of Education at the College of Jordan experienced in adapting to online learning during the COVID-19 epidemic [68]. Within the realm of literature, a lack of research exists pertaining to the examination of students' experiences with ChatGPT, hence impeding our capacity to draw comparisons with existing findings. This research is different from others in that it examines the undergraduate experience in using ChatGPT for learning in terms of benefits and challenges based on students' practical usage. In contrast, prior investigations highlighted the potential and concerns regarding using ChatGPT in education through interviews with the ChatGPT, this study takes a different approach. Further investigation is required to determine the experience and challenges faced by students when utilizing ChatGPT in the field of education, particularly in the domains of counseling and mental health education.

5 CONCLUSION

The novelty of this study is that it is the first to investigate the undergraduates' experience using ChatGPT, including their perceptions in terms of benefits and the challenges they faced while utilizing it in counseling and mental health education. This study adopted a descriptive quantitative research methodology with a purposive sample. Researchers set the inclusion criteria for the study sample, which includes undergraduate counseling and mental health students who are experienced in using ChatGPT in their learning. A self-administrated web-based questionnaire was constructed to obtain data about this phenomenon, and the data were collected

during the second semester of the academic year 2022–2023 from 210 undergraduates at the University of Jordan.

The study revealed that undergraduate counseling and mental health students perceived ChatGPT as a valuable tool for learning and supporting most counseling competencies, i.e., the primary professional and personal boundaries and counseling dispositions and behaviors. Despite this beneficial ability of ChatGPT to support counseling and mental health education, undergraduates experience some challenges when using ChatGPT related to confidentiality, culture, validity, and timely response, as well as a number of them reporting limited ICT literacy and a fear of using new technology. However, these results encourage counseling and mental health educators to employ ChatGPT in their practice and encourage their students to utilize it in their learning. Further, it inspires decision-makers at the University of Jordan to set procedures and strategies to foster students' awareness about the possibility of cultural bias, data accuracy, and the educational benefits of ChatGPT and how to properly employ it to maintain their concerns regarding confidentiality issues, such as conducting a workshop. These results also highlighted the need to consider students who fear new technology, such as conducting CBT. The limitations of this research involve: a) it was carried out at a single university in Jordan; b) the study sample has a limited number of male students, which is attributed to the low percentage of male students (7.1%) who enrolled in counseling and mental health programs in the second semester of the academic year 2022–2023; and c) the results are founded only on undergraduates' perceptions using a self-administered questionnaire. Future research should incorporate a larger sample size to cover several universities and conduct quantitative research to investigate students' concerns regarding using ChatGPT in depth.

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