

RESEARCH ARTICLE

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Attitudes of Mental Health Professionals Toward Digital Cognitive Behavioral Therapy in Pakistan

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ABSTRACT

Background: Digital mental health services are growing at a swift pace around the world, and there is an urgent need to understand the attitudes of professionals towards technology-assisted psychological treatments in low and middle-income countries. This study explored the attitudes of mental health professionals in Pakistan towards digital Cognitive Behavioral Therapy (CBT), which is the use of internet platforms or mobile applications to provide CBT.

Methods: A cross-sectional survey design using a quantitative approach was used. There were 80 mental health professionals (clinical psychologists, counsellors and psychiatrists) who participated ($M_{age} = 36.32$, $SD = 9.91$). A 31 items instrument developed by the researchers measured seven domains of the attitudes. The instrument assessed seven domains: knowledge and training, perceived effectiveness and clinical confidence, cultural fit and contextual adaptation, online therapeutic alliance, digital literacy and technology confidence, workload/supervision/professional support, and willingness to implement/perceived barriers. Frequency distributions and valid percentages were used to analyse the data.

Results: Results showed positive attitudes overall, with the exception of a few items. The willingness to use digital CBT, if trained, was the most highly endorsed item (95.0%). There was a general consensus on the importance of cultural adaptability and the incorporation of Islamic values and Pakistani family dynamics. The systemic barriers were shown to be significant, especially the lack of supervision (50.0% access), lack of organisational support (23.8% disagreed), and infrastructural issues like unreliable internet and electricity (77.5% acknowledged).

Conclusion: Results indicated that there is a high level of attitudinal readiness amongst the mental health professionals in Pakistan, but it will take targeted training, institutional support and culturally adapted digital platforms to be implemented.

Keywords: digital CBT, teletherapy, e-mental health, Pakistan, therapist attitudes, cognitive behavioral therapy, mental health professionals

INTRODUCTION

In Pakistan, mental health professionals seem to be somewhat optimistic about digital CBT; however, this optimism is contingent on training, fit, privacy, and clinical logistics. Although there is limited literature specific to Pakistan, existing studies have consistently highlighted digital therapy as a solution to overcome the challenges of heavy healthcare manpower shortages, disparity in care and access between cities and villages, and the difficulties associated with travelling to access healthcare services (Ahmed & Ahmad, 2023; Akhtar et al., 2025; Maqsood et al., 2024). Meanwhile, Pakistani practitioners report issues with confidentiality, maintaining a therapeutic relationship online, patients' digital literacy, and the integration of structured digital care into already burdensome services (Faisal & Masood, 2022; Maqsood et al., 2024; Qureshi et al., 2025). Local evidence has also shown that generalized anxiety disorder in Pakistani clinical populations may be associated with contextual psychosocial stressors such as domestic violence and abuse, supporting the need for accessible, confidential, and culturally sensitive psychological interventions, including digitally supported CBT models (Siddiqui et al., 2021).

This is similar to the general implementation literature internationally. In multi-country studies and systematic reviews, the main concerns regarding digital therapy are around alliance, patient selection, workflow burden, infrastructure and data security, though clinical perspective is typically somewhat positive about accessibility and efficiency. The evidence for Pakistan is not from large national surveys of psychiatrists/psychologists on attitudes towards digital CBT, but rather from qualitative studies with therapists and counsellors, small implementation studies, and feasibility trials (Faisal & Masood, 2022; Latif et al., 2021; Maqsood et al., 2024; Vostanis et al., 2021).

Available empirical evidence from Pakistan suggests that digital CBT is increasingly gaining acceptance rather than facing outright rejection. Mental health professionals, including therapists and counsellors, perceive digital therapy as an effective approach to overcoming geographical barriers and enhancing engagement with digitally literate clients (Maqsood et al., 2024). Furthermore, a pilot qualitative study evaluating therapist-assisted internet-based cognitive behavioral therapy (iCBT) for depression reported that both therapists and clients considered the digital format to be effective, useful, and relatively easy to use. However, participants also identified certain challenges related to the therapeutic environment and the structure of the intervention (Faisal & Masood, 2022).

Evidence from Pakistani also indicates that positive attitudes are tenuous when digital tools conflict with actual service situation. The issue of privacy and confidentiality emerged as a major theme in interviews exploring digital therapy the digital therapy interviews (Maqsood et al., 2024). Faisal & Masood (2022) highlighted that limited internet access and digital literacy, as well as low income, were practical barriers to frequent use of iCBT. Beyond these practical challenges, previous research on CBT and Pakistan suggest a therapy is often delivered in a more directive than participatory manner, which may contribute to reservations about imported models of digital CBT (Naeem et al., 2010).

The attitude of professionals towards digital CBT is repeatedly formed by several factors. The strongest predictor of overall acceptance of digital interventions among patients and health professionals alike is performance expectancy, indicating that when patients and health professionals feel they will truly benefit from digital interventions, they are more likely to use them (Philippi et al., 2021). Knowledge, experience and confidence play a role: lower levels of knowledge, limited experience and uncertainty about processes consistently hinder uptake and education and experiential exposure help increase confidence (Davies et al., 2020; Zhang et al., 2025). In low-resource countries like Pakistan, infrastructure and workload seem to hold significant importance, as the healthcare providers in such environments are already burdened with limited specialists and high patient volume (Akhtar et al., 2025; Qureshi et al., 2025).

Clinician comfort is also influenced impacted by patient selection. In general, therapists are more enthusiastic about using iCBT for mild to moderate problems, motivated patients and individuals with enough digital skills. However, they are more cautious when considering iCBT for individuals with more severe, complex, or unstable presentations (Davies et al., 2020; Qureshi et al., 2025; Vigerland et al., 2014; Weineland et al., 2020).

Rationale

Overall, the available evidence suggests that mental health professionals in Pakistan are generally receptive to digital CBT, with little evidence of widespread resistance. Clinicians appear willing to adopt digital CBT when it improves access to care while preserving human support within the therapeutic process (Andersson, 2010; Faisal & Masood, 2022; Maqsood et al., 2024). This is particularly relevant in Pakistan, where a shortage of mental health specialists and the concentration of services in urban areas make scalable psychological interventions especially valuable (Akhtar et al., 2025).

However, the local evidence base remains limited, consisting largely of qualitative studies and broader digital mental health research rather than studies specifically evaluating digital CBT or provider attitudes (Akhtar et al., 2025; Faisal & Masood, 2022; Maqsood et al., 2024). The strongest quantitative local evidence is a small feasibility trial demonstrating that culturally adapted online CBT-guided self-help was acceptable to patients, indirectly supporting the potential acceptability of digital CBT among clinicians (Latif et al., 2021).

These findings align with international evidence showing generally favorable clinician attitudes toward digital CBT, although implementation is constrained by inadequate training, workflow integration, data security concerns, and uncertainty regarding its suitability for patients with complex needs (Berardi et al., 2024; Davies et al., 2020; Ganapathy et al., 2021; Nascimento et al., 2023). Such barriers are likely to be more pronounced in Pakistan due to limitations in digital infrastructure, remuneration mechanisms, and implementation expertise (Faisal & Masood, 2022; Mol et al., 2019; Qureshi et al., 2025). Acceptance is greatest for low-intensity, structured, supported, and culturally adapted digital CBT, whereas it declines when digital CBT is intended to replace therapeutic relationships or is implemented without adequate training, supervision, or service redesign (Akhtar et al., 2025; Kneubühler et al., 2026; Seittu et al., 2025). Collectively, these findings suggest that the successful implementation of digital CBT in Pakistan depends more on strengthening implementation systems than on changing clinician attitudes. Furthermore, evidence from Pakistani child mental health research underscores the need for structured digital mental health systems by highlighting the importance of early identification, family-informed assessment, and timely intervention pathways (Rajput et al., 2024).

METHOD

Research Design

The current study adopted quantitative, cross-sectional survey design to explore the attitudes of mental health professionals towards digital delivery of CBT in Pakistan. The descriptive approach was used, and data was summarised through the use of frequency distributions and percentages. No composite scores or subscale totals were derived, but the intent was to obtain the distribution of individual therapists' scores across the attitudinal items, not to obtain global measures of attitude. This was in line with exploratory descriptive research that aimed to describe what practitioners think and believe (Creswell & Creswell, 2018) and not to test hypothesised relationships between latent constructs.

Participants

Purposive sampling was used to recruit the participants. The inclusion criteria included current mental health practitioners in Pakistan (clinical psychologists, counselling psychologists, counsellors and psychiatrists). Eighty mental health professionals completed the survey (N = 80). The age of participants ranged from 23 to 69 years (M = 36.32, SD = 9.91). Most participants were female (n = 67, 83.8%) with males accounting for 16.3% (n = 13). Table 1 shows the demographic characteristics of the sample.

Table 1
Demographic Characteristics of Participants (N = 80)

Variable	n	%
Gender		
Female	67	83.8
Male	13	16.3
Educational Level		
Bachelor's (BS)	28	35.0
Master's (MS)	29	36.3
Doctoral (PhD)	6	7.5
Medical/Psychiatry	17	21.3
Professional Designation		
Clinical Psychologist	41	51.2
Counsellor	21	26.3

Variable	n	%
Psychiatrist	18	22.5
Years of Clinical Experience		
Less than 2 years	12	15.0
2–5 years	27	33.8
6–10 years	25	31.3
More than 10 years	16	20.0
Primary Work Setting		
Private clinic/hospital	22	27.5
Public hospital/facility	19	23.8
NGO	17	21.3
University	12	15.0
Telehealth only	10	12.5
Province of Practice		
Sindh	45	56.3
Punjab	14	17.5
Islamabad (ICT)	10	12.5
Balochistan	8	10.0
Gilgit-Baltistan	3	3.8
Weekly Caseload		
1–5 clients	39	48.8
6–15 clients	25	31.3
16–25 clients	8	10.0
More than 25 clients	8	10.0
Theoretical Orientation		
CBT only	48	60.0
Integrative	32	40.0
Monthly Income (PKR)		
Below Rs. 50,000	22	27.5
Rs. 50,000–99,999	25	31.3
Rs. 100,000–199,999	19	23.8
Rs. 200,000 and above	14	17.5

Note. All values represent frequency counts and valid percentages. PKR = Pakistani Rupee.

Measures

A researcher-made survey instrument was designed especially for the clinical context of Pakistan, to evaluate attitudes towards digital CBT. The instrument was 31 items spread across seven conceptual areas: (a) knowledge and training, (b) perceived effectiveness and clinical confidence, (c) cultural fit and contextual adaptation, (d) online therapeutic alliance, (e) digital literacy and technology confidence, (f) workload, supervision, and professional support, and (g) willingness to implement and perceived barriers. Items were created based on a literature review of the existing research on therapist attitude towards technology assisted therapy (e.g. Sucala et al., 2012; Waller & Gilbody, 2009) and modified accordingly to fit the sociocultural and infrastructural context of Pakistan.

Most attitude items were measured on a three-point scale (Agree, Neutral, Disagree). Two items related to training and familiarity with the digital CBT program were binary coded (Yes/No). Items that elicited a positive attitude to digital CBT when disagreements responded were selected as reverse-keyed; but in the spirit of this exploratory, descriptive study, no reverse-scoring or summing was done. Frequency counts and percentages were used to analyse each item individually.

Procedure

After securing ethical approval, participants were recruited by using professional networks such as Pakistan Association of Cognitive Therapist (PACT) and institutional contacts from public and private mental health institutions in Pakistan. The survey was carried out electronically using a structured online form. They were told that their involvement was voluntary and their consent was obtained implicitly by their completion and submission of the survey. No personally identifying information was collected. Data were collected from February to April 2026.

Data Analysis

IBM SPSS Statistics (Version 27) was used to analyse the data. All of the demographic items and attitude items had been subjected to descriptive statistics such as number of frequency counts and valid percent. Continuous age data were summarised using the mean and standard deviation. As per the descriptive and exploratory nature of the study, no statistical or factor analysis procedures or composite scoring were conducted. Every attitude item was analyzed separately, and the distribution of the therapist responses over the three response categories was described. The findings are presented in text and table format using the APA 7th Edition guidelines.

RESULTS

The findings are presented in the order of the seven conceptual domains assessed by the survey instrument. Frequency counts (n) and valid percentages (%) are reported for each item individually.

Knowledge and Training in Digital CBT

Table 1 shows that the vast majority of participants reported, received formal training on how to deliver CBT using online platforms or apps (n = 70, 87.5%) and 12.5% (n = 10) had not. Also, 80.0% (N = 64) said they were familiar with evidence-based digital CBT programmes. 75.0% (n=60) agreed and 25.0% were neutral to the idea of distinguishing between digital and face-to-face CBT. Although there was general confidence, 92.5% (n = 74) agreed that they would need more training before they would be able to deliver digital CBT, while 6.3% were neutral and 1.3% disagreed.

Table 1

Frequency Distribution: Knowledge and Training in Digital CBT

Item	Agree/Yes n (%)	Neutral n (%)	Disagree/No n (%)
Received formal training in online CBT delivery	70 (87.5)	—	10 (12.5)
Familiar with evidence-based digital CBT programmes	64 (80.0)	—	16 (20.0)
Confident distinguishing digital vs. face-to-face CBT	60 (75.0)	20 (25.0)	—
Would benefit from additional training (R)	74 (92.5)	5 (6.3)	1 (1.3)

Note. n = 80. Items 1 and 2 used a binary (Yes/No) format. Items 3 and 4 used a three-point format. (R) = reverse-keyed. Dashes (—) indicate zero responses.

Perceived Effectiveness and Clinical Confidence

88.8% of the participants (n = 71) agreed that digital CBT can yield clinically meaningful outcomes as presented in Table 2. 82.5% (n = 66) agreed with the confidence in providing CBT over video call. 67.5% (n = 54) agreed that equivalence with face-to-face CBT was good, with 27.5% being neutral. 72.5% (n = 58) were confident in online mental state assessment. The division of the reverse-keyed item on therapeutic depth was: 40.0% agreed, 30.0% disagreed, and 30.0% were in the middle.

Table 2*Frequency Distribution: Perceived Effectiveness and Clinical Confidence*

Item	Agree/Yes n (%)	Neutral n (%)	Disagree/No n (%)
Digital CBT produces clinically meaningful outcomes	71 (88.8)	6 (7.5)	3 (3.8)
Confident delivering CBT via video call	66 (82.5)	12 (15.0)	2 (2.5)
Digital CBT as effective as face-to-face for common disorders	54 (67.5)	22 (27.5)	4 (5.0)
Can accurately assess patient's mental state online	58 (72.5)	17 (21.3)	5 (6.3)
Digital CBT lacks therapeutic depth (R)	32 (40.0)	24 (30.0)	24 (30.0)

Note. n = 80. All items used a three-point format. (R) = reverse-keyed.

Cultural Fit and Contextual Adaptation

82.5% (n = 66) responded in the affirmative for the adaptation of digital CBT tools to Pakistani cultural and religious values, while 17.5% (n = 14) were neutral and none disagreed as shown in Table 3. 91.3% (n = 73) reported having adapted CBT to the culture of Pakistan. 65.0% (n = 52) agreed and 31.3% were neutral about their confidence in discussing joint family dynamics online. 67.5% (n = 54) agreed that digital CBT should include Islamic views while 28.7% were neutral.

Table 3*Frequency Distribution: Cultural Fit and Contextual Adaptation*

Item	Agree/Yes n (%)	Neutral n (%)	Disagree/No n (%)
Digital CBT can be adapted to Pakistani cultural/religious values	66 (82.5)	14 (17.5)	—
Has adapted CBT to Pakistani cultural norms in practice	73 (91.3)	5 (6.3)	2 (2.5)
Can address joint family dynamics in online CBT format	52 (65.0)	25 (31.3)	3 (3.8)
Digital CBT should incorporate Islamic perspectives	54 (67.5)	23 (28.7)	3 (3.8)

Note. n = 80. All items used a three-point format. Dashes (—) indicate zero responses.

Online Therapeutic Alliance

When asked about the ability to build a therapeutic relationship with patients who communicate solely via the Internet, 73.8% (n = 59) agreed that they can do this well, 21.3% were neutral, and 5.0% disagreed as shown in Table 4. The reverse-keyed question on 'difficulty detecting non-verbal cues' was endorsed by 57.5% (n = 46) and disagreed by 18.8%. 88.8% (n = 71) reported using active rapport building strategies at the beginning of the session. 78.8% (n = 63) agreed that online sessions give patients the opportunity to be comfortable in their own home.

Table 4*Frequency Distribution: Online Therapeutic Alliance*

Item	Agree/Yes n (%)	Neutral n (%)	Disagree/No n (%)
Can form strong therapeutic relationship online	59 (73.8)	17 (21.3)	4 (5.0)
Harder to detect non-verbal cues online (R)	46 (57.5)	19 (23.8)	15 (18.8)
Actively uses rapport-building strategies online	71 (88.8)	8 (10.0)	1 (1.3)
Online sessions allow patients to feel at ease	63 (78.8)	14 (17.5)	3 (3.8)

Note. n = 80. All items used a three-point format. (R) = reverse-keyed.

Digital Literacy and Technology Confidence

80.0% (n = 64) reported comforting with the use of video-calling platforms for clinical work as shown in Table 5. Sixty-one percent (n = 49) agreed and 16.3% disagreed — the largest disagreement rate of this domain — with knowledge of electronic homework tools and mood-tracking applications. 72.5% (n = 58) reported confidence in trouble shooting technical problems. 70.0% (n = 56) agreed that digital skills were perceived to be sufficient while 8.8% disagreed.

Table 5

Frequency Distribution: Digital Literacy and Technology Confidence

Item	Agree/Yes n (%)	Neutral n (%)	Disagree/No n (%)
Comfortable using video-calling platforms clinically	64 (80.0)	10 (12.5)	6 (7.5)
Knows how to use homework tools/mood-tracking apps	49 (61.3)	18 (22.5)	13 (16.3)
Can troubleshoot technical problems during sessions	58 (72.5)	18 (22.5)	4 (5.0)
Digital skills sufficient for effective online therapy	56 (70.0)	17 (21.3)	7 (8.8)

Note. n = 80. All items used a three-point format.

Workload, Supervision, and Professional Support

This domain received the most variation and disagreement of the instrument, as shown in Table 6. 56.3% (n = 45) agreed to adequate organisational support while 23.8% (n = 19) disagreed. Only 50.0% (n = 40) reported access to regular clinical supervision, while 22.5% (n = 18) disagreed. 42.5% of respondents (n = 34) agreed with the reverse-keyed workload item while 30.0% of respondents (n = 24) disagreed with the item. Fifty-seven and a half percent (57.5%) (n = 46) agreed that peer consultation was available and 60% (n = 48) agreed that adequate compensation was available.

Table 6

Frequency Distribution: Workload, Supervision, and Professional Support

Item	Agree/Yes n (%)	Neutral n (%)	Disagree/No n (%)
Organisation provides adequate support for online therapy	45 (56.3)	16 (20.0)	19 (23.8)
Has access to regular clinical supervision	40 (50.0)	22 (27.5)	18 (22.5)
Online sessions increase workload vs. in-person (R)	34 (42.5)	22 (27.5)	24 (30.0)
Peer consultation available for difficult online cases	46 (57.5)	24 (30.0)	10 (12.5)
Adequately compensated for digital CBT delivery	48 (60.0)	24 (30.0)	8 (10.0)

Note. n = 80. All items used a three-point format. (R) = reverse-keyed.

Willingness to Implement and Perceived Barriers

95.0% (n = 76) — the highest endorsement rate across the entire instrument — was willing to deliver CBT online, given appropriate training and resources, while 5.0% was neutral and no one disagreed. There was widespread agreement that infrastructure barriers were present, with 77.5% (n = 62) agreeing that unreliable electricity or internet is a big barrier. 41.3% (n = 33) agreed that patient reluctance due to cultural reasons was perceived, 32.5% (n = 26) disagreed and 26.3% (n = 21) considered it neutral. There was a high willingness to recommend digital CBT to patients who do not have in-person access (91.3%, n = 73). 69 of 80 (86.3%) reported plans for integration of digital tools in 12 months.

Table 7

Frequency Distribution: Willingness to Implement and Perceived Barriers

Item	Agree/Yes n (%)	Neutral n (%)	Disagree/No n (%)
Willing to deliver CBT online given training and resources	76 (95.0)	4 (5.0)	—
Unreliable electricity/internet is a significant barrier (R)	62 (77.5)	13 (16.3)	5 (6.3)
Patients reluctant to engage due to cultural reasons (R)	33 (41.3)	21 (26.3)	26 (32.5)

Item	Agree/Yes n (%)	Neutral n (%)	Disagree/No n (%)
Would recommend digital CBT to patients lacking in-person access	73 (91.3)	6 (7.5)	1 (1.3)
Plans to integrate digital tools within 12 months	69 (86.3)	10 (12.5)	1 (1.3)

Note. n = 80. All items used a three-point format. (R) = reverse-keyed. Dashes (—) indicate zero responses.

DISCUSSION

To the authors' knowledge, this is one of the first descriptive studies on attitudes towards digital CBT among mental health professionals in Pakistan. In each of the seven attitudinal domains, participants' attitudes toward the delivery of CBT using digital platforms were mostly positive. Overall, these results align with the international literature that indicates the positive attitude of physicians towards digital therapeutic options in various settings (Sucala et al., 2012; Waller & Gilbody, 2009); however, these findings offer significant context-specific insights regarding the attitude of physicians in Pakistan.

The high percentages for reported training (87.5%) and programme familiarity (80.0%) found in the present sample are encouraging, but may reflect sampling bias, in that these professionals are already involved with CBT type networks like PACT. Perhaps more telling is the almost universal support for further training needs (92.5%), indicating that exposure to digital CBT concepts has not yet resulted in a feeling of being "fully prepared." This is consistent with the results of Bee et al., (2008) which showed that even UK experienced therapists were unclear about their competence in technology-assisted delivery. What this means for the training institutions in Pakistan is obvious: there is an urgent need for formal curricula on technical skills and clinical adaptations needed for CBT delivery online.

Perceived effectiveness of digital CBT was high, with 88.8% of participants endorsing its potential to achieve clinically meaningful outcomes. However, opinions regarding therapeutic depth were divided, with 40.0% agreeing that digital CBT lacks the therapeutic depth of in-person therapy, 30.0% disagreeing, and 30.0% remaining neutral. This ambivalence mirrors findings from Western qualitative studies, where therapists have expressed concerns about the therapeutic bond and the loss of somatic and non-verbal cues in online therapy (Fairburn & Patel, 2017). These concerns may be particularly relevant in Pakistan, where relational structures and family systems play a central role in psychiatric care. Supporting this, recent local evidence has highlighted the importance of family functioning and family dynamics among families of children with ADHD, suggesting that culturally adapted digital CBT should incorporate relational, parental, and family-system components rather than relying solely on individually focused intervention models (Rajput et al., 2025).

Some of the highest endorsement rates in the study were obtained for the cultural adaptation domain, with 91.3% of participants stating that CBT has been previously adapted to the cultural norms of Pakistan, and 82.5% stating that they believed that digital CBT could be adapted to cultural and religious values. This is in line with the developing evidence of culturally adapted CBT in Pakistan and other majority Muslim populations (Naeem et al., 2016). The agreement of Islamic viewpoints in relation to the use of digital CBT tools (67.5%) indicates that there is a general consensus that culturally sensitive adaptation including components such as tawakkul (reliance on God), sabr (patience), and du'a (supplication) is desirable and achievable. It is recommended for developers who are creating a digital CBT platform focused on Pakistanis to involve local clinicians and religious scholars in the co-design process.

The overall attitudes regarding online therapeutic alliance were positive, with 73.8% of respondents indicating that they felt confident about developing a strong therapeutic alliance with a client who could only be seen online. Interestingly, 88.8% said that they used rapport building strategies at the beginning of online sessions, indicating that many practitioners are already taking some adaptive practice with them to the online context. Interestingly, 57.5% endorsed the reverse-keyed item on non-verbal cue detection, suggesting that most participants know that this is a limitation of online delivery, which is supported by the larger literature on teletherapy (Simpson, 2009). Importantly, 78.8% agreed that online sessions might be more convenient for patients, as they can be conducted in the comfort of their own homes, which could mitigate some of the disadvantages of the lack of non-verbal communication.

The greatest concerns raised were within the workload, supervision and professional support domain. Just 50.0% said that they receive regular clinical supervision for their online practice, and 23.8% disagreed that their organisation offers sufficient support for their online practice. The numbers are alarming in an environment in which the practice of digital CBT is quickly growing with no institutional infrastructure to match. A key barrier identified was infrastructure, with 77.5% agreeing that unreliable internet and electricity is a significant issue in the implementation of digital health by

individual clinicians, a structural issue which attitudes cannot overcome (Naslund et al., 2017). Policy measures need to involve investing in robust digital infrastructure, as well as creating institutional supervision structures for online practice, and fair remuneration policies for digital service delivery.

The most clinically important finding was the high willingness of mental health professionals to deliver digital CBT if provided with adequate training and the necessary resources (95.0%). This suggests that the primary barriers to implementation in Pakistan are structural rather than attitudinal. The strong intention to use digital tools within the next 12 months (86.3%) further underscores the need for structured training programs, supervision, and supportive institutional policies to translate this readiness into sustainable clinical practice.

Limitations

The current study has some limitations that need to be acknowledged. First, the sample was drawn from a professional network with a CBT orientation, i.e., those who are already positively oriented towards structured psychological interventions, which may restrict the generalisability of the results to the wider Pakistani mental health workforce. Secondly, the cross-sectional study does not allow any conclusions to be drawn with regard to temporal change in attitudes. Third, three-point response format minimizes acquiescence bias but also decreases the level of detail in the measurement of attitudes when compared to a five-point Likert scale. Fourth, the instrument was developed by the researcher and has not yet been formally psychometrically validated, future studies should include a factor analysis and internal consistency, and convergent validity with other accepted measures of technology acceptance. Lastly, social desirability bias is a concern with self-report data, especially with training and cultural competence items.

Recommendations

These findings have important implications for training, policy, and future research. At the training level, professional bodies such as PACT, Pakistan Psychological Association and College of Physicians and Surgeons Pakistan could consider creating competency frameworks and continuing professional development programmes that specifically focus on digital delivery of CBT. On the policy side, national mental health policy initiatives should incorporate terms for digital mental health infrastructure, models of supervision in digital practice, and funding mechanisms to support equitable access. With regards to development of platforms, technology designers should collaborate with Pakistani clinicians, and communities to create culturally homogenous digital CBT resources that take into account Urdu / regional language preferences, Islamic values, and the relational complexity of Pakistani family systems. Further studies should investigate outcomes of digital delivery of CBT in Pakistan, investigate both patient attitudes as well as clinician attitudes and comparative studies between different regions and professional groups within Pakistan.

CONCLUSION

This study is the first to assess the attitudes of mental health professionals in Pakistan toward digital CBT across seven theoretically informed domains. Overall, participants demonstrated positive attitudes, with high levels of cultural acceptance, technological engagement, and willingness to integrate digital CBT into practice. However, gaps in training, supervision, organizational support, and digital infrastructure remain important barriers to implementation. These findings provide a foundation for developing targeted training, supportive policies, and culturally adapted digital platforms to facilitate the wider adoption of digital CBT and improve access to evidence-based psychological care in Pakistan.

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