

Mental Health Help-Seeking and AI Chat-bot Perceptions Among Pakistani University Students: A Pilot Study

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Abstract

Pakistan is facing mental health challenges among university students yet help-seeking behavior remains very low. Existing researchers have explored stigma, gender norms, and digital mental health tools separately, but how these forces operate together in the Pakistani university context remains less explored. The current study addresses this gap by simultaneously examining cultural stigma, gender-based barriers, and AI chatbot perceptions through four theoretical frameworks. A total of 100 students aged 18 to 30 completed a standardized online 20-item survey adapted from validated instruments (ATSPPH; Fischer & Turner, 1970; BACE; Clement et al., 2012). Findings indicated that approximately 60% of respondents reported experiencing stress, anxiety, or depression during university, yet only 13% had ever sought professional help. Male students ($M = 4.00$) felt pressure to manage difficulties independently and female students ($M = 3.54$) reported being ignored when expressing distress. Mental health problems were perceived as socially unacceptable ($M = 3.82$) and a sign of personal weakness ($M = 3.56$). Willingness to use a culturally adapted AI chatbot was moderate ($M = 3.12$), concerns about cultural relevance were noted ($M = 3.19$), and consensus emerged that AI cannot replace human empathy ($M = 3.88$). Culturally adapted digital tools, strengthened university mental health infrastructure, and community-level stigma reduction are recommended. Findings are exploratory and intended to inform future research with larger, more representative samples.

Keywords: *mental health help-seeking, Pakistani university students, cultural stigma, gender norms, AI chat-bots, digital mental health*

Introduction

There is a growing awareness in Pakistan about mental health but obtaining professional help for mental health issues has proven to be challenging for university students. This is due to low availability of qualified mental health professionals, as well as societal perceptions and expectations associated with being mentally tough and able to cope with stress independently. This is also impacted by gender-related expectations and differing perceptions of mental health by members of the Pakistani community. All these aspects contribute to how students view mental health in general (Asghar et al., 2025; Khan et al., 2021).

As a common social norm for many males in Pakistani culture, they often hear statements such as “*mard rote nahi*” (men don’t cry) or “*ye sab tum har weham hai*” (that’s all in your head). How these messages are received by both male and female students causes a large portion of their lives to be affected by this expectation; men feeling this pressure to deal with their problems alone and unable to share when something is not right, while females are told when they express their feelings; “*you’re being overly dramatic*” or “*there’s no reason to feel that way,*” and their feelings are often not taken into consideration. The expectation placed on both sets of students directly impacts how they manage stress and seek help (Sagar-Ouriaghli et al., 2019; Yousaf et al., 2015).

Negative cultural attitudes towards mental health further complicate these barriers. In many cases, mental health issues aren’t viewed seriously and are equated with being “made up” within Pakistani society. When mental health assistance is sought by a member of a family or community, it typically is a sign of weakness and stigma associated with mental health issues in Pakistan complicate speaking openly about issues with mental health and to seek support. As such, many individuals experiencing mental health issues remain silent and do not speak up about their mental health issue because of the significant stigma that surrounds mental health within the larger cultural context (Choudhry et al., 2023; Daraz et al., 2025).

Due to being anonymous and easy to access, chat-bots have become another source of assistance for mental health however, their success rates vary according to how willing individuals are to use them. If chat-bots give answers that do not reflect the experiences of users, they may become less likely to trust them and use them; this may also have a more pronounced effect in areas where culture affects how people behave. Additionally, the effectiveness of these tools may be impacted by factors such as cultural sensitivity and by their ability to respond appropriately to emotion and to be socially appropriate within the environment of the user. (Balcombe, 2023; Li et al., 2024).

In this research study, the Technology Acceptance Model, Health Belief Model,

Literature Review

Mental Health Crisis in Pakistan

The mental health system in Pakistan is defective, and university students are suffering highly. Pakistan already stacks up poorly on mental health, with just 0.19 psychiatrists for every 100,000 people in one of the worlds the lowest in the world, and the Eastern Mediterranean Region as indicated by a conference organized by the World Health Organization in 2024. Furthermore, there is an uneven range of psychiatrists which varies based on the demographic of that area and are less accessible to rural and more economically disadvantaged populations, about 51% of psychiatrists work in private urban settings (Dayani et al., 2024). Public investment in mental health is low. Psychiatric care, even though there are widely estimated to be 24 million people needing help. The number of university-level support networks across the country remain inadequate, and mental health education rarely included in formal curricula. These systemic limitations have an impact on students in terms of quantifiable ways. role of religion and spirituality in addressing suicide risk and prevention among undergraduate students. According to a systematic review and meta-analysis of 26 studies with 7,652 university students from Pakistan the overall prevalence of depression was 42.66% in Pakistan, much higher than the world overlapping groups (Khan et al., 2021). According to more recent study, there is

Internalized Stigma Model, and Cultural Identity Theory are all used to research the different cultural, gender-based and technology-specific barriers that Pakistani university students face when seeking professional mental health support. The present study is warranted for three reasons first, no prior empirical study has examined cultural stigma, gender-based barriers, and AI chatbot perceptions simultaneously in the Pakistani university context. Second, existing AI mental health tools have been developed primarily for Western populations and require culturally specific evaluation. Third, Pakistani university students represent an underserved and understudied population in global mental health research.

This research has the following objectives:

1. To identify barriers preventing Pakistani university students from seeking professional mental health support.
2. To examine how cultural expectations and gender-related factors influence help-seeking barriers among Pakistani university students.
3. To explore Pakistani university students' perceptions of AI chat-bots as mental health support tools.

still a low rate of help-seeking behaviour, which is suppressed by stigma, academic demands, and restricted service accessibility (Asghar et al., 2025). The disparity between need and usage is not coincidental; rather, it is a consequence of a system in which structural absence and cultural deterrence coexist.

Cultural and Gender-Based Barriers to Help-Seeking

The gender barriers in Pakistan are a key factor for men seeking assistance. Men are taught early that to show emotion is to show vulnerability (i.e. there is a cultural stigma around masculinity), thus, being vulnerable could mean losing self-worth. Similarly, women also face challenges reaching out for help however, whereas men are considered weak for reaching out for emotional support, women are often dismissed when doing so. Often, people assume that women are reaching out for help because they are more emotional than men. This view of the gender roles people in Pakistan hold contributes to people's discrepancy against men and women when it comes to requesting assistance during times of crisis. Furthermore, individuals cultures have a significant impact on their likelihood of asking for assistance. According to Daraz et al. (2025), cultural narratives account for considerable differences between why students at Peshawar University choose to avoid seeking help from others. In the first study to address barriers to seeking mental health treatment in Pakistan,

taken together, these findings suggest that barriers to accessing services in Pakistan include financial barriers, fears of being stigmatized within their culture, or cultural beliefs, and dependence on informal support from family, friends, or religious institutions. (Choudhry et al., 2023)

AI Chat-bots as Digital Mental Health Tools

Given the limitations of traditional mental health services in Pakistan, AI chat-bots have increasingly been proposed as scalable and cost-effective tools capable of providing early psychological support to individuals with restricted access to professional care (Balcombe, 2023).

However, AI chat-bots are not meant to replace doctors and other professionals they are meant to be used in addition to these services. People will only keep using AI chat-bots for a time if certain things happen. It does not just depend on how the AI chat-bots work. AI chat-bots are affected by things like people being embarrassed to use them being worried about their privacy and not wanting to use technology. This is especially true in places where people put the group before the individual like in some countries, where people are really worried about what others think of them and do not want their personal information to get out (Khawaja & Belisle-Pipon, 2023). People will stop using technologies if they do not fit with their lives no matter how useful they are, if people think technology is a fit for their culture they are

more likely to keep using it (Li et al., 2024). Ma et al. (2025).

This is significant to a country like Pakistan. The country has its own culture where families are prioritized over religion or other sources of coping with their problems, and family ties are strong. These cultural differences affect how an AI-powered chat-bot may work when developing one for Pakistan. Even if the chat-bot works in that culture, it is likely that people will still have difficulty trusting it and believe it understands their emotional state. Therefore, gaining acceptance of AI-powered chat-bots within the culture will be difficult because it is essential to understand what the users expect from the application, such as empathy and trust, to design the application for them (Ma et al., 2025).

Research Gap

There have been two separate areas of research, one on the use of AI chat-bots as supporting tools and another on factors, such as gender and sociocultural influences around mental health, that influence whether individuals seek help. In Pakistan, there has been little integration between these two areas of research. This gap will have consequences, as any solutions proposed, won't ultimately match up with the true limitations that these students face if we do not consider sociocultural influences (gendered norms, gender roles, technological perceptions) along

with the use of technology in the university context in Pakistan. To be able to correctly develop recommendations for students in Pakistan, we need to be able to consider these variables together. Understanding Pakistani cultural norms as well as gender norms are important for this purpose. Furthermore, most of the work that has been conducted on AI chat-bots in a mental health context has been conducted in countries such as the United States and Canada, India, or other East Asian countries that differ from Pakistan in terms of their sociocultural structures, religious orientations, and cultural identity. As such, no research exists regarding the use of AI chat-bots in the mental health area that is specific to Pakistan, which may limit the development of digital solutions to support mental health in addressable ways.

Theoretical Framework

This study is informed by four complementary theoretical frameworks. Technology Acceptance Model, Health Belief Model, Internalized Stigma Model, and Cultural Identity Theory. Each framework is applied to specific variables and findings within this study, providing a multi-level lens for understanding the psychological, social, and technological factors influencing help-seeking behavior and perceptions of AI chat-bots.

Technology Acceptance Model

Perceived utility and perceived ease of use are the two main characteristics used by Davis's (1989) Technology Acceptance Model (TAM) to explain technology adoption. When individuals perceive technology as useful and relevant to their needs, they are more likely to engage with it. TAM is utilized in this study to analyse how students see AI chat-bots as instruments for mental health support as measured by items, Q15 through Q17. Specifically, Q15 assesses awareness of AI chat bots as a mental health resource, Q16 examines whether students perceive existing chat bots as culturally relevant to Pakistani values and norms, and Q17 measures conditional willingness to adopt a culturally adapted AI chat bot. Moderate agreement was observed across these items ($M = 3.19$, $M = 3.19$, $M = 3.12$), suggesting that perceived cultural relevance may be a critical factor shaping technology acceptance in this population. This shows that cultural relevance of intelligence and mental health tools is important. These findings show that it is not enough to make intelligence mental health tools easy to use but these tools also need to fit within the culture.

Health Belief Model

According to Rosenstock and colleagues their Health Belief Model says that how people feel about their vulnerability, the seriousness of a problem, the benefits and drawbacks of taking action and their confidence in making a change all affect their health behaviors. This model helps

us understand why students do or do not seek help. In this study it is used to understand how cultural issues stop students from seeking help using questions Q10 to Q12. Q10 asks if students think seeking help is looked down upon in culture. The concerns regarding being judged by others for looking for support are examined within question eleven and the degree to which cultural and social pressures contribute to students' hesitance in seeking help, explored in Q11. Both types of pressures affect how much students feel the drawbacks associated with seeking help such as stigma or social disapproval outweigh the positive outcomes they may receive through access to services. Overall, most students believe that their cultural heritage does not value health (Q10, $M = 3.56$). Thus, this lack of cultural awareness will prevent some students from accessing services and obtaining assistance even though they need it badly (Q14, $M = 3.82$).

Internalized Stigma Model

According to Molina and Ruiz (2024), the Internalized Stigma Model describes how people absorb and apply unfavorable cultural ideas about mental health to themselves. People may internalize these views in situations when mental health issues are linked to societal shame or weakness. In this study, the Internalized Stigma Model is applied to interpret findings from items Q6, Q9, and Q11. Specifically, Q6 examines whether students have personally felt judged or

mocked for expressing emotional difficulties, Q9 assesses whether students have avoided help-seeking due to gender-related expectations, and Q11 measures personal worry about social judgment when considering help-seeking. Moderate agreement across these items (Q6: $M = 3.28$, Q9: $M = 3.24$, Q11: $M = 3.13$) suggests that internalized stigma operates as a psychological barrier in this sample, suppressing help-seeking even when distress is present. This is further supported by the strong positive correlation between worry about social judgment (Q11) and help-seeking avoidance (Q12), $r_s(100) = .738$, $p < .001$, indicating that internalized stigma may be among the most significant individual-level barriers to professional help-seeking in this population. Higher levels of internalized stigma are linked to worse mental health outcomes and less help-seeking behaviour, according to existing research (Vayro & Moskowich, 2025).

Cultural Identity Theory

According to Cultural Identity Theory, people make choices that are consistent with their social and cultural identities (Tajfel and Turner, 1986). Identity is frequently strongly associated with shared values, social conventions, and familial expectations in collectivist settings. In this study, Cultural Identity Theory is applied to interpret findings from items Q7, Q8, Q13, and Q14. Specifically, Q7 examines whether female students are dismissed when expressing mental

health concerns, Q8 assesses whether gender roles in Pakistani society create barriers to help-seeking, Q13 measures whether students believe universities should provide mental health support, and Q14 examines whether mental health problems are perceived as illegitimate within Pakistani culture. High agreement on Q13 ($M = 4.02$) and Q14 ($M = 3.82$) suggests that cultural identity norms actively shape both the perception of mental health problems and the institutional expectations students hold. These findings indicate help-seeking behavior in this population cannot be understood without considering the broader cultural identity context that shapes students' daily lives.

Methodology

Research Design

For this study, a cross-sectional research design was adopted. This design was selected because it enables the simultaneous measurement of multiple variables across a diverse sample within a single time point, making it appropriate for investigations. A descriptive and correlational analytical technique was employed to examine relationships between cultural stigma, gender-based barriers, and AI chatbot perceptions. Correlational techniques are appropriate for exploratory research where the goal is to identify patterns and associations among variables rather than establish causality (Field, 2018). Given the absence of prior empirical work combining these

three dimensions in the Pakistani university context, this approach provides a foundational evidence base for future hypothesis-driven research

Participants and Sampling

Pakistani university students enrolling in undergraduate or postgraduate programs between the ages of 18 and 30 were the study's target population. Purposive sampling was used, and the poll was disseminated to students in many Pakistani cities using social media sites including Facebook and WhatsApp. A total of 100 students completed the survey.

Instrument

Data was gathered using a self-administered, structured online questionnaire consisting of five parts and twenty items. Demographic data was collected in the first segment. Using five-point Likert scale answers ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), sections two and three assessed gender-based and cultural obstacles to obtaining help.

Items in Sections 2 and 3 were adapted from the Attitudes Toward Seeking Professional Psychological Help scale (ATSPPH; Fischer & Turner, 1970) and the Barriers to Access to Care Evaluation scale (BACE; Clement et al., 2012), with wording modified to reflect the Pakistani sociocultural context. Section 4 items were developed specifically for this study given the absence of validated instruments measuring AI

chat bot perceptions in non-Western Muslim-majority contexts.

Internal consistency was assessed using Cronbach's alpha. The Gender Norms subscale (Q5–Q9) demonstrated good reliability ($\alpha = .792$). The Cultural Barriers subscale (Q10–Q14) demonstrated acceptable reliability ($\alpha = .832$). The AI chat bots subscale (Q15–Q18) demonstrated acceptable reliability ($\alpha = .752$). These values indicate satisfactory internal consistency across all three sub-scale for a pilot study

Ethical Considerations

Anonymity was always preserved, and participation was completely optional. At no time was any identifiable information gathered. Participants were given a thorough consent statement prior to proceeding. This study was carried out in accordance with the APA's minimal-risk survey research ethical guidelines.

Data Analysis

Descriptive statistics including means and standard deviations were computed for all Likert scale items. Frequency analysis was conducted for categorical items. Independent samples t-tests were conducted to examine gender-based differences across all items. Spearman correlation analysis was conducted to examine relationships between cultural stigma, gender-based pressure, and help-seeking avoidance. These analyses are

interpreted with caution due to the limited sample size.

Results

Demographic Profile

A total of 100 Pakistani university students participated in this pilot study. Data was gathered from group of students. Out of these students 71.0% females (n = 71) and 28.0% males (n = 28) were present. They were from levels of university from first year to postgraduate. Majority students fell between the age of 21 and 23 years. The largest group was between 23 and 27 years old. The students were from cities, in Pakistan including Islamabad, Lahore, Karachi, Rawalpindi, Faisalabad, Quetta, Gujranwala.

Mental Health Prevalence and Help-Seeking Behavior

The gap between students with health issues and those seeking help is significant. Many students, 60.0% (n = 60) reported having experienced stress, anxiety, or depression during university. An additional 23.0% (n = 23) responded. Only 15.0% (n = 15) reported no such experience. Despite this level of reported distress, professional help-seeking remained minimal. Only 13.0% (n = 13) sought professional help such as a doctor or counselor while 37.0% (n = 37) talked to someone they know like a friend or family member. Many students, 33.0% (n = 33) try to handle their problems on their own and 17.0% (n = 17) did not consider their issues serious enough to seek help.

Table 1

Key Survey Findings with Gender Comparison

Items	<i>M</i>	<i>M</i>	<i>SD</i>
	Female	Male	
Males expected to handle alone	3.821	4.04	1.11
Females told overreacting	3.96	3.5	1.38
Universities should have support	4.25	4.18	1.21
Mental health seen as not real	3.92	4.18	1.29
They use culturally adapted chat bots	3.40	3.5	1.51
AI cannot replace human empathy	4.07	4.04	1.21

Table 2*Key Survey Findings with Gender Comparison*

Items	<i>M</i>	<i>M</i>	<i>SD</i>
	Female	Male	
Males expected to handle alone	3.48	4.00	1.34
Females told overreacting	3.54	3.57	1.51
Universities should have support	3.92	4.25	1.34
Mental health seen as not real	3.66	4.18	1.40
They use culturally adapted chat bots	2.99	3.39	1.51
AI cannot replace human empathy	3.73	4.21	1.42

Reliability Analysis

Internal consistency was satisfactory across all three sub-scale, supporting the reliability of the adapted instrument for this study.

Table 3*Reliability Analysis for Survey Sub-scale*

Sub-scale	Cronbach's α
Gender Norms	0.792
Cultural Barriers	0.832
AI Chatbots	0.752

Gender-Based Barriers

Gender based barriers were regularly found in the sample. Male students reported higher agreement that they are expected to handle problems independently ($M = 4.00$, $SD = 1.12$) compared to female students ($M = 3.48$, $SD = 1.39$). Female students reported higher agreement that women

are dismissed as overreacting when expressing mental health concerns ($M = 3.54$, $SD = 1.58$) compared to male students ($M = 3.57$, $SD = 1.35$). Gender roles were perceived as a barrier to help-seeking across both groups (Total $M = 3.68$, $SD = 1.43$)

Independent samples t-tests were conducted to examine gender differences across gender-specific mental health items (Q5, Q7, Q8, and Q9). Male students reported higher agreement that they are expected to handle problems independently ($M = 4.00$, $SD = 1.12$) compared to female students ($M = 3.48$, $SD = 1.39$). This difference approached significance, $t(97) = 1.77$, $p = .081$, $d = 0.39$, suggesting a trend toward male students experiencing greater expectations to deal with issues alone, although it did not reach conventional statistical significance ($p < .05$).

Both female ($M = 3.54$, $SD = 1.58$) and male students ($M = 3.57$, $SD = 1.35$) reported similar levels of agreement regarding females being dismissed as overreacting when expressing mental health concerns, with no significant difference observed, $t(97) = 0.11$, $p = .915$, $d = 0.02$. Overall, gender roles were perceived as a substantial barrier to help-seeking across the total sample ($N = 100$, $M = 3.68$, $SD = 1.43$). No other statistically significant gender differences were found among the gender-related items (all $p > .05$)."

Table 4

Independent Samples t-Test for Gender-Based Barrier Items

Items	Female	Male	<i>t</i>	df	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>M</i>				
Males expected to handle problems alone	3.48	4.00	1.77	97	0.081	0.39
Females dismissed as overreacting	3.54	3.57	0.11	97	0.915	0.02
Gender roles make help-seeking harder	3.55	3.96	1.31	97	0.194	0.29
Avoided help due to gender expectations	3.11	3.50	1.21	97	0.230	0.27

Note: ** $p < 0.01$ (2-tailed)

Cultural Barriers

Cultural barriers were strongly endorsed across the sample. The perception that mental health problems are not really received high agreement ($M = 3.82$, $SD = 1.40$). Help-seeking was widely perceived as a sign of weakness within Pakistani

culture ($M = 3.56$, $SD = 1.45$). Cultural and social pressure was identified as a barrier to seeking help ($M = 3.31$, $SD = 1.46$). Most significantly, there was very strong agreement that Pakistani universities should provide proper mental health support systems ($M = 4.02$, $SD = 1.34$). Spearman correlation analysis revealed significant associations between cultural

variables and help-seeking avoidance. Worry about social judgment (Q11) was strongly and positively correlated with help-seeking avoidance (Q12), $rs(100) = .738, p < .001$. Cultural stigma (Q10) demonstrated a moderate significant positive correlation with help-seeking avoidance

(Q12), $rs(100) = .496, p = .005$. Gender-based pressure (Q5) was strongly correlated with personal avoidance (Q9), $rs(100) = .297, p = .003$. These findings indicate that cultural stigma and fear of social judgment are significant predictors of help-seeking avoidance in this sample.

Table 5

Internal Consistency and Spearman Correlations for Study Variables

Variable/Items Pairs	Cronbach's Alpha (α)	Correlation (rs)	<i>p</i>
Cultural Stigma (Q10) & Avoidance (Q12)	0.832	0.496	.001
Worry about Social Judgment (Q11) & Avoidance (Q12)	—	0.738	.001
Gender-Based Pressure (Q5) & Personal Avoidance (Q9)	0.792	0.297	.003
Perceived Cultural Irrelevance (Q16) & Chatbot Willingness (Q17)	0.752	0.367	.001

Note. ** $p < 0.01$

AI chat bots Perceptions

Awareness of AI chat-bots as mental health support tools was moderate. Respondents moderately agreed that existing AI chat-bots do not understand Pakistani cultural values. Willingness to use a culturally adapted AI chat bots were moderate. The strongest finding was near-unanimous agreement that AI chat-bots cannot replace human empathy.

The correlation between perceived cultural irrelevance (Q16) and willingness to use a culturally adapted chat bots (Q17) were positive and significant, $rs(100) = .367, p < .001$ suggesting that willingness to adopt culturally adapted tools may be shaped by factors beyond cultural concerns alone. These findings indicate conditional rather than categorical rejection of AI-based mental health support among Pakistani university students.

Discussion

This part of the paper discusses the comparison of results obtained with prior

research and relevant theories. Factors that contribute to the data appear to interact in a way that students' thoughts about

technology, their perceived barriers, and their internalized feelings of stigma all contribute to their methods of obtaining assistance; and their method of seeking assistance will also have an impact on whether they choose traditional or technology-based alternatives for assistance.

The Help-Seeking Gap

In this study a noticeable difference was found between students who are struggling emotionally and those who get help. A lot of students said they feel down or feel overwhelmed. About 13% of them had gone to see a mental health professional. All these things are on top of the problem they are dealing with. This study shows this pattern in People who knows they need help but still do not ask for it. These things affect what people do when they know they need help. The group of students studied was small, but it still gives us a good idea of what some students are thinking and feeling.

Gender-Based Barriers

Gender differences about how society teaches us to behave. It is a social conditioning rather than preference. For students it is hard to ask for help. In Male Students reluctance is tied to social costs;

norms equating self-reliance with strength make seeking help a "socially evaluated" risk to their identity. For most female students, they are cautious in seeking assistance, because of how they perceive the effectiveness of asking for assistance. Due to male students with feelings of fear or hesitation due to how society views their ability to help themselves or their masculine trait by being assertive and self-sufficient are social evaluations of asking for assistance; which is risked to their identity. For Most female students have previous experiences that were dismissed by others, when they shared their feelings with someone, and because the utility of asking for help has lessened, they are less likely to ask someone for assistance in the future.

Most male students feel that it makes them weak, and that it is their duty as a man to be able to do it on their own; therefore, it is risky to how others define them, if they seek assistance. For the most part, male students do not seek assistance for not believing it will be effective. For female students, when they share a feeling with someone and it is dismissed; their experience of seeking assistance has less value and therefore, make them less likely to ask for assistance. These differences tell us that merely telling

individuals to seek assistance is not enough, and we must change the way individuals view the act of seeking assistance. In addition, we must change the way in which individuals respond to others seeking assistance, to enhance the access of individuals to seek assistance, at school and work. The purpose of intervention after awareness campaigns is for individuals not to perceive that they are taking a risk. Research will explore how these interventions can be designed to address gender-based barriers and increase the likelihood of individuals seeking help.

Cultural Barriers

People are still affected by their beliefs regarding how things should be when it comes to their health and thus their views towards mental health issues are also influenced by their beliefs about social norms. Since not everyone perceives mental health issues as a problem, there is still a stigma attached to these issues which makes it difficult for people to discuss openly what is going on with them. Many people would feel that universities should provide mental health services, however, there appears to be conflicting ideas about how to approach this issue. The evidence demonstrates that although some people still maintain strongly held beliefs, there is a growing recognition of

the need for mental health services, which means if there are systems in place that will support students with mental health difficulties, they are more likely to use them. Correlation analyses supported the results of the patterns of help-seeking behaviors; concern over social stigmas influences $r(100) = .738$, and avoidance of seeking assistance $r(100) = .496$,) at moderate levels, both findings indicate that they are consistent with the Health Belief Model's emphasis on perceived barriers.

AI chat bots Perceptions

Students show an interest in using digital mental health tools with the qualification that they must be compatible with the cultural and social context. Just because a tool is easy to use, doesn't mean that someone will use it; they need to feel comfortable with and have faith in the tool. They do not believe that tools, such as AI chat-bots, can take the place of speaking with a real person, but they are open to the idea of using them as a resource for assistance. This suggests that the digital tools are more effective when they serve to enhance, rather than replace, formal support systems. When we take everything, we learned throughout our research, we see some common themes. Many of the students in the study are experiencing some form of health

concern but they do not seek out formal assistance; this is considered a combination of personal and sociocultural norms regarding how society expects men and women to behave and the types of supports available. All these combined factors impact how students respond to health challenges. Mental health challenges are generally prevalent among students and digital mental health tools can be useful resources, if they are culturally appropriate for the student users.

Limitations

This study has several limitations that need to be noted when interpreting the findings and planning for future research studies. The sample ($N = 100$) is small and limits the extent to which the findings can be generalized to other populations. Although high levels of internal consistency were seen between sub-measures ($\alpha=.752-.832$), formal construct validity has yet to be demonstrated. The survey instrument in the Pakistani context was adapted from existing validated scales, so results need to be interpreted with caution since the AI chat bot sub-scale items were developed specifically for this research and had not previously been assessed for their reliability or validity. There

may also be a selection bias due to using a convenience sampling method and recruiting from social media. Despite its limitations, this research presents initial findings and forms the foundation for future studies.

Furthermore, the cross-sectional design of this study limits causal inference. Future research should employ longitudinal designs to examine how help-seeking barriers evolve over time. The exclusive use of self-report measures introduces the possibility of social desirability bias, which may have led to under reporting of mental health distress or over-reporting of willingness to seek help.

Policy Recommendations

The following suggestions show possible paths for future study and policy development, even though they are based on exploratory data. According to the findings, Pakistani university students may experience mental health issues in addition to difficulties getting the help they need. Cultural stigma, gender norms, institutional constraints, and the apparent mismatch of technology technologies are some of these obstacles. The study's conclusions and examples from Malaysia, Bangladesh, and Indonesia all of

which have structural and cultural parallels to Pakistan are used to support the suggestions.

International Evidence

1. Through the Minda Sihat initiative, a partnership between the Ministry of Health and the Ministry of Education, which is implemented in more than 2,456 secondary schools and 7,776 primary schools countrywide, Malaysia has incorporated mental health support into its current institutional frameworks. Over 284,000 kids were screened as part of the initiative, and 200 psychologists were assigned to various districts and medical facilities. Additionally, Malaysia has created NurAI, an AI chat-bot that complies with Shariah and incorporates Islamic principles, halal advice, and faith-based wellness assistance. To match digital mental health resources with Muslim users cultural and religious circumstances, this is an intentional attempt, and this indicates that culturally tailored tools might enhance participation in comparable scenarios.
2. In Bangladesh, mental well-being is integrated into the education system. It accounts for about 9% of all learning hours according to national curriculum

framework for 2021, which identifies mental well-being & psycho-social well-being as one of 10 critical learning topics. An estimated 5 million students have benefited from this curriculum via over 30,000 secondary schools since January 2023. Nearly 260,000 of those have received training via the internet on providing psychological first aid; additionally, over 30,000 teachers were given direction for incorporating mental well-being into their teaching methods. This plan illustrates how early educational integration may ultimately reduce

3. In Indonesia, several adolescents suffer severe psychological distress; nonetheless, this research found that only 2% participate in any form of mental health service. There is a pattern of people not using their care options or reaching out for help. It is possible to integrate elements of both culture and religion with psychotherapy. As a result, 86.67% of Jakarta's public schools now offer mental health education, and Indonesia has increased mental health therapy and instruction in schools. The emergence of Islamic-informed therapy frameworks in Indonesia further implies

that culturally grounded methods might improve the acceptability and use of mental health care in settings with most Muslims. If looked together, these examples show that good models always have congruence and that big culturally grounded mental health interventions can work in similar places with limited resources. These models and interventions are important for health. Effective mental health interventions like these can be used in places.

Recommendations for Pakistan

Recommendation 1: Expand University Mental Health Services

Universities should consider expanding mental health provider availability to better serve student needs. Strong perceived desire for institutional support is shown by participant replies in this study ($M = 4.02$), with males expressing especially strong agreement ($M = 4.25$). This will lessen the social visibility of help-seeking and eliminate stigma-related hurdles found in this study. This approach is modeled after Malaysia's strategy of integrating services within already-existing campus infrastructure, such as student affairs offices and health clinics.

Recommendation 2: Integrate Mental Health Literacy into University Curricula

It may be possible to lessen stigma and raise awareness before cultural avoidance habits become ingrained by including mental health literacy into university curricula, especially in the early academic phases. Pakistani institutions may think about integrating culturally appropriate mental health courses into first-year orientation programs, given Bangladesh's findings that millions of students may be reached by allocating 9% of study time to mental health literacy. To guarantee relevance and acceptability, content should consider local cultural norms.

Recommendation 3: Develop Culturally Adapted AI Mental Health Tools

The results of this study indicate willingness to culturally tailored AI technologies ($M = 3.12$). Shariah-compliant, culturally aware chat-bots are theoretically possible, as demonstrated by Malaysia's NurAI. Pakistani students' participation may be increased by creating tools that react in Urdu, represent regional communication methods, and integrate culturally appropriate frameworks. Instead of taking the role of professional treatment, these technologies should be positioned as additional help.

Recommendation 4: Address Stigma Through Targeted Initiatives

Targeted awareness campaigns may be necessary to combat cultural myths that discourage getting treatment, such as the belief that mental health issues are a sign of weakness or spiritual failure. To boost credibility and reach, public efforts may benefit from the participation of peer networks, religious leaders, and trusted community members. Community-based participation may significantly change views over time, according to Indonesia's experience.

Recommendation 5: Strengthen Student Mental Health Data Systems

There is presently no centralized data on the incidence of mental health issues and the rates at which students seek care in Pakistan. By gathering better quality data. Evidence-Based Policy Making will be possible through Institutions ability to collect information on pattern tracking and assessing their actions. The Mental Health National Screening Programme in Malaysia & implementation research infrastructure of Bangladesh demonstrate how even organizations with limited resources can develop effective methods of gathering the

data they need to produce evidence-based policies through The Commitment and Drive of the Institutions.

Conclusion

The purpose of this study is to explore how Pakistani university students feel about being able to receive AI chat-bot support for their mental health and what barriers they may face in accessing that support. The results show that although there are many students likely experiencing psychological distress, only a small number of them will reach out for professional help. Gender norms, institutional inequities, and cultural stigma all appear to be a factor in this behavior. The participants in this study indicated a moderate degree of openness towards culturally relevant digital technologies. The discrepancy between being in distress and seeking help emphasizes the need to have access to appropriate and readily available support networks. The findings of this study serve as an initial step toward better understanding the impact of cultural, gender, and technological influences on students' help-seeking behaviour in the future. Future research should provide linguistic tools to reach students who speak other languages; use a more diverse and larger sample to

identify patterns among those with limited English proficiency; and investigate the cultural dynamics impacting students' perceptions of the efficacy of chatbots and seeking assistance. Using qualitative methodologies that are culturally sensitive, institutionally based, and responsive to the diverse needs of different student populations may be necessary to address these issues.

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