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A PERSPECTIVE OF MENTAL HEALTH PRACTITIONERS ON SMARTPHONE-MEDIATED CBT INTERVENTIONS FOR OBSESSIVE COMPULSIVE DISORDER AMONG PAKISTANI YOUTH

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Abstract

This focus group discussion explored the insights of the Islamabad-based Pakistani clinical psychologists about smartphone-mediated Cognitive Behavioural Therapy (CBT) applications for youth suffering obsessive compulsive disorder (OCD). This qualitative research involved 11 practitioners. The researchers analyzed data guided by Braun & Clarke's (2006) thematic analysis model, supplemented by NVivo software. The major themes explored include 'Effectiveness of Smartphone-mediated Apps in CBT; OCD Treatment and Clinical Challenges; Socio-cultural Considerations; Structural and Technological Barriers; and Future Prospects' the study findings demonstrate that smartphone-mediated CBT facilitates with enhanced youth access and engagement for mild OCD treatment, there remain substantial concerns about its clinical limitations, particularly for cultural barriers, religious misinterpretations, Exposure and Response Prevention (ERP), and lower digital literacy. The respondents advocated for blended therapies involving stakeholder trainings, localized content, and government policy and regulation. This research underscores the potential and drawbacks of digital interventions for mental health in Pakistan, providing guidance for clinical practice, future research, and policy development.

INTRODUCTION

Challenges to psychological wellbeing among youth have emerged as a common yet serious concern across the globe (Ahmed et al., 2023; Nisa et al., 2025; Sultan et al., 2023). The obsessive compulsive disorder (OCD) is ranked among gravest and functionally impairing disorders among this age group. OCD among youth is most often underdiagnosed and mistreated due to limited awareness, various social and religious stigmas, inaccessibility to clinicians and state of the art mental health services in primitive societies like Pakistan. Cognitive Behavioural Therapy (CBT), particularly when coupled with Exposure and Response Prevention (ERP), is considered as a standard mechanism to treat OCD. However, the traditional services involving face-to-face CBT sessions are mostly not accessible to Pakistani youth because of social and religious barriers, poor financial status, and geographic limitations.

Smartphones, the digital extensions of computers, have taken an integral place in modern human life in this technologically advanced age (Ahmed et al., 2023; Ahmed & Yousaf, 2023; Sultan et al., 2023). These digital devices have helped people from different walks of life by facilitating their office work as well as personal conversations through

different digital applications (Ahmed, 2024). The exponential growth of the smartphones has engaged youth in different aspects (Ahmed et al., 2025). Digital media and other social media applications engage youth for various productive and useful activities (Khan & Ahmed, 2024; Younis & Ahmed, 2024) who spend most of their active life in the digital space (Sultan & Ahmed, 2022). Such a high level of digital connectivity highlights pivotal role of smartphones in individuals' daily life, acting as gateways to social interaction, bulk of information, businesses, and various digital services. Contemporary advances in the filed of digital health have paved ways for effective mental health interventions via smartphone-mediated applications. One of such interventions include smartphone-mediated or digital Cognitive Behavioural Therapy (CBT) that is not only easy to access, engaging, but also potentially cost effective. Such digital clinical interventions are helpful in managing mild to moderate levels of obsessive-compulsive disorder (OCD).

The increasing prevalence of obsessive-compulsive disorder (OCD) among youth across the globe has encouraged mounting interest in application of smartphone-based Cognitive Behavioral Therapy (CBT). Traditional in person CBT, particularly Exposure and Response Prevention (ERP), is known as first-line therapeutic procedure to treat OCD among children. However, access to clinical treatment for individuals is considered as one of the barriers, especially in the developing world to various geographic and cultural limitations, costly clinical sessions, and scarcity of trained clinicians. A study by Lenhard et al. (2017) on 67 adolescents aged 12–17 years and suffering from OCD highlighted that clinician-guided, digital CBT meaningfully reduced disorder symptoms. Similarly, another research by Hollmann et al. (2021)utilizing video-conference CBT for nine kids also reported a high acceptance level (89 %) and reduction in symptoms among all participants. A meta-analysis carried out by Polak and Tanzer (2024) of nine randomized clinical trials suggested that digitally-delivered CBT accomplished reduction in 47% of the subjects as compared to 25.1% under controlled conditions. Similarly, systematic review by Litke et al. (2023) concentrating on youth demonstrated that tools including BiP OCD app resulted in greater reductions in chronic OCD, with long-term effects at quarterly follow-ups.

However, another study by Haque and Rubya (2022) revealed that smartphone-mediated applications to treat mental health also face challenges. A qualitative study of users' feedback explored that psychological health applications lack crisis support, are not evidence-based, and face inconsistent moderation that reduces adherence of the users as well as credibility among them. Moreover, a qualitative research in from Iraq by Ibrahim et al. (2025) explored usage of digital CBT with localized content, reporting positive engagement. However, the study was conducted in different socio-cultural settings. Furthermore, tech-driven CBT is rated as the most effective intervention as and when clinician-guided. A research by Wolters et al. (2017) highlighted that fully self-regulated smartphone-mediated interventions risk greater dropout rates and lesser outcomes than the ones integrated with clinicians' support.

Problem Statement

Pakistani socio-cultural and geographic landscape offers a unique perspective of challenges with respective to mental health and associated clinical interventions. Cultural stigma and religious misinterpretations regarding psychological disorders often hinder therapeutic procedures. The misunderstanding or poor diagnosis of the symptoms associated to obsessive compulsive disorder (OCD), particularly the ones with intrusive content, further complicates the therapeutic process when arbitrated via digital platforms. This research has attempted to explore the insights of Islamabad-based Pakistani clinical psychologists about effectiveness of smartphone-mediated cognitive behavioural therapy for youth diagnosed with OCD. Given the fact that clinical psychologists have a central role in terms of evaluation and delivery of therapeutic interventions, their perspectives have provided valuable direction on cultural considerations, ethical aspects and practical procedures for

successful application of digital intervention for mental health in Pakistan.

Significance of the Study

Employing qualitative approach, this research has investigated perceived effectiveness of smartphone-mediated CBT as well as structural and socio-cultural factors that influence its adoption. By focussing on the insights of clinical mental health practitioners, this study has been a useful addition to the existing body of literature on digital mental health interventions in Pakistan as well as the under-developed world. It has explored professional perspectives that may help policymakers, mental health practitioners, IT developers, and society as whole to make an effective use of smartphone-mediated CBT interventions for Pakistani youth with OCD.

Objective of the Study:

This study aimed to document the professional insights of the Islamabad-based Pakistani clinical psychologists about usefulness of smartphone-mediated Cognitive Behavioural Therapy interventions for youth suffering from obsessive compulsive disorder to help them in cognitive restructuring, exposure and response prevention, reducing avoidance, safety behaviours, and developing coping skills and strategies.

Research Questions:

The study was guided by the following research questions:

RQ1. What is the opinion of clinical psychologists about the effectiveness of smartphone-mediated CBT interventions in treating obsessive compulsive disorder among Pakistani youth?

RQ2. What are the challenges faced by clinical psychologists in implementation of smartphone-mediated CBT for Pakistani youth with OCD?

RQ3. How do clinical psychologists view the potential integration of smartphone-mediated CBT strategies into standard care for youth's OCD treatment in Pakistan?

Methodology

Guided by the exploratory design and qualitative approach, this research adopted focus group discussion as a method to explore the expert perspectives of the Islamabad-based Pakistani clinical psychologists about the effectiveness of smartphone-mediated cognitive behavioural therapy (CBT) for youth who suffer from obsessive-compulsive disorder (OCD). A number of 25 practicing clinical psychologists were approached for informed consent out of which 19 agreed to participate in the discussion. However, only 11 were conveniently available at the time and venue of the discussion. Keeping in view the busy schedule of the clinicians, the researchers conducted one but comprehensive discussion that lasted for 3 hours 56 minutes, facilitated by neutral and friendly setting, ensuring data confidentiality and comfort of the participants. With the consent of the study participants, the session was video-recorded and later transcribed. The researchers were also reflexive of their role. With ice-breaking comments by the researchers involving bilingual (English and Urdu) mode, making the participants comfortable to share their personal treatment experiences, expert insights, and recommendations for improved CBT in the future, the discussion revolved around:

a. Prospects and concerns about smartphone-mediated CBT for OCD treatment of youth in countries like Pakistan.

b. Key challenges faced by clinicians in ethical concerns while applying CBT for OCD cases.

c. Religious and sociocultural stereotypes, taboos and factors impacting therapeutic engagement

d. Structural, technical, and literacy challenges to smartphone-mediated CBT for OCD treatment in the underdeveloped/developing world.

e. Future recommendations for tech-clinician integration and regulation of mental health services in Pakistan

Data Analysis:

The researchers gathered responses from a focus group discussion involving 11 Islamabad-based Pakistani clinical psychologists. Thematic analysis was carried out to analyse data, using Braun and

Clarke's (2006) six-step framework. Nisa et al. (2024), Ayaz and Ahmed (2024), Ayoub and Ahmed (2024), and Ahmed et al. (2024) applied this six-phase approach in their qualitative studies for data analysis. It enabled the researchers to identify recurring patterns, connotations, and insights relating to the effectiveness and challenges to smartphone-mediated Cognitive Behavioural Therapy (CBT) for Pakistani youth suffering from obsessive compulsive disorder (OCD). The focus group discussion notes and transcriptions were coded manually and refined through NVivo software to warrant systematic organization and traceability of the study themes. The data analysis focused not only on the content but also on the context of study, focussing on technological, cultural, and clinical nuances, which impact digital interventions related to psychological wellbeing in Pakistan. The themes and subthemes were inductively derived, and reflected diverse experiences across respondents.

Table 1: Themes, Descriptions, Codes, Definitions, and Example Quotes

Theme	Description	Code	Code Definition	Example Quote
Effectiveness of Smartphone-mediated Apps in CBT	Respondents' opinion about effectiveness and results of Smartphone-mediated CBT apps for youth OCD cases.	Digital App improve accessibility	Smartphone-mediated CBT enhances access to care, particularly for individuals who are unable to visit clinics.	A lot of rural families may find it convenient to access Smartphone-mediated therapy.
		Relief in symptoms for individuals with mild OCD	Smartphone-assisted Apps may help counter and reduce symptoms in young people suffering from mild to moderate OCD.	In mild to moderate OCD cases, I have witnessed some relief in compulsions after consultation through smartphone applications."
		Positive youth engagement	Young people feel more comfortable when they access therapy via smartphones.	"Individuals open up more while sharing perceptions and experiences virtually, and show reluctance while being face to face.

OCD Treatment and Clinical Challenges	Practical therapeutic complications in OCD management via smartphone-assisted apps	ERP requires oversight by the therapist	Execution of Exposure and Response Prevention (ERP) looks challenging without professional supervision.	One can not expect a digital application to supervise graded exposure in case of religious obsessions. It requires tailoring.
		Limited emotional linkage	Digital Apps can not handle non-verbal cues, hence unable to develop a therapeutic relationship.	I can not record the subtle cues, the facial expressions, and the body language.
		Inadequate for chronic cases	Smartphone-mediated CBT alone can not be effective for chronic OCD cases.	With chronic OCD, particularly when risk is involved, smartphone-mediated CBT can never be considered.
Socio-cultural Considerations	How domestic culture and social values including religious beliefs, traditions, stigma, and language develop the acceptance of digital therapeutic applications.	Psychological (mental) health stigma	Psychological (mental) disorders and subsequent therapies still suffer societal judgment in Pakistan.	"Parents avoid admitting their children have any psychological disorder. Going for therapies is still a taboo in Pakistani society.
		OCD subjected to religious interpretations	Obsessions and compulsions are subject to religious interpretations	I have had clients suffering from OCD where consistent focus on

			and mostly misjudged as religious obligations.	tasbeeh, even in social gathering where individuals avoid and ignore their family, friends and colleagues stating they are connected to God, is considered as extra piety, not a disorder.
		Digital Apps lack localization	Smartphone-mediated CBT apps lack localization as these are not designed according to Pakistani socio-cultural values (e.g. not available in Urdu for people in Pakistan).	Most of the digital application are in English languages, and designed according to sociocultural context that doesn't match Pakistani cultural realities.
Structural and Technological Barriers	Limitations and challenges on access to technology, smartphone literacy, and government policies in Pakistan.	Limited smartphone access and literacy	Low-income and lesser-educated families can not afford, and effectively use smartphones and related internet-based applications.	We can not expect low-income, and lesser educated households to afford and effectively use smartphones, mobile data packages and apps for psychological wellbeing.
		Parents lack tech literacy	Parents belonging to Generation X,	Some of the Gen X and millennial

			and millennials, particularly in the rural areas of Pakistan lack digital literacy and skills required to support youth using CBT applications.	parents don't have digital literacy and can not even download any application, let alone monitor its utilization.
		Privacy concerns	Data privacy and security concerns hinder trust and confidence in digital interventions.	I always think: who monitors this data? There exists no policy and monitoring mechanism regarding such applications.
Future Prospects	Recommendations from the clinical psychologists on how to improve the effectiveness and integration of smartphone-mediated CBT tools.	Blended therapeutic model	Integration of smartphone-based CBT apps with face-to-face sessions outcome optimization	Smartphone-mediated apps can work best only when the therapist devises a therapeutic plan and guides the process alongside.
		Clinicians and parental training	Essential structured training programmes for clinicians and parents on the usage of digital technologies effectively.	Both clinicians and parents need orientation sessions and structured trainings before therapeutic execution through smartphone-

				mediated apps.
		Government policy and support	Policy endorsement is required to legitimize and regulate psychological wellbeing practices both in person and via digital apps.	Pakistan is a country where many bogus psychological clinicians practice. There is dire need to develop a policy and regulate this sector. Government should approve certified clinicians and psychological wellbeing applications before these are put into practice.

Table 1 above portrays the main themes, codes, definitions, and supporting respondent quotes found out via thematic analysis of the focus group involving Islamabad-based Pakistani clinical psychologists using NVivo. The researchers explored five main themes including Effectiveness of Smartphone-mediated Apps in CBT, OCD Treatment and Clinical Challenges, Socio-cultural Considerations, Structural and Technological Barriers, and Future Prospects. Every theme is endorsed by the relevant codes that indicate explicit insights from the clinicians about smartphone-mediated CBT app usage for Pakistani youth with obsessive compulsive disorder. The quotations demonstrate how respondents expressed these ideas, basing the study in real-life clinical and socio-cultural contexts.

Table 2: Themes, Subthemes, References, Participants, and Interpretive Note (n=11)

Theme	Subthemes	Number of References	Number of Participants (n=11)	Interpretive Note

Effectiveness of Smartphone-mediated Apps in CBT	• onvenience and access • ymptomatic improvement in mild OCD cases • outh engagement	57	11	Smartphone-mediate CBT is globally accepted practical clinical intervention to treat mild OCD.
OCD Treatment and Clinical Challenges	• RP needs supervision • imited therapeutic bond • napplicability in chronic OCD	51	10	Substantial concern over the scientific care and limitations of remote CBT
Socio-cultural Considerations	• sychological health stigma • eligious approach towards symptoms • ack of content localization	47	9	sociocultural stigma and religious

				pers pecti ves great ly influ ence perc eptio ns abou t treat men t.
Struct ural and Techn ologic al Barrie rs	• nadequate access • arental tech illiteracy • rivacy concerns	39	8	Soci etal struc tural limit atio ns hind er adop tion of digit al ther apeu tic strat egies .
Futur e Prosp ects	• lended therapeutic model • tructured training clinicians and parents • olicy support	44	11	Gen eral cons ensu s on the requ irem ent for blen ded care,

				policy support, and training

Table 2 above reveals a brief overview of the five main themes explored by the researchers via thematic analysis based on a focus group discussion involving 11 Islamabad-based clinical psychologists. Every theme has been supported by the subthemes, revealing diverse but relevant ideas recurrently deliberated by the respondents. The table also demonstrates the frequency of coding references in NVivo and the number of respondents who cited the particular theme, providing insights into the depth and breadth of every aspect.

A brief explanation of the themes is as under:

1. **Theme 1—Effectiveness of Smartphone-mediated Apps in CBT:** This theme was cited by all respondents *(n=11)* with the maximum mentions (57), reflecting strong consensus over smartphone-mediated CBT as being practical and manageable for Pakistani youth with mild OCD symptoms.

2. **Theme 2—OCD Treatment and Clinical Challenges:** The theme was also extensively cited *(n=10)* with a focus on concerns including the need for close supervision by clinicians during ERP, challenges in developing therapeutic associations through digital apps, and the ineptness of smartphone-mediated tools for chronic OCD.

3. **Theme 3—Socio-cultural Considerations:** This theme emerged from the narratives of nine *(n=9)* respondents, revealing challenges like religious misinterpretations, psychological (mental) health stigma, and culturally irrelevant content including applications facilitated with English language communication in majority of the CBT strategies.

4. **Theme 4—Structural and Technological Barriers:** The theme emerged out of discussions by eight *(n=8)* discussants stating concerns related to factors and limit the equitable usage of smartphone-mediated interventions including limited smartphone access, poor digital literacy among the parents of young people suffering from OCD, and scepticism about data confidentiality.

5. **Theme 5—Future Prospects:** All respondents *(n=11)* received broad support, stressing a preference for blended care model (therapist + digital (smartphone-mediated) applications, trainings for clinicians and parents, and the requirement of policy / government endorsement and support for digital tools.

Word Cloud Reflecting Central Concepts of Study Themes

The word cloud above visually demonstrates central concepts revolving around the five major themes based clinical psychologists' perspectives on smartphone-mediated cognitive behavioural therapy for obsessive compulsive disorder among Pakistani youth. The word cloud highlights the efficacy of digital applications in improving accessibility, convenience, and symptom decrease, particularly for mild OCD cases and engagement of youth. The challenges comprise the requirement for clinicians' supervision during ERP, limited therapeutic associations between clinician and the OCD cases, and complications linked with chronic OCD. Various socio-cultural factors including religious beliefs, stigma, and lack of localized (Urdu-based) content play crucial roles besides structural barriers such as limited accessibility, privacy concerns, and lower parental tech literacy. Clinicians underscore the future prospects including blended models, parental and clinicians' training, and policy support to regulate digital psychological wellbeing.

Findings of the Study:

1. Smartphone-mediated CBT is widely considered as beneficial for youth with mild OCD, basically due to its cost-effectiveness, accessibility, and comfort it offers them due to their familiarity with the digital platforms.
2. The clinical psychologists voice grave concerns about the challenges faced by smartphone-mediated CBT in delivering ERP without clinicians' oversight, particularly for moderate to chronic OCD cases.
3. Socio-cultural and religious beliefs meaningfully influence the ground realities like OCD acceptance, and willingness for treatment as many families misinterpret OCD symptoms via religious lens or avoid therapy because of stigma associated with it.
4. Structural and technological barriers such as limited smartphone accessibility, lower parental digital literacy, and data privacy concerns are commonly documented obstructions in successful digital CBT interventions for OCD.
5. A blended approach, integrating smartphone-mediated strategies with in person therapeutic session, training programmes for both parents and clinicians, and policy-endorsed guidelines and regulation can help professionals for better and broader clinical interventions.

Discussion:

The current research explored the perspectives of Islamabad-based clinical psychologists on smartphone-mediated CBT interventions for obsessive compulsive disorder among Pakistani youth. It documented the expert opinions to understand the prospects and concerns about digitally regulated cognitive behavioural therapy for youth who are diagnosed with obsessive compulsive disorder. With the application of NVivo, the researchers found out five major themes including 'Effectiveness of Smartphone-mediated Apps in CBT', 'OCD Treatment and Clinical Challenges', 'Socio-cultural Considerations', 'Structural and Technological Barriers', and 'Future Prospects'. The findings of the study revealed that while smartphone-mediated CBT applications provide a notable facilitation regarding cost-effectiveness, accessibility, and youth engagement, the clinical utility of such digital strategies is limited to mild OCD cases. These results align with existing body of literature documenting that smartphone-mediated CBT applications may work as accessible entry points into psychological healthcare, particularly in understanding underserved communities **(Hollis et al., 2017).**

The respondents stressed that being digitally naive, the young people often demonstrate amplified facilitation and comfort with smartphone interfaces, enabling engagement with the therapeutic content.

However, substantial clinical challenges were also documented, especially about the implementation of Exposure and Response Prevention (ERP). The respondents emphasized that ERP requires critical monitoring, personalization, and clinical rapport. This falls in conformity of previous research that cautions against the application of self-guided CBT to treat chronic OCD cases **(Andersson et al., 2014).** Non-verbal cues, emotional tone, and real-time feedback by the therapist were reported as missing in the smartphone-mediated applications, the aspect that potentially limits the therapeutic impact during ERP. Furthermore, Pakistani socio-cultural landscape emerged as a crucial factor. Mental health stigma, reinforced by communalist traditions coupled with religious misinterpretations of symptoms stagnates both the diagnosis and acceptance of smartphone-mediated interventions. The lack of localized applications, which mostly are English-based and Westernized, were considered a challenge to relevance and usability, resounding similar concerns in the available literature pertaining to global south **(Naslund et al., 2017).**

This research also identifies technological disparities including limited smartphone accessibility and digital connectivity among families with low socioeconomic status, and lower digital literacy among parents, particularly in the rural areas that may hinder participation of young people in digital therapeutic programs. Significantly, the study participants raised ethical concerns such as data privacy and the absence of regulatory oversight for psychological wellbeing in Pakistan. Despite many challenges, the respondents advocated for blended care models, where smartphone-mediated complement, rather than replace, in person therapeutic sessions. The clinical psychologists They campaigned for structured training programs for both caregivers and clinicians, culturally-relevant content, and policy support for regulation and legitimization for digital interventions. The existing literature also reflected successful implementation of such hybrid models, integrating the outreach of smartphone-mediated applications with the policy-regulated clinical interaction **(Mohr et al., 2013)**.

Study Limitations

The sample of this research was limited to only 11 Islamabad-based Pakistani clinical psychologists who gathered for a focus group discussion. It might not have captured the complete spectrum of professional perspectives across diverse regions of the country. Moreover, the qualitative findings may be jeopardised by subjective interpretations and are not generalizable. Additionally, the research also did not consider youth or caregivers (parents) as participants, thus could not gather key stakeholder viewpoints about smartphone-mediated CBT interventions. Furthermore, social desirability bias might have influenced respondents who were aware of the academic

context of the study. Finally, the findings of this may quickly get outdated in view of the rapidly evolving digital technologies and their application to psychotherapeutic functionalities.

Future Recommendations and Study Implications

The future research should be conducted under multi-stakeholder approach. It should engage youth, caregivers (parents) and tech developers so that their viewpoints yield comprehensive results. Furthermore, quantitative and mixed-method studies should also be carried out to assess symptom reduction outcomes by controlled use of CBT applications. Besides, the digital CBT apps should incorporate culturally and linguistically adapted strategies and content for Pakistani users. The policy makers, academicians and practitioners should collaborate to develop and execute training modules for parents and clinicians alike, guaranteeing informed usage of digital applications. Lastly, government must devise regulatory policies to ensure clinical licensing for practice validity, data privacy, ethical compliance, and mental health apps usage.

Conclusion

This research explored the expert insights of Islamabad-based Pakistani clinical psychologists on the usage of smartphone-mediated CBT interventions for Pakistani youth with OCD. The results show cautious optimism concluding that while smartphone-mediated therapy is considered as promising strategy to improve youth accessibility and engagement, it suffers cultural, structural, and clinical challenges. The lack of clinicians' supervision in ERP delivery during digital CBT, cultural stigma, inadequate content localization, and limited parental support limit effective its implementation. However, the respondents stressed upon a blended care model, policy support, and stakeholder training that may streamline digital CBT as a viable mental health services component for Pakistani youth. This study contributes to the growing digital mental health discourse, especially in the primary and secondary societies and acknowledges the culturally sensitive and policy-regulated digital care models.

REFERENCES

Ahmed, A. (2024). Effects of Smartphone Usage: Measuring Nomophobia among Journalists in Pakistan. University of Gujrat, Pakistan.

Ahmed, A., Kashif, M., & Mansoor, S. (2024). Exploring Journalists ' Narratives on Challenges to Climate Journalism in Pakistan. Human Nature Journal of Social Sciences, 5(1), 286–294.

Ahmed, A., Nisa, U., & Iftikhar, A. (2023). Digital Media and Perseverative Thinking : A Case of the Students of Psychology among Islamabad-based Public Sector Universities. Online Media & Society, 4(3), 58–66.

Ahmed, A., Shah, S. Z. A., & Akhtar, A. (2025). Personalized Digital Advertising: Influene of Cosmetic Brands on Purchase Intensions of Pakistani Youth. Journal of Media Horizons, 6(2), 47–56. https://doi.org/10.5281/zenodo.15239761

Ahmed, A., & Yousaf, M. (2023). An Investigation into Smartphone Usage and Nomophobia among Journalists in Pakistan. Human Nature Journal of Social Sciences, 4(2), 750–764.

Ayaz, W. Bin, & Ahmed, A. (2024). Analyzing the Insights of Climate Change Researchers on the Role of Media in Shaping Public Discourse on Environmental Issues in Pakistan. Journal of Media Horizons, 5(4), 579–591.

Ayoub, M., & Ahmed, A. (2024). Decoding Interpersonal Communication Patterns among Climate Disaster Victims : A Case Study of 2024 Glacier Burst Floods in Kumrat Valley , Pakistan. Human Nature Journal of Social Sciences, 5(4), 132–142.

Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. Qualitative Research in Psychology, 2(3), 77–101. https://doi.org/https://doi.org/10.1191/1478088706qp063oa

Haque, R., & Rubya, S. (2022). "For an App Supposed to Make Its Users Feel Better, It Sure is a Joke" - An Analysis of User Reviews of Mobile Mental Health Applications. ACM Humuman-Computer Interaction, 6(November), 421:1-421:28. https://doi.org/10.1145/3555146

Hollmann, K., Allgaier, K., Hohnecker, C. S., Lautenbacher, H., Bizu, V., Nickola, M., Wewetzer, G., Wewetzer, C., Ivarsson, T., Skokauskas, N., Wolters, L. H., Skarphedinsson, G., Weidle, B., Haan, E. de, Torp, N. C., Compton, S. N., Calvo, R., Lera-Miguel, S., Haigis, A., … Conzelmann, A. (2021). Internet - based cognitive behavioral therapy in children and adolescents with obsessive compulsive disorder: a feasibility study. Journal of Neural Transmission, 128(9), 1445–1459. https://doi.org/10.1007/s00702-021-02409-w

Ibrahim, R. H., Yaas, M. H., Hamarash, M. Q., Al-mukhtar, S. H., Abdulghani, M. F., & Mushhadany, O. Al. (2025). Adapting Cognitive Behavioral Therapy for Adolescents in Iraq via Mobile Apps: Qualitative Study of Usability and Outcomes. JMIR Pediatrics and Parenting, 8(e67137 |), 1–12. https://doi.org/10.2196/67137

Khan, S., & Ahmed, A. (2024). The Role of Social Media in Shaping University Students' Perception of Climate Change in Pakistan. Policy Research Journal, 2(4), 2240–2248.

Lenhard, F., Andersson, E., Mataix-Cols, D., Ruck, C., Vigerland, S., Hogstrom, J., Hillborg, M., Brander, G., Ljungstrom, M., Ljotsson, B., & Serlachius, E. (2017). Therapist-Guided, Internet-Delivered Cognitive-Behavioral Therapy for Adolescents With Obsessive-Compulsive Disorder: A Randomized Controlled Trial. Journal of the American Academy of Child & Adolescent Psychiatry, 56(1), 10–19. https://doi.org/10.1016/j.jaac.2016.09.515

Litke, S. G., Resnikoff, A., Anil, A., Montgomery, M., Matta, R., Huh-yoo, J., & Daly, B. P. (2023). Mobile Technologies for Supporting Mental Health in Youths: Scoping Review of Effectiveness, Limitations, and Inclusivity. JMIR Mental Health, 10(e46949), 1–15. https://doi.org/10.2196/46949

Nisa, U., Ahmed, A., Ali, S., Hassan, K., & Naz, A. (2025). An Investigation into the Impact of Social Media Addiction on Cognitive Failures Among Young Adults: A Cross Sectional Study. Clinical Social Work and Health Intervention, 16(1–2), 95–107. https://doi.org/10.22359/cswhi_16_1_2_10

Nisa, U., Ahmed, A., & Elahi, H. (2024). Cultural Influences on Body Image: A Thematic Analysis of Social Media Perception among Young Pakistani Women. Journal of Peace, Development and Communication, 08(02), 267–278. https://doi.org/10.36968/JPDC-V08-I02-20

Polak, M., & Tanzer, N. K. (2024). Based Cognitive Behavioural Treatments for Obsessive – Compulsive Disorder: A Systematic Review and Meta-Analysis. Clinical Psychology & Psychotherapy, 31(e2989), 1–21. https://doi.org/10.1002/cpp.2989

Sultan, K., & Ahmed, A. (2022). A Framework for Regulating Digital Lives in the Context of Digital Etiquettes and Responsibilities. Online Media & Society, 3, 273–281.

Sultan, K., Ahmed, A., & Tariq, N. U. (2023). Investigating the Impact of Smartphone Addiction on Perseverative Thinking among Pakistani University Students: A Case of Islamabad. Human Nature Journal of Social Sciences, 4(3), 305–313.

Wolters, L. H., Beek, V. De, Weidle, B., & Skokauskas, N. (2017). How can technology enhance cognitive behavioral therapy: the case of pediatric obsessive compulsive disorder. BMC Psychiatry, 17(226), 1–9. https://doi.org/10.1186/s12888-017-1377-0

Younis, N., & Ahmed, A. (2024). Exploring the Impact of Exposure to Social Networking Sites on Climate Activism among University Students: A Case of Islamabad, Pakistan. Online Media & Society, 5(4), 13–21.