Volume 4, Issue 4, 2026

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

DETERMINANTS INFLUENCING THE INTEGRATION OF YOGA INTO PHYSICAL THERAPY PRACTICES IN PAKISTAN: QUALITATIVE STUDY

Abdur Rehman[1], Mashhud Ahsan [2], Mahnoor Ali [3], Tayyab Awan [4], Kashmala Zia [5], Subhan Ur Rehman Burki [*6]

[1,2,3]*Physical Therapist/Student of Northwest Institute of Health Sciences*
[4]*Lecturer/Clinical instructor at Northwest Institute of Health Sciences*
[5,*6]*Assistant Professor/Clinical instructor at Northwest Institute of Health Sciences*

[1]hajishahidmzai@gmail.com, [2]mashhudahsan17@gmail.com,[3]khanmahnoor116@gmail.com, [4]tayyabawan97@gmail.com , [5]Kashoozia25@gmail.com[5], [*6]hani11@rocketmail.com

DOI: https://doi.org/10.5281/zenodo.19885266

Keywords
Yoga integration, Physical therapy, Qualitative research, Clinical practice, Pakistan, Professional training.j

Article History
Received: 02 March 2026
Accepted: 11 April 2026
Published: 29 April 2026

Corresponding Author: *
Subhan Ur Rehman Burki

Abstract

Background: *The integration of yoga into physical therapy is gaining global attention due to its potential benefits in improving flexibility, pain management, and overall functional outcomes. However, in Pakistan, the adoption of yoga within physiotherapy practice remains limited and is influenced by cultural perceptions, professional awareness, and institutional support.*

Objective: *Yoga is a holistic mind-to-body practice that benefits physical and psychological health. This study investigated the factors that influence the integration of yoga into physiotherapy practice in Pakistan, exploring educational, cultural, and organizational elements.*

Methodology: *A single-case qualitative study design was employed. Purposive sampling was used to recruit eight male physiotherapists from various tertiary and secondary healthcare institutions in Sindh, Punjab, and Khyber Pakhtunkhwa. Data was gathered through in-depth, semi-structured interviews conducted via Zoom and WhatsApp. All interviews were transcribed and analyzed using Clarke and Braun's (2006) thematic analysis approach.*

Results: *Five key themes emerged: Curriculum and Training Gaps, Therapist and Patient Altitudes, Cultural and Religious Context, Organizational Support and Infrastructure, and Perceived Benefits and Clinical Relevance. Physiotherapists reported limited formal education and lack of certifications as major barriers. Cultural misconceptions and religious concerns affect acceptance, particularly among communities with lower education levels. However, physiotherapists recognized yoga's physical and psychological advantages, which enhanced their motivation to incorporate it.*

Conclusion: *The integration of yoga into physiotherapy practice in Pakistan is influenced by a combination of educational, altitudinal, cultural, and organizational factors. Strengthening professional training, addressing cultural considerations, and establishing supportive institutional policies may enable safe, effective, and culturally appropriate incorporation of yoga in clinical seedlings.*

Volume 4, Issue 4, 2026

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

INTRODUCTION

Yoga is a holistic mind-to-body practice originating in the Indian subcontinent. Traditionally spiritual discipline, it has evolved into a popular exercise and wellness practice worldwide [1]. Contemporary definitions emphasize their components of breath control (pranayama), physical postures (asana), and meditation or mindfulness (dhyana) [1]. In clinical contexts, yoga is often described as a form of "mind to body fitness" that encompasses both physical and mental training aimed at improving overall health and balance [2].

Extensive research demonstrates that regular yoga practice benefits both physical and psychological health. Clinical trials report significant reductions in stress, anxiety, and depression following yoga interventions [3]. On the physical side, systematic reviews find that yoga enhances muscular strength, balance, and flexibility [4]. Physical therapists are increasingly viewing yoga as a valuable tool in rehabilitation. Research shows that many therapists integrate yoga techniques to support patients with a wide range of conditions, including chronic low back pain and post-stroke mobility [5, 6].

However, the integration of yoga into clinical practice faces unique challenges. Studies suggest that most formal physical therapy training does not offer sufficient yoga training, leaving therapists unprepared to use it safely [7]. Furthermore, cultural background plays a key role; in Pakistan, where most of the population is Muslim, yoga may raise questions about religious acceptability [8,9,10]. Current findings on yoga in clinical practice are limited by a lack of diversity in participant samples, often focusing on Western contexts [11]. This study aims to determine the determinants influencing the integration of yoga into physical therapy practices in Pakistan, identifying educational, cultural, and organizational barriers and facilitators.

MATERIAL AND METHODS

Study Design and Settings

This single-case qualitative study was conducted online via Zoom and WhatsApp. Participants were recruited from various healthcare settings, including Agha Khan University Hospital (Sindh), Dr. Ziauddin Hospital (Sindh), Northwest General Hospital (KPK), Peshawar Institute of Cardiology (KPK), DHQ Hospital Nowshera (KPK), and Shifa International Hospital (Islamabad).

Duration and Sampling

The study was conducted between May 2025 and November 2025. The sample size consisted of 8 physiotherapists recruited using a purposive sampling technique. Inclusion criteria required participants to be PTs holding an MS degree with at least 5 years of continuous clinical experience, working in gyms, general OPDs, or musculoskeletal OPDs, and willing to interview in English .

Ethical Considerations

Ethical approval was obtained from the Institutional Review Board (IRB) and Ethical Committee (EC) of Northwest General Hospital. The purpose of the study was to explain to all participants, and online written informed consent was obtained prior to data collection.

Data Collection and Analysis

Data was collected through in-depth, semi-structured interviews. The Clarke and Braun (2006) six-phase thematic analysis approach was used as the theoretical framework for data analysis. This involved systematic coding and the development of themes related to the integration of yoga into practice.

RESULTS

Participants were eight practicing male physiotherapists aged 32–52 years with clinical experience ranging from 7 to 30 years. The analysis yielded five main themes representing the key determinants of integrating yoga into physical therapy practice.

1. Curriculum and Training Gaps

All participants noted a lack of formal education in yoga within physiotherapy. They reported that yoga is not included as a structured subject in their curriculum.

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

- *Curricular deficiencies:* One participant stated, "First of all, as a clinician, I would like to suggest that there should be some portion in our academics regarding yoga. Every physiotherapist should know the benefits of this protocol" (P3).
- *Lack of formal training:* Another participant admifled, "I have not taken any yoga training properly. I don't have any certificate" (P6).

2. Therapist and Patient Altitudes

Therapists' own altitudes toward yoga and patients' receptivity were key influences.

- *Therapist latitudes:* Some viewed yoga as peripheral, with one noting, "Yoga is not part of physical therapy treatment" (P1). Others saw value, stating, "It is very helpful for functional mobility and mental health" (P6).
- *Patient awareness:* Participants reported low patient awareness. One stated, "The first question [patients ask] is 'what is yoga'...most of them know, as I am working in an area of people highly educated, some of them know more than me" (P1). Another noted, "It's very trouble to hear when I guide them to do exercise they say, 'what exercise, what yoga?' They have no awareness" (P4).

3. Cultural and Religious Context

Social beliefs and religion were frequently mentioned factors.

- *Religious sensitivities:* One participant noted, "Muslims who do religious activities find it hard to perform yoga in front of everyone due to the poses and the nature of body movements" (P1). Another added, "Some people told me there is a religion problem... some movements are very... our religion doesn't allow them" (P4).
- *Socio-cultural factors:* A participant observed, "The culture we live in... specifically here... illiteracy is more. Because of that, patients don't accept it. It's a mafler of acceptance" (P6).

4. Organizational Support and Infrastructure

System-level factors played a dual role as both facilitators and obstacles.

- *Institutional support:* Some hospitals facilitated integration. A participant shared, "We had yoga in the hospital... The team of health and wellness had discussed...to improve mental health, we started yoga... and the staff is using all the benefits" (P2).
- *Resource constraints:* Conversely, many cited a lack of support. "We don't have any support from the hospital, from the department... We have a big problem of space" (P5).

5. Perceived Benefits and Clinical Relevance

Despite barriers, therapists recognized the benefits of yoga.

Physical health: Participants noted yoga is "used for flexibility and muscle endurance of the body" (P1) and is "very good for posture and balance" (P5).

- *Mental health:* Therapists observed that "when we introduce yoga... mental state improves and anxiety decreases" (P6).

DISCUSSION

The study revealed that the lack of formal yoga training in Pakistani physiotherapy programs is a primary barrier. Participants highlighted that specialized coursework does not exist, and certified training is rare. This aligns with global findings that standard physiotherapy training rarely incorporates yoga, leaving therapists hesitant to use it without further training [12].

Therapist and patient altitudes also play a crucial role. While some therapists recognized yoga's value for functional mobility, others remained hesitant due to a lack of familiarity. Similarly, patients often lack awareness, specifically in populations with lower literacy levels. This mirrors findings in underserved populations elsewhere, where yoga was initially viewed as exotic but eventually accepted once its health value was understood [13,14].

Cultural and religious context emerged as a significant determinant. In a Muslim-majority society, concerns regarding yoga's origins and physical postures were noted. However, some clinicians argued that yoga can cross religious boundaries if focused on scientific and health aspects. Literature suggests that culturally adapting yoga—for example, comparing breathing techniques to prayer—can enhance acceptability in Muslim communities [15,16].

Organizational support was identified as a critical enabler or barrier. Hospitals with wellness

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

programs and dedicated space successfully integrated yoga, whereas those with resource constraints and no official policies struggled. This supports the notion that successful integration of novel therapies requires strong organizational endorsement [17].

Finally, the perceived clinical benefits served as a strong motivator. Therapists consistently cited improvements in flexibility, balance, and mental health, aligning with clinical trials demonstrating yoga's efficacy in musculoskeletal and psychological rehabilitation [18-25].

CONCLUSION

The integration of yoga into physiotherapy practice in Pakistan is conditioned by educational, cultural, and organizational factors. The absence of formal training and certification, combined with low patient awareness and resource constraints in hospitals, constitutes major obstacles. However, the strong belief among physiotherapists in yoga's physical and mental benefits provides a foundation for integration. To advance holistic rehabilitation, academic institutions should introduce yoga science into curricula, policymakers should develop clinical guidelines and allocate resources, and practitioners should engage in community awareness efforts to demystify yoga and address cultural concerns.

FUNDING & CONFLICT OF INTEREST

The authors declare no conflict of interest. No specific funding was received for this study.

REFERENCES

Adams EV, Crowe BM, Vanadore J, Van Puymbroeck M, Schmid AA. The use of yoga in clinical practice: A descriptive study. OBM Integrative and Complementary Medicine. 2022;7(2):1-23.

Chauhan S, Najaf SS, Gergely L, Kinga KA, Karsai I, Prémusz V. Impact of 10 Weeks of Yoga Intervention on Mental Health and Overall Well-Being Among Medical Students: GSY Study. Sports. 2025;13(4):114.

Shin S. Meta-analysis of the effect of yoga practice on physical fitness in the elderly. International journal of environmental research and public health. 2021;18(21):11663.

Wims ME, McIntyre SM, York A, Covill LG. The use of yoga by physical therapists in the United States. International journal of yoga therapy. 2017;27(1):69-79.

Andrews AP, Atler KE, Dickman Portz J, VanPuymbroeck M, Rose CM, Schmid AA. Occupational therapists' use of yoga in post-stroke care: A descriptive qualitative study. British Journal of Occupational Therapy. 2021;84(4):240-50.

Thompson A, Huberty J, Eckert R, Taylor MJ, Ortiz A. Determining Physical Therapists' Readiness for Integrating Yoga Therapeutics into Rehabilitation. International journal of yoga therapy. 2020;30(1):77-88.

Sayeed SA, Prakash A. The Islamic prayer (Salah/Namaaz) and yoga togetherness in mental health. Indian journal of psychiatry. 2013;55(Suppl 2):S224-S30.

Joyce C, Kelly KC, Gurnani S, Sherman KJ, Roseen EJ, Saper RB. "In class we were all one." A qualitative exploration of yoga and educational interventions for predominantly low-income and minority adults with chronic low back pain. Journal of Integrative and Complementary Medicine. 2022;28(11):870-7.

Gupta P. Yoga at primary health centers–A pathway to holistic health: Narrative review. International Journal of Yoga. 2024;17(2):93-100.

Sivaramakrishnan D, Fitzsimons C, Kelly P, Ludwig K, Mutrie N, Saunders DH, et al. The effects of yoga compared to active and inactive controls on physical function and health related quality of life in older adults-systematic review and meta-analysis of randomised controlled trials. International Journal of Behavioral Nutrition and Physical Activity. 2019;16(1):33.

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

Zhang X, Chang T, Hu W, Shi M, Chai Y, Wang S, et al. Efficacy and safety of yoga for the management of chronic low back pain: an overview of systematic reviews. Frontiers in neurology. 2023;14:1273473.

Wieland L, Cramer H, Lauche R, Verstappen A, Parker E, Pilkington K. Evidence on yoga for health: A bibliometric analysis of systematic reviews. Complementary therapies in medicine. 2021;60:102746.

Thomas A, Kirschbaum L, Crowe BM, Van Puymbroeck M, Schmid AA. The integration of yoga in physical therapy clinical practice. Complementary therapies in medicine. 2021;59:102712.

Shefly DP, Patil NJ, Shyamala G, Belle VS, Annapoorna K, Lakshmi RV, et al. Yoga as a Holistic Intervention for Primary Dysmenorrhea: A Pilot Study on Pain, Mental Well-being, and Quality of Life. Advances in Integrative Medicine. 2025:100558.

Brinsley J, Schuch F, Lederman O, Girard D, Smout M, Immink MA, et al. Effects of yoga on depressive symptoms in people with mental disorders: a systematic review andmeta-analysis. British journal of sports medicine. 2021;55(17):992-1000.

Weber M, Schnorr T, Morat M, Morat T, Donath L. Effects of mind–body interventions involving meditative movements on quality of life, depressive symptoms, fear of falling and sleep quality in older adults: A systematic review with meta-analysis. International journal of environmental research and public health. 2020;17(18):6556.

Krejčí M, Hill M, Kajzar J, Tichý M, Hošek V. Yoga Exercise Intervention Improves Balance Control and Prevents Falls in Seniors Aged 65. Zdravstveno varstvo. 2022;61(2):85-92.

Grabara M. Intensity of Hatha yoga training for older adults. Scientific Reports. 2025;15(1):12936.

Kashyap M, Rai NK, Singh R, Joshi A, Rozatkar AR, Kashyap PV, et al. Effect of early yoga practice on post stroke cognitive impairment. Annals of Indian Academy of Neurology. 2023;26(1):59-66.

Anheyer D, Haller H, Lauche R, Dobos G, Cramer H. Yoga for treating low back pain: a systematic review and meta-analysis. Pain. 2022;163(4):e504-e17.

Marshall A, Joyce CT, Tseng B, Gerlovin H, Yeh GY, Sherman KJ, et al. Changes in pain self-efficacy, coping skills, and fear-avoidance beliefs in a randomized controlled trial of yoga, physical therapy, and education for chronic low back pain. Pain Medicine. 2022;23(4):834-43.

Cook CE, Bailliard A, Bent JA, Bialosky JE, Carlino E, Colloca L, et al. An international consensus definition for contextual factors: findings from a nominal group technique. Frontiers in Psychology. 2023;14:1178560.

Abafita BJ, Singh A, Aitken D, Ding C, Moonaz S, Palmer AJ, et al. Yoga or Strengthening Exercise for Knee Osteoarthritis: A Randomized Clinical Trial. JAMA Network Open. 2025;8(4):e253698-e.

Estevao C. The role of yoga in inflammatory markers. Brain, behavior, & immunity-health. 2022;20:100421.

Pascoe MC, J. de Manincor M, Hallgren M, Baldwin PA, Tseberja J, Parker AG. Psychobiological mechanisms underlying the mental health benefits of yoga-based interventions: a narrative review. Mindfulness. 2021;12(12):2877-89.