

DECLARATION

I hereby declare that this study was conducted by me at Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA), Bengaluru, under the guidance of **Dr. Sony Kumari**, Division of Yoga and Management, S-VYASA Deemed-to be University, Bengaluru.

I also declare that the subject matter of my thesis entitled “**Cross-sectional Comparative study of Yoga Delivery: Remote and In-person in Demographics of India (East) & North America (West)**” has not previously formed the basis of the award of any degree, diploma, associateship, fellowship or similar titles.

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DATE: 30th Jan 2025

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**STANDARD INTERNATIONAL TRANSLITERATION CODE USED TO
TRANSLITERATE SANSKRIT WORDS**

a	=	अ	ña	=	ड	pa	=	प
ā	=	आ	ca	=	च	pha	=	फ
i	=	इ	cha	=	छ	ba	=	ब
ī	=	ई	ja	=	ज	bha	=	भ
u	=	उ	jha	=	झ	ma	=	म
ū	=	ऊ	ñ	=	ञ	ya	=	य
ṛ	=	ऋ	ṭa	=	ट	ra	=	र
ṝ	=	ॠ	ṭha	=	ठ	la	=	ल
e	=	ए	ḍa	=	ड	va	=	व
ai	=	ऐ	ḍha	=	ढ	śa	=	श
o	=	ओ	ṇa	=	ण	ṣa	=	ष
au	=	औ	ta	=	त	sa	=	स
m̐	=	अं	tha	=	थ	ha	=	ह
ḥ	=	अः	da	=	द	kṣa	=	क्ष
ka	=	क	dha	=	ध	tra	=	त्र
kha	=	ख	na	=	न	jña	=	ज्ञ
ga	=	ग						
gha	=	घ						

ABSTRACT

BACKGROUND

As an increasingly recognized complementary healthcare approach, yoga demonstrates efficacy in managing a wide range of health issues, including chronic pain, diabetes, cardiovascular conditions, and mental health concerns such as anxiety and depression. With the global popularity of Hatha yoga and lifestyle shifts, yoga has transitioned into mainstream health care and wellness practices. Despite its benefits, integrating yoga into conventional healthcare remains challenging owing to the diversity in practice styles, demographic variability, and limited standardization of research methods and outcomes.

The shift to digital platforms accelerated by the pandemic has transformed yoga's accessibility and adaptability, allowing practitioners to engage remotely. However, remote yoga delivery raises concerns regarding consistency, reliability, and authenticity compared with traditional in-person sessions. Given these complexities, this study investigated the comparability and efficacy of remote versus in-person yoga across three key dimensions: authenticity, deliverability, effectiveness of delivery structure, and content inclusiveness. By examining these aspects across culturally distinct populations in North America (West) and India (East), this study provides insights into the potential of remote yoga for healthcare integration, emphasizing the need for structured, culturally adaptive approaches to enhance reliability and usability in various healthcare settings.

AIMS AND OBJECTIVES

This study aimed to evaluate the effectiveness of remote yoga delivery compared to in-person practices in supporting health and wellness across diverse global populations. Specifically, it seeks to identify critical factors in authenticity, delivery, usability structure, and content inclusiveness that influence the

quality and effectiveness of remote yoga as a reliable and effective healthcare practice. By addressing demographic and cultural differences, this study also explored delivery variability and the reliability of yoga interventions in aligning with healthcare needs.

METHODS

Participants: The study involved a culturally diverse sample of participants from North America (Western population) and India (Eastern population), representing a cross section of yoga practitioners engaging in both remote and in-person settings.

Design: A cross-sectional mixed-method design was employed, incorporating both quantitative and qualitative approaches. The quantitative component compared remote and in-person yoga practices, whereas the qualitative analysis explored expert insights into remote yoga authenticity and the delivery gaps between these methodologies.

Assessments: Telehealth Usability Questionnaire (TUQ), Essential Properties of Yoga Questionnaire (EPYQ) and a Qualitative Interview of yoga experts

Intervention: No Intervention was provided

RESULTS

Qualitative analysis revealed that 90% of experts regarded traditional in-person yoga as the gold standard for authentic practice, deeply rooted in traditions, discipline, and the Guru-Shishya Parampara, which remote delivery models cannot fully replicate. However, there is strong consensus on the positive impact and growing significance of remote yoga, particularly its ability to enhance global accessibility through advancements in technology and refined delivery methodologies. Experts

have also highlighted the potential to effectively address global health challenges. Although remote yoga may not entirely match the depth of in-person practice, it serves as a powerful and accessible alternative for practitioners worldwide.

A quantitative Study on deliverability evaluating remote yoga delivery revealed positive overall experiences, albeit with regional and demographic differences, that suggest areas for improvement. In the first study, 1,767 participants (801 from India and 966 from North America) generally reported positive feedback across the five subscales, although the mean scores on the reliability subscale were lower. Participants from India scored significantly higher than those from North America, indicating possible disparities in usability and effectiveness across the regions.

The second quantitative study involved 2,619 participants, 1296 from India and 1323 from North America. Total EPYQ scores were higher in India, with significant differences ($p < 0.05$) across the 14 subscales spanning region, sex, delivery mode, and participation status. Regional differences revealed that U.S. participants scored higher on body awareness and acceptance/compassion, while Indian participants rated spirituality and social aspects higher. Remote yoga delivery received positive ratings for yoga philosophy and health benefits, but lower ratings for individual attention and active postures. Men scored higher on social aspects and yoga philosophy, whereas women scored higher on body awareness and restorative postures. Additionally, practitioners rated physicality and active postures higher, whereas instructors rated yoga philosophy and mindfulness higher. These findings emphasize the need for tailored remote yoga approaches to address participants' diverse needs across regions and demographic groups.

CONCLUSION

Remote yoga offers substantial promise for healthcare integration but requires structured, culturally

adaptive delivery methods to maximize its effectiveness across diverse populations. This study highlights remote yoga's promise as a viable alternative to in-person practice, while identifying key areas for improvement in authenticity, reliability, and delivery. Introducing the KAPER framework, this study underscores the need for a structured approach that accounts for demographic and regional differences, promoting culturally sensitive and healthcare-integrated solutions. Moving toward data-driven analysis, this study supports the advancement of standards that enhance remote yoga's effectiveness and integration into conventional healthcare.

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