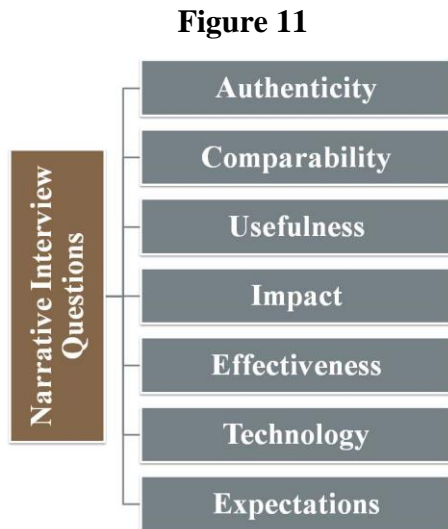


6.0 RESULTS

6.1 STUDY 1: QUALITATIVE NARRATIVE INTERVIEWS

The study addressed the convergence and divergence of remote yoga to in-person yoga. We employed a narrative analysis to evaluate remote yoga authenticity and future viability. The interviews were conducted with yoga experts from India, the USA, and Europe from institutions like UCLA, American Hindu University, Svyasa, Divine Society, Chinmaya, and Ramakrishna Mission, as well as other experts from other reputed yoga institutions. The experts' narratives were systematically analyzed using natural processing tools and keyword analysis. We sought to uncover underlying themes and patterns that reflect the collective viewpoints of the experts. Expert responses were categorizing their sentiments as positive, neutral, or negative. The scope of the question and discussion covered the factors shown in Figure 11.



Scope of narrative interviews

The analysis of expert participant responses to the seven narrative questions reveals distinct perceptions regarding traditional in-person yoga and remote yoga practices, as shown in the Table -5.

We rated each response as either positive, natural, or negative as a percentage of the sample size of 20 experts.

Table 5
Narrative Questions

Narrative Questions (n=20)	Positive %	Neutral %	Negative %
AUTHENTICITY: Does traditional in-person yoga provide a benchmark for the methods and objectives?	90	10	0
COMPARABILITY: Can remote yoga delivery be considered holistically equivalent to traditional in-person yoga for achieving yoga's true goals?	50	35	15
USEFULNESS: Is remote yoga comparable to traditional methodologies, including mental and physical well-being and holistic benefits?	60	20	20
IMPACT: Does remote yoga provide advantages in extending the reach of yoga practice and integrating it into the global health system?	70	20	10
EFFECTIVENESS: Has remote yoga been effective in current therapeutic applications?	85	5	15
TECHNOLOGY: Are technological advancements expected to enhance the outcomes of remote yoga practices?	55	25	20
EXPECTATIONS: Do you have positive future expectations toward the improved integration of remote yoga for offering comprehensive benefits?	80	10	10

The summary of the results is as follows.

1. Authenticity

A significant majority (90%) of experts view traditional in-person yoga as the benchmark for methods and objectives, with 10% remaining neutral and no negative responses. This indicates a strong consensus on the authenticity and foundational value of in-person yoga sessions.

2. Comparability

Opinions are more divided on the effectiveness of remote yoga compared to traditional in-person sessions. Half of the experts (50%) consider remote yoga equally effective, 35% are neutral, and 15% express skepticism.

3. Usefulness

When evaluating the equivalence of remote yoga to traditional methods in terms of mental, physical, and holistic benefits, 60% of experts respond positively, 20% remain neutral, and 20% respond negatively. While a majority acknowledge the usefulness of remote yoga, a notable portion of participants are either uncertain or doubtful about its comprehensive benefits.

4. Impact

Regarding the impact of remote yoga in extending the reach of practice and integrating into the global health system, 70% of experts express positive sentiments, 20% are neutral, and 10% are negative. This reflects a general optimism about the potential of remote yoga to broaden accessibility and contribute to global health initiatives.

5. Effectiveness

A substantial 85% of participants believe that remote yoga has been effective in current therapeutic applications, with 5% neutral and 15% negative responses. This indicates a strong endorsement of remote yoga's therapeutic efficacy among the majority of respondents.

6. Technology

Opinions on technological advancements enhancing remote yoga outcomes are mixed: 55% positive,

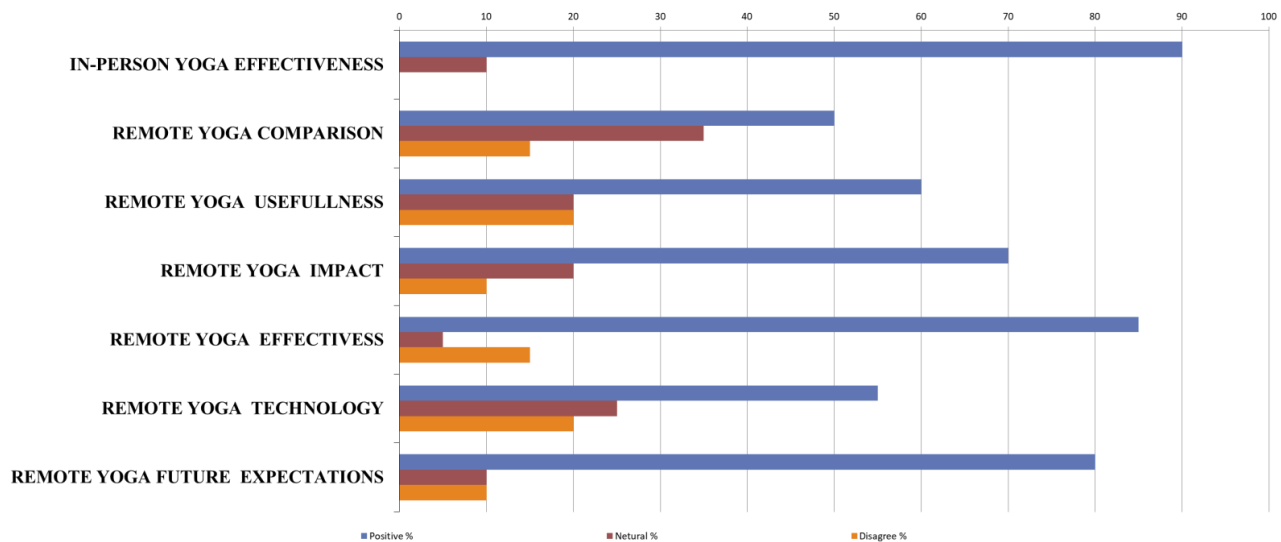
25% neutral, and 20% negative. While over half are optimistic about technology's role, a significant portion remains uncertain or skeptical about its benefits.

7. Expectations

Looking toward the future integration of remote yoga, 80% of experts have positive expectations, 10% are neutral, and 10% are negative. This suggests a prevailing belief in the potential for remote yoga to offer comprehensive benefits moving forward.

In summary, while traditional in-person yoga is predominantly viewed as the standard for authenticity, there is a considerable openness to remote yoga's effectiveness and potential, albeit with varying degrees of acceptance across different aspects. The data graph highlighted in **Figure 12** shows areas where remote yoga is embraced and points to aspects where further validation or improvement may be necessary to meet future delivery expectations. The analysis highlights the key contrasts between traditional (in-person) and remote yoga deliveries.

Figure 12



Assessment of qualitative expert interviews

The experts emphasized the value of one-on-one interaction, personalized guidance, and the integration

of yoga philosophy in traditional settings. The experts noted that in-person sessions promoted community learning, emphasized individual character development, and tailored teaching to the learners' progress. In contrast, experts perceived remote yoga as more modular, limiting sensory experiences and personal connections, despite its popularity in regular practice and specific therapeutic applications. The experts emphasized the lack of a holistic approach in remote sessions, which often focused on asanas and pranayama, and highlighted the challenges of conveying yoga's philosophical depth in these formats.

Analysis revealed that 90% of experts view traditional, in-person yoga as the true benchmark for authentic yoga practice, rooted in traditions, discipline, and Guru-Shishya Parampara that cannot be substituted by remote delivery models. The experts stated that traditional yoga prioritizes immersive learning, a personalized guru-disciple relationship, tailored progression, and lifelong transformation with "vairagya" (detachment). Moreover, the West is increasingly embracing the yoga philosophy, suggesting that remote self-guided methodology is a viable form of practice. Remote yoga offers accessibility to various teachings, complements traditional practices, enables broader global outreach, and necessitates careful transition to preserve the depth of yoga practice. The experts all agreed that remote yoga has therapeutic uses and overall health benefits. They also agreed that it can be a stepping stone for people who want to explore the deeper aspects of yoga through traditional in-person practices. Experts reflected strong consensus for the positive impact and growing relevance of remote yoga, global accessibility, advancements in remote technology, improved delivery methodology, and its potential role in addressing global health needs. While remote yoga may not achieve perfect comparability, it presents a powerful and accessible option for practitioners worldwide.

6.2 STUDY – 2 : QUANTITATIVE OBSERVATIONAL STUDY (TUQ)

This quantitative observational study aimed to assess the usability factors and satisfaction of remote yoga delivery among participants from India and North America. The survey incorporated the Telehealth Usability Questionnaire (TUQ), a 21-item, 6-subscale Likert scale to evaluate usability and satisfaction, with responses rated on a 7-point scale. The study targeted 192 participants per segment, achieving a total sample size of 1,767 participants, with 801 from India and 966 from North America.

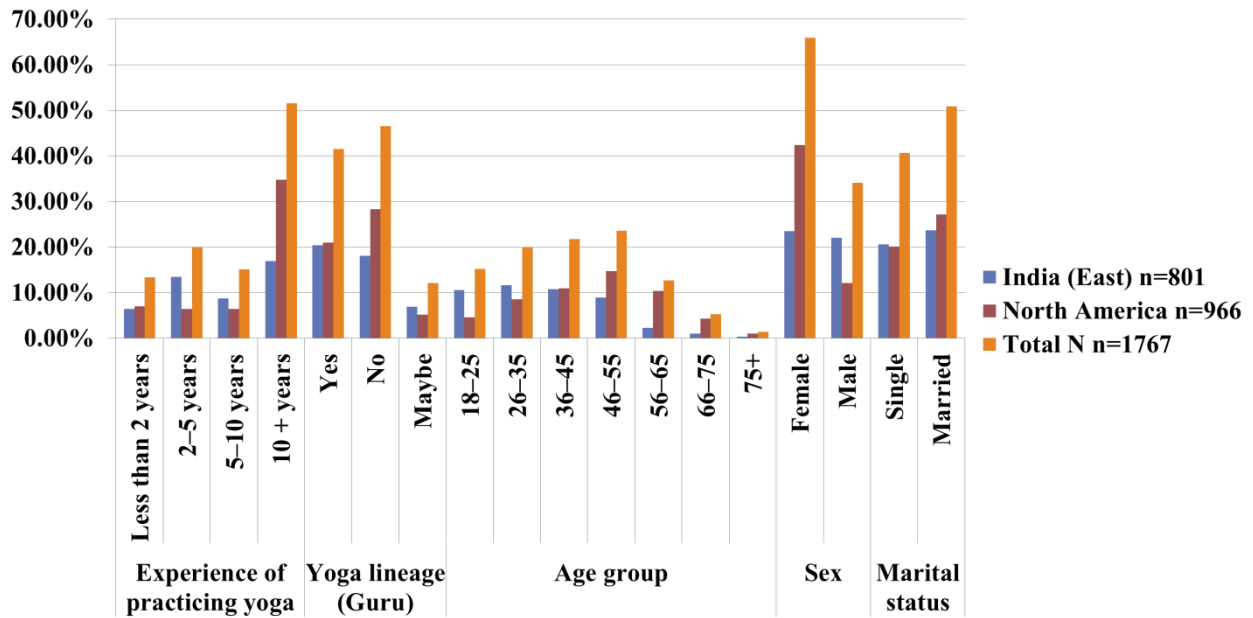
Quantitative Data Analysis:

In the quantitative phase of this study, the TUQ scale was utilized to assess the usability and effectiveness of remote yoga. The validity and reliability of the TUQ were confirmed through confirmatory factor analysis (CFA) and reliability testing (Cronbach alpha = 0.909) in an initial subset of 100 responses. The TUQ showed strong internal consistency and content validity, with standardized correlation coefficient values for the subscales ranging from 0.369 to 0.733, thus affirming its reliability. The high Cronbach's alpha value of 0.909 further demonstrated the questionnaire's robustness (Appendix 1 Table A1). The absence of multicollinearity confirmed the independence of the variables. Normality was assessed by analyzing skewness and kurtosis values, examining histograms, and utilizing Q-Q plots while considering the limitations of large sample sizes.

6.2.1 Demographic Characteristics:

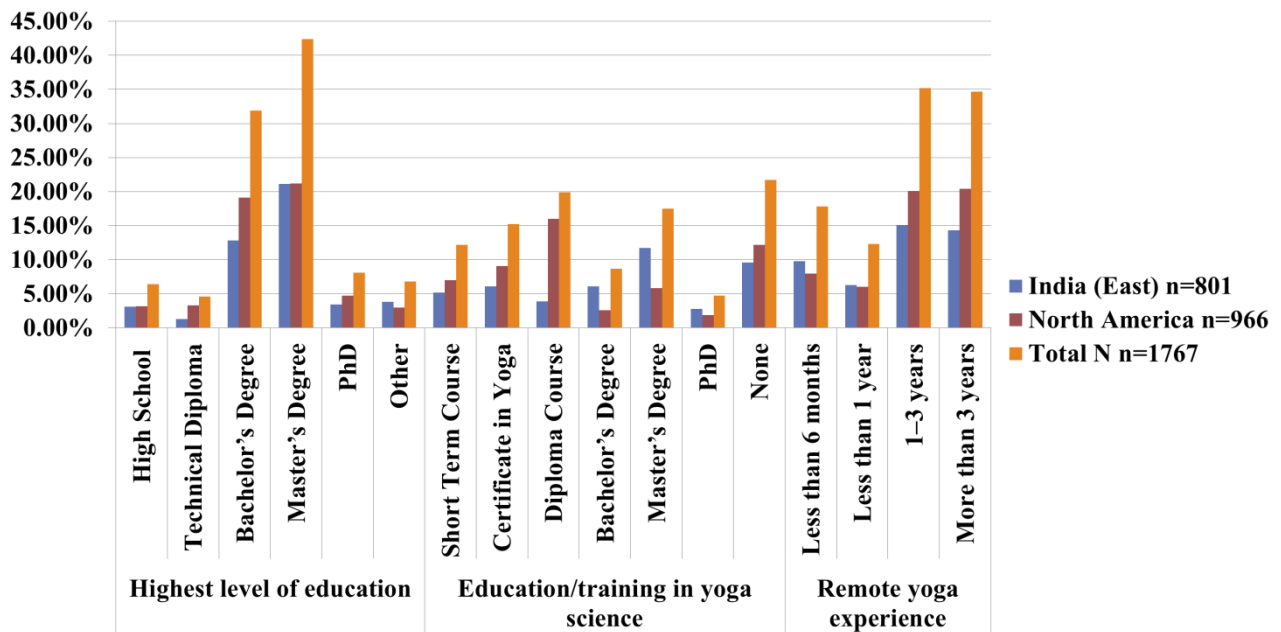
Appendix 1 Table A2, demonstrate participant profile. The highlight of participant demographics areas as follows. Figure 14 and Figure 15 illustrates the key demographics of participants.

Figure 14



Demographics of participants -1

Figure 15



Demographics of participants -2

Participants' connection to yoga:

Participants' connection to yoga varied significantly across categories. Yoga teachers and gurus formed the largest group, accounting for 38.4% of participants, with North America contributing 25.9% and India 12.5%. Regular practitioners without formal yoga degrees comprised 23.8%, distributed relatively evenly across both regions. Yoga students at the undergraduate level (11.7%) and yoga scholars pursuing advanced degrees (10.1%) represented smaller proportions of the sample. Meanwhile, yoga experts and professors made up 16.0% of the participants, reflecting a diverse representation of yoga-related roles.

Participants' experience in Yoga:

Over half of the participants (51.6%) reported practicing yoga for more than 10 years, with North America (34.8%) showing a notably higher percentage of long-term practitioners compared to India (16.9%). Participants with 2–5 years of experience made up 19.9%, while those with less than 2 years constituted 13.4%. This indicates a strong base of experienced yoga practitioners, particularly in North America.

Participants' yoga lineage (Guru):

Participants reported belonging to a yoga lineage in approximately 41.5% of cases, with nearly equal distribution between India (20.4%) and North America (21.0%). Those without a lineage accounted for 46.5% of the sample, while 12.1% were uncertain. This highlights the mixed reliance on traditional guru-based yoga practices in contemporary settings.

Participants' age and gender:

The majority of participants fell within the 26–55 age group, which accounted for 65.4% of the total

sample. The largest subgroup was the 46–55 age range, contributing 23.6%. Female participants dominated the sample, making up 65.9% of the total, with higher representation in North America (42.4%) compared to India (23.5%). These findings indicate the prominence of middle-aged female practitioners in yoga communities globally.

Participants' Marital Status:

Married participants constituted the largest group, making up 50.9% of the sample, followed by single participants at 40.7%. A smaller proportion of 8.4% identified as "other." This distribution highlights that yoga appeals broadly across marital statuses, with a slight predominance of married individuals.

Participants' Education Level:

Participants demonstrated high educational attainment, with 42.4% holding a master's degree and 31.9% possessing a bachelor's degree. Those with PhDs or post-doctoral degrees represented 8.1% of the sample, underscoring the academic integration of yoga practices. Only a small percentage (6.4%) had education levels limited to a high school diploma.

Participants' yoga education and training:

Formal education and training in yoga varied widely among participants. 12.2% completed short-term courses, and 15.2% obtained yoga certificates. 19.9% of participants completed diploma courses, and 17.5% and 4.7%, respectively, earned advanced yoga degrees (master's and PhD). Notably, 21.7% of participants reported having no formal yoga education, indicating that informal practice still holds a significant place in the yoga community.

Roles in Yoga:

Yoga providers, such as instructors, made up 59.4% of the participants, while the remaining 40.6% were yoga receivers or participants. This distribution reflects the dual nature of yoga engagement,

where both teaching and practicing are common roles among the community.

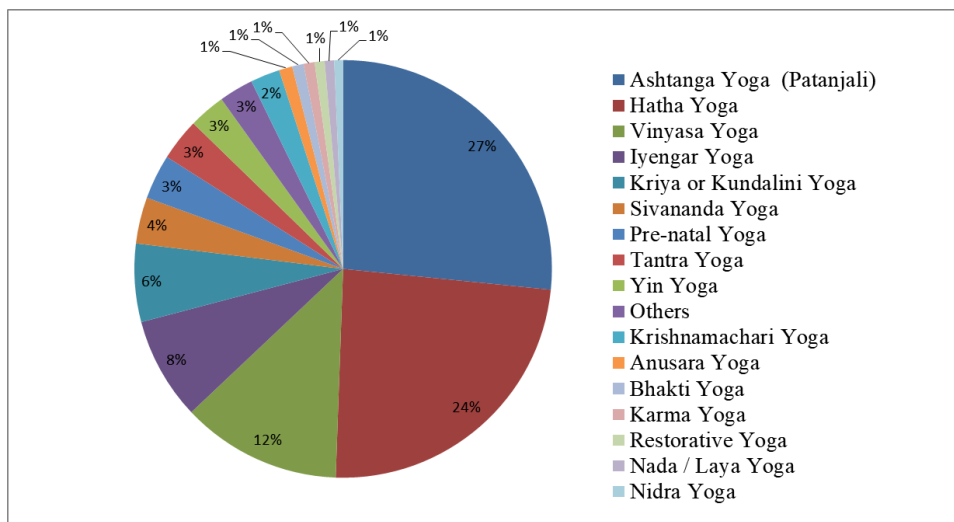
Remote Yoga Experience:

Remote yoga adoption was widespread among participants, with 69.9% having at least one year of experience. Among these, 35.2% reported 1–3 years of practice, while 34.7% had been practicing remotely for more than 3 years. Short-term experience (less than 1 year) was less common, at 30.1%. These findings highlight the growing prevalence and acceptance of remote yoga practices in both India and North America.

Participants' yoga styles:

Figure 16 shows yoga styles adopted of the participants. Almost (51%) practiced Ashtāᅅga or Hatha yoga, whereas 12% embraced Viniyoga and 8% followed Iyengar yoga.

Figure 16

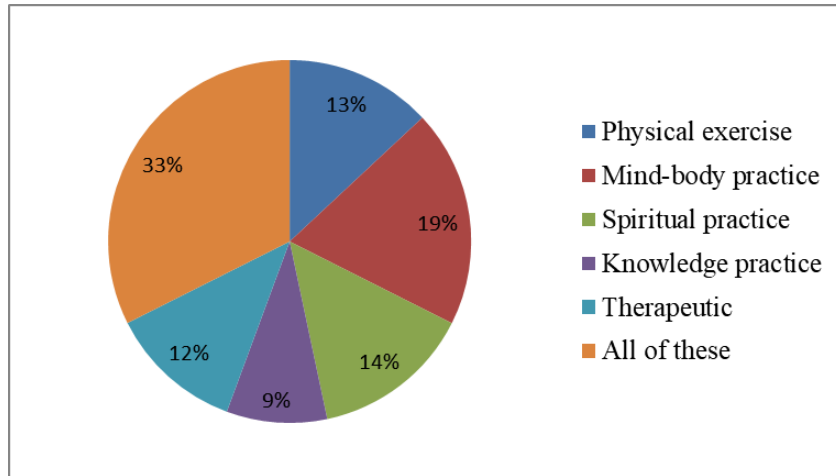


Yoga Styles Practiced by Participant

Participants' goals for yoga practice:

Diverse goals fueled participants as illustrated in Figure 17, with 33% seeking holistic benefits, 13% focusing solely on physical gains, and 12% utilizing yoga for therapy.

Figure 17

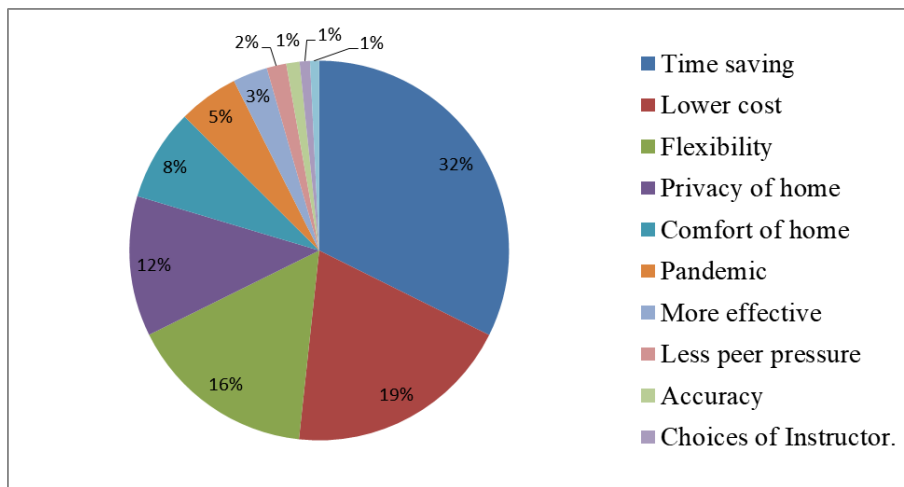


Reason for Remote yoga

Remote yoga participant goals:

Regarding the motivation for adopting remote yoga, 33% valued its time-efficiency benefits, 25% found it cost-effective, and 16% appreciated its flexibility benefits, driven by considerations of privacy, comfort, and the influence of the COVID-19 pandemic. Figure 18 shows the diversity of participant goals.

Figure 18



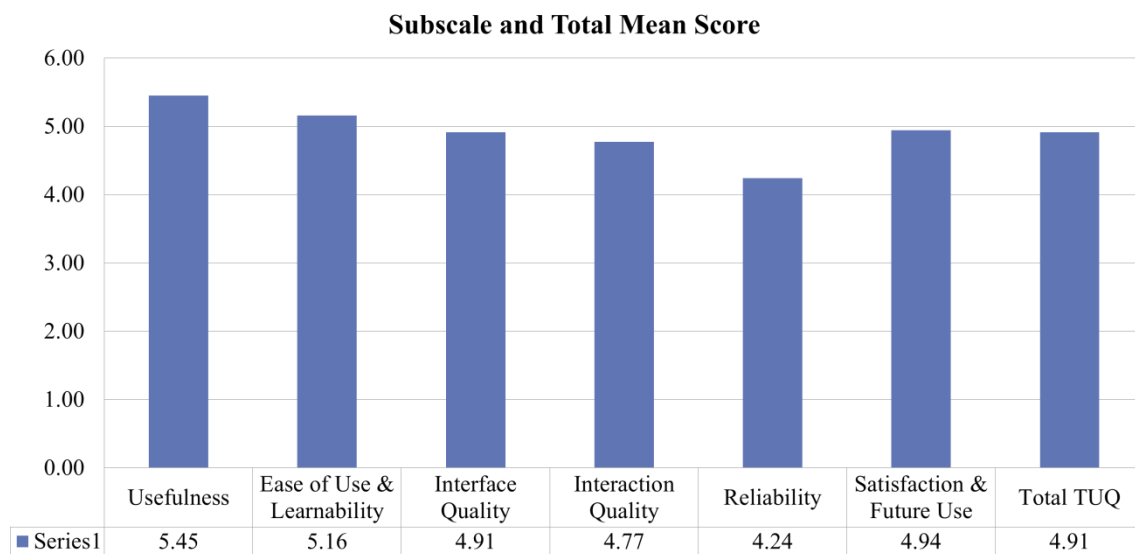
Remote yoga- participant goals

6.2.2 Descriptive:

The mean score data in **Appendix 1 Table A3**, shows how people responded to factors represented by the six subscales that make up the TUQ score: Usefulness (SS1), Ease of Use and Learnability (SS2), Interface Quality (SS3), Interaction Quality (SS4), Reliability (SS5), Satisfaction and Future Use (SS6), and the overall TUQ score. The results are categorized based on demographics (region, gender, and role in yoga delivery).

The overall mean TUQ score is 4.91, highlighted in **Figure 19** demonstrate generally favorable perceptions of remote yoga, but with room for improvement, particularly in reliability and interaction quality. Across all participants, the highest-rated subscale was SS1 (Usefulness) with a mean of 5.469, followed by SS2 (Ease of Use & Learnability) at 5.162. The lowest-rated subscale was SS5 (Reliability) with a mean of 4.249. This suggests that remote yoga delivery is perceived as highly useful but struggles with reliability issues.

Figure 19

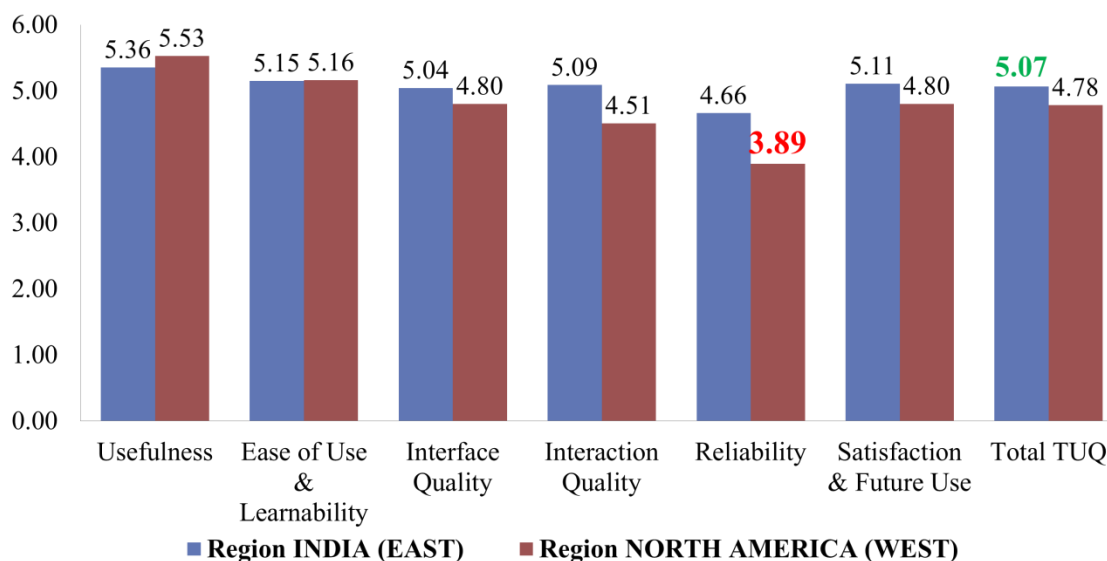


Overall TUQ mean score

As illustrated in Figure 20, except for the reliability subscale for the North America population, which had a mean score of 3.89 (SD 1.4), the mean scores on all other subscales exceeded 4.0, indicating generally positive experiences with remote yoga delivery.

The usefulness subscale emerged as the highest-rated aspect of remote yoga, with a mean score of 5.47 (SD 1.09), whereas the ease of use and learnability subscale also received a high score of 5.16 (SD 1.19). In contrast, the reliability subscale had the lowest overall mean score of 4.25 (SD 1.41), with a particularly low mean score of 3.89 (SD 1.4) for the North America cohort, suggesting a comparatively lower perceived reliability of remote yoga in that region.

Figure 20



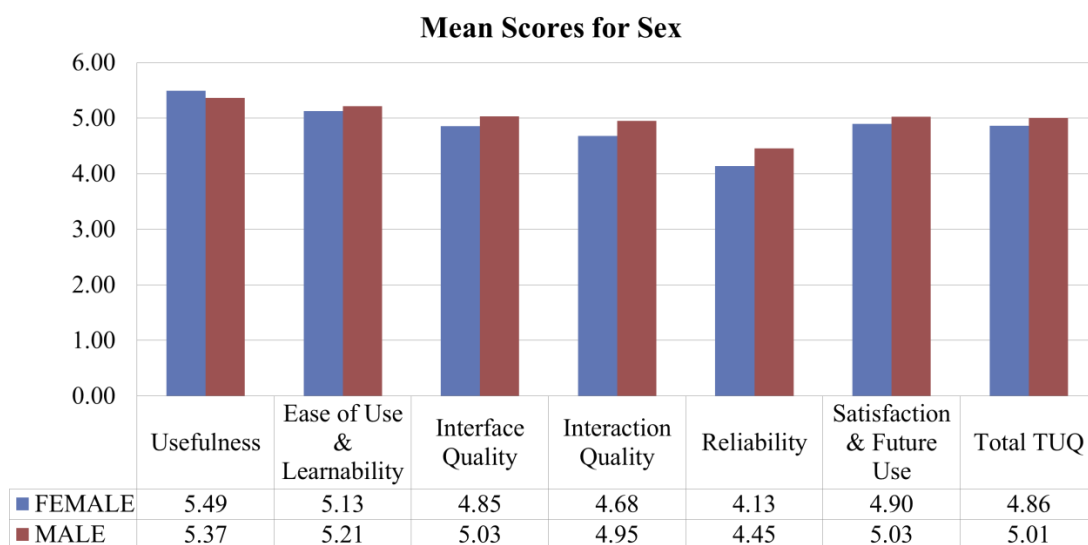
Region Analysis (India vs. North America)

Regional Analysis (India vs. North America): Moreover, the overall mean score of the participants in India (5.08, SD 1.01) was higher than that of the participants in North America (4.79, SD 1.09), emphasizing better overall satisfaction and delivery perception in India. Participants from North

America rated SS1 (Usefulness) slightly higher (5.536) than those from India (5.390). However, North America scored lower than India across most other subscales, especially in SS4 (Interaction Quality) (4.521 vs. 5.083) and SS5 (Reliability) (3.894 vs. 4.671). These differences indicate that while North American participants find remote yoga useful, they perceive interaction quality and reliability to be weaker compared to their Indian counterparts.

Sex (Female vs. Male): As shown in Figure 19 Males scored higher on the overall TUQ (5.007, SD 1.09) than females (4.878, SD 1.09), reflecting a slightly more favorable perception of yoga delivery among male participants. Female participants generally rated subscales slightly lower than male participants across most metrics, except for **SS1 (Usefulness)**, where females scored higher (5.513 vs. 5.385). Males reported higher satisfaction with **SS2 (Ease of Use)** and **SS6 (Satisfaction and Future Use)**. Both genders rated reliability lower compared to other subscales, with females scoring 4.148 and males 4.442. This indicates a consistent concern regarding reliability across genders.

Figure 19



Mean score for sex - Female vs. Male

Yoga Provider vs. Receiver: Yoga providers and receivers showed similar satisfaction levels, with mean scores of (4.93, SD 1.1) and (4.91, SD 1.0), respectively, reflecting a small but consistent difference in perceptions of remote delivery. Yoga providers scored slightly higher than yoga receivers on most subscales, particularly on SS6 (Satisfaction and Future Use) (4.995 vs. 4.907) and SS1 (Usefulness) (5.470 vs. 5.469). This suggests that providers have a slightly more positive outlook on the delivery process compared to receivers.

Key Findings:

Regional Differences: India outperformed North America in overall TUQ scores, particularly in interaction quality and reliability, suggesting a stronger traditional foundation and smoother delivery systems.

Sex Variations: Males exhibited slightly higher satisfaction with yoga delivery compared to females, though both genders rated reliability as the weakest aspect.

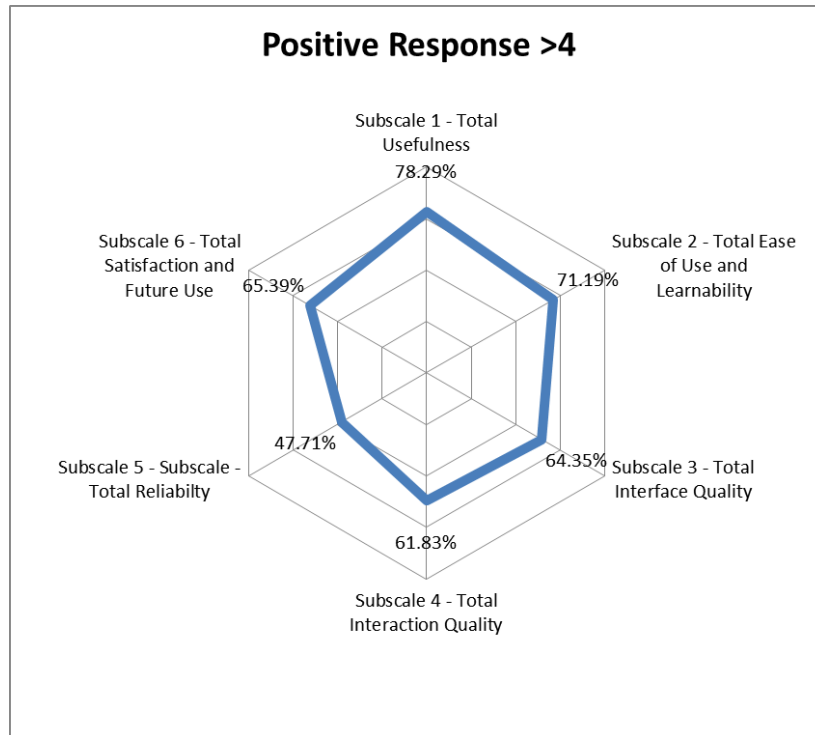
Role-based Differences: Yoga providers had a slightly better perception of yoga delivery than receivers, particularly in satisfaction and future use.

6.2.3 Percentage of Positive Responses:

We further examined Likert-type scale responses to determine the overall percentage of positive responses. We classified responses indicating "agree" or "strongly agree" as positive across all demographic groups. Conversely, we classified "neutral," "disagree," and "strongly disagree" responses as negative. As illustrated in Appendix 1 Table A4 and Figure 20, participants reported significantly positive experiences (scores greater than four) with remote yoga across all scale items. The table provides insights into how participants perceive various aspects of remote yoga delivery,

with responses categorized as positive (>4 on a 7-point Likert scale) or negative/neutral (≤ 4).

Figure 20



TUQ Percentage of Positive Responses

Subscale 1: Usefulness

Positive Responses: 78.29% of participants rated usefulness positively, the highest among all subscales. Specific items such as "Remote yoga improves access to yoga services" (75.83%) and "Remote yoga saves travel time to physical locations" (85.17%) were rated very positively. These findings align with the high mean score for SS1 (Usefulness) in the descriptive data (5.469 overall). The strong positive response reflects participants' recognition of the convenience and accessibility benefits of remote yoga.

Subscale 2: Ease of Use and Learnability

Positive Responses: 71.19% rated this subscale positively. The "remote yoga platform was simple to use" (79.97%) and "easy to learn" (76.63%) were highly rated. However, only 56.99% felt they could

effectively learn yoga remotely, indicating a significant limitation. The descriptive data showed that SS2 (Ease of Use) had a relatively high mean (5.162), but variability in responses (SD = 1.233) indicates mixed perceptions. The relatively lower percentage of positive responses to "learning yoga remotely" may stem from participants' challenges with learning physical techniques in virtual environments.

Subscale 3: Interface Quality

Positive Responses: 64.35% rated this subscale positively. While the simplicity of remote yoga delivery was well received (72.33%), items like "Remote yoga delivery can do everything I want" (54.90%) received lower positive responses. The descriptive data for SS3 (Interface Quality) showed the lowest mean among subscales (4.915). The lower positive response percentage reflects the limited functionality and unmet expectations of the platform, as also highlighted in the variability of scores (SD = 1.324).

Subscale 4: Interaction Quality

Positive Responses: 61.83% rated this subscale positively, indicating a moderate perception of interaction quality. Specific items like "I could hear the yoga instructor clearly" (73.97%) were rated positively, but items like "I was able to express myself effectively" (56.42%) and "I could see the instructor as if in person" (58.40%) showed lower positive responses. The descriptive data for SS4 (Interaction Quality) had a moderate mean score (4.778) with notable variability (SD = 1.354). The difficulty in replicating in-person interactions in virtual formats likely accounts for the lower positive response rates and the moderate mean score.

Subscale 5: Reliability

Positive Responses: Only 47.71% rated reliability positively, making it the weakest subscale. Items like "Instructions are the same as in-person practice" (46.35%) and "Error messages clearly told me how to fix problems" (41.65%) were rated the lowest. This finding strongly aligns with the descriptive

data, where SS5 (Reliability) had the lowest mean score (4.249). The low reliability scores highlight significant challenges in providing consistent and dependable remote yoga experiences.

Subscale 6: Satisfaction and Future Use

Positive Responses: 65.39% rated satisfaction and future use positively. Items like "I will use remote yoga in the future" (71.70%) and "I am satisfied with remote yoga delivery" (67.97%) had relatively high positive responses. The descriptive data for SS6 (Satisfaction and Future Use) had a mean score of 4.959, reflecting moderate satisfaction and a willingness to continue using remote yoga. The higher positive response rates for future use suggest optimism despite some limitations.

Positive Responses Overall Analysis:

Positive Responses: Across all subscales, 64.79% of responses were positive, with the highest ratings for Usefulness (78.29%) and the lowest for Reliability (47.71%).

Mean and SD: The overall mean score of 4.91 indicates moderate satisfaction, and the SD of 1.106 reflects a moderate variation in responses.

Median Scores: Median scores across items and subscales are often 5 or 6, suggesting that a majority of participants lean toward positive perceptions, but a significant proportion remains neutral or negative.

Areas for Improvement: Across all categories, reliability (SS5) and interaction quality (SS4) are the lowest-rated subscales, indicating the need for targeted improvements in these areas to enhance overall satisfaction.

The data from descriptive, t-test, percentage of positive analysis, and mean response values were sufficiently strong to warrant further investigation into the differences across the subscales and cross-sectional factors.

6.2.4 Multivariate Analysis:

To examine the significance of the differences between the Indian and North America populations for individual survey items, each subscale, and total scores, MANOVA was performed. As shown in Table 6 below and Appendix 1 Table A5, and the Multivariate Analysis of Variance (MANOVA) examined the effects of region (India vs. North America), sex (male vs. female), and role (provider vs. receiver) on the subscales of remote yoga delivery. The multivariate tests (Pillai's Trace) assess the collective impact of these factors on the dependent variables. Following significant differences were observed.

Table 6

TUQ Subscale	P values		
	India –North America	Gender (M/F)	Provider - Receiver
1 Usefulness	0.014	0.133	0.544
2 Ease of Use and Learnability	0.262	0.12	0.357
3 Interface Quality	0.026	0.072	0.623
4 Interaction Quality	0.000	0.121	0.174
5 Reliability	0.000	0.167	0.467
6 Satisfaction Future Use	0.000	0.212	0.203

Multivariate test Summary

Intercept:

Pillai's Trace = 0.96, $F(6,1754) = 6554.032$, $p < .001$, Partial Eta Squared = 0.957.

The intercept shows a strong overall effect, with nearly all variance explained (Partial Eta Squared = 0.957). This suggests that the subscale scores are significantly influenced by baseline factors, likely reflecting the general effectiveness of remote yoga delivery.

India or North America:

Pillai's Trace = 0.09, $F(6,1754) = 29.683$, $p < .001$, Partial Eta Squared = 0.092.

Region has a statistically significant effect on the dependent variables. Although the effect size is small (Partial Eta Squared = 0.092), this aligns with the descriptive and percentage-positive analyses, which showed that participants in India rated subscales like interaction quality and reliability higher than those in North America.

Sex:

Pillai's Trace = 0.01, $F(6,1754) = 3.085$, $p < .005$, Partial Eta Squared = 0.01.

Sex also has a statistically significant but small effect on the dependent variables. This corresponds to the descriptive analysis, where males tended to rate reliability and satisfaction slightly higher than females.

India or North America × Provider or Receiver:

Pillai's Trace = 0.01, $F(6,1754) = 2.686$, $p < .013$, Partial Eta Squared = 0.009.

The interaction between region and role (provider vs. receiver) has a statistically significant but small effect. This suggests that the differences in perceptions of remote yoga delivery between providers and receivers may vary across regions.

The MANOVA results provide statistical support for the trends observed in the descriptive and percentage-positive analyses. Regional differences are the most pronounced factor, with participants in India generally rating remote yoga delivery higher than those in North America. Sex and the interaction between region and role also have significant but small effects, indicating subtle variations in perceptions. Despite the strengths in usefulness and satisfaction, challenges remain in reliability and interaction quality, particularly in North America. The findings underscore the importance of tailoring remote yoga delivery to regional and demographic contexts while addressing systemic issues like platform reliability and interaction quality to enhance overall effectiveness.

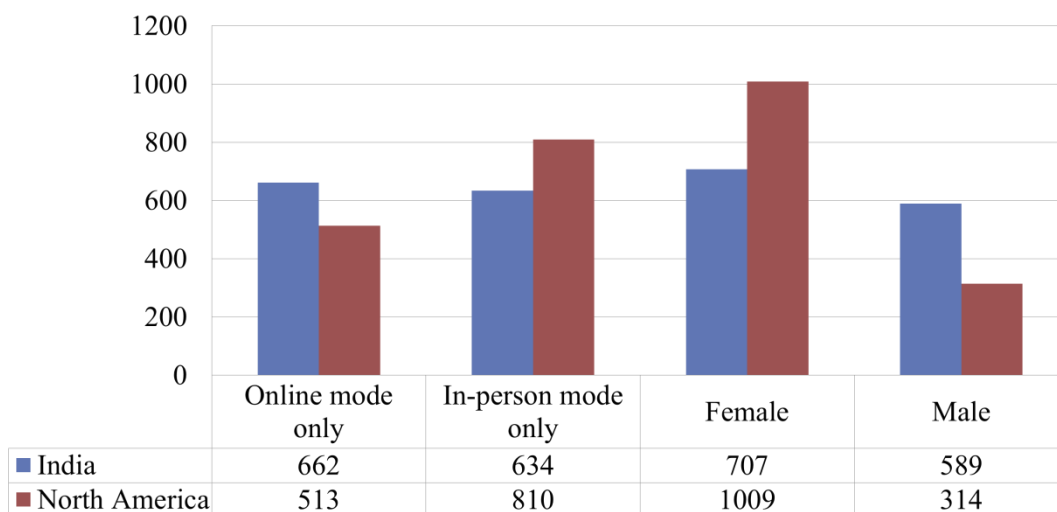
The quantitative findings also reinforce the qualitative insights, highlighting interaction quality, authenticity, and reliability as key distinctions between traditional and remote yoga. While remote

yoga delivery is positively received, gaps persist in interaction quality, reliability, and user satisfaction. Notably, significant cultural differences between Indian and North American participants underscore the need for enhanced delivery methods and culturally tailored approaches to improve engagement and inclusivity.

6.3 STUDY - 3 QUANTITATIVE OBSERVATIONAL STUDY (EPYQ)

The EPYQ scale demonstrated strong internal consistency and content validity, with standardized correlation coefficients for the subscales ranging from 0.287 to 0.787, confirming its reliability. As shown in Figure 23, among the 2,619 participants, there was a balanced distribution between the Indian (1,296) and U.S. (1,323) samples.

Figure 23



EPYQ Participant distribution

Quantitative Data Analysis

In the quantitative phase of this study, the EPYQ was utilized to assess the usability and effectiveness of remote yoga. The validity and reliability of the EPYQ were confirmed through confirmatory factor analysis (CFA) and reliability testing. The EPYQ showed strong internal consistency and content validity, with standardized correlation coefficient values for the subscales, as shown in Appendix 1, Table 6A, ranges from 0.287 to 0.787, thus affirming its reliability. The high Cronbach’s alpha value of 0.909 further demonstrated the questionnaire’s robustness. The absence of multicollinearity confirmed the independence of the variables. Normality was assessed by analyzing skewness and kurtosis values, examining histograms, and utilizing Q-Q plots while considering the limitations of

large sample sizes.

6.3.1 Yoga Demographics

Online vs. In-Person: 44.9% of participants practiced yoga exclusively online, while 55.1% engaged only in in-person sessions. Online participation was higher in India (25.3%) compared to North America (19.6%). Conversely, North America had a higher proportion of in-person participants (30.9% vs. 24.2% in India). The regional differences in delivery mode indicate a stronger inclination toward in-person yoga in North America, whereas online modes have a significant presence in India, potentially due to accessibility and cultural integration. Appendix 1 Table A7, provides the demographic summary of participant characteristics.

Connection to Yoga: Yoga Teachers Dominate: Yoga teachers, masters, or gurus formed the largest group (33.8%), followed by regular practitioners (27.1%) and students (15.7%). India had a higher proportion of yoga students (undergraduate level) and yoga scholars (19% combined vs. 6.5% in North America). North America had a larger percentage of yoga teachers and gurus (21.8% vs. 12.0% in India). The data suggests that India has a broader base of academic and beginner-level yoga participants, while North America leans toward more advanced practitioners and teachers.

Experience in Yoga: Long-Term Practitioners Lead: Over 43.6% of participants had more than 10 years of yoga experience. This was especially prevalent in North America (28.5% vs. 15.2% in India).

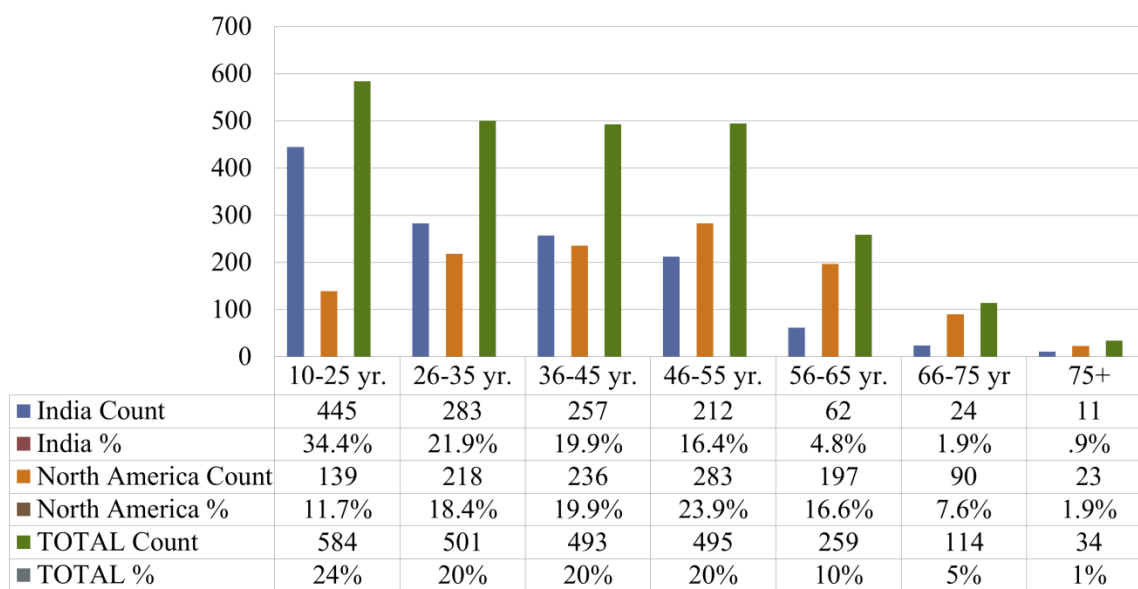
Less Experienced Groups: Participants with less than 5 years of experience constituted 41.1%, evenly distributed across both regions. North America has a stronger representation of long-term practitioners, indicating an established and mature yoga community compared to the emerging or beginner-level demographic in India.

Yoga Lineage: Following a Guru: 36.2% of participants reported following a yoga lineage, with similar percentages across India (19.5%) and North America (16.7%). A majority (50.3%) did not follow a guru-based tradition, with North America showing a higher proportion of these participants (28.5% vs. 21.8% in India). This highlights the prevalence of non-traditional yoga practices, especially in North America, where yoga is often practiced as a wellness activity without formal lineage.

Age and Gender:

Most participants were between 18 and 55 years old (83.9%), with the largest groups being 18–25 years (21.3%) and 26–35 years (20.7%) as shown in Figure 24. Participants aged 56+ years were more prevalent in North America, indicating a stronger older demographic there.

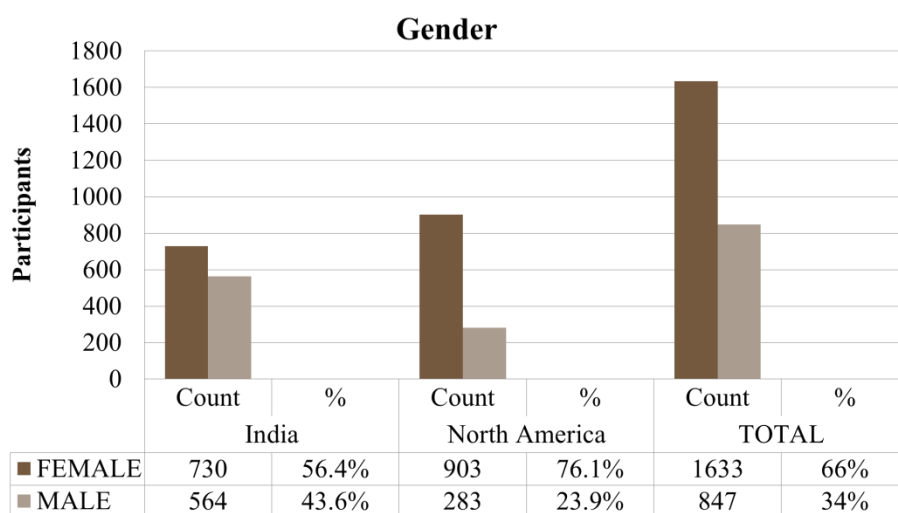
Figure 24



EPYQ Participants age distribution

Figure 25 shows females dominated the sample, comprising 65.5% of participants. This trend was more pronounced in North America (38.5% female vs. 27.0% in India). Yoga is predominantly practiced by younger and middle-aged women, with North America showing a higher representation of older participants.

Figure 25



EPYQ Sex distribution of participant

Marital Status

Single participants accounted for 46.2% of the sample, slightly higher than married participants (45.9%). North America had a higher proportion of "others" (6.8% vs. 1.0% in India), reflecting broader inclusivity in definitions of marital status. Yoga appeals equally to single and married individuals, with North America showing greater diversity in marital status categories.

Education

38.6% held a master's degree, while 33.2% had a bachelor's degree. PhD or post-doctoral participants constituted 7.2%. India had a higher proportion of master's degree holders (19.7%) compared to North America (18.9%). The majority of participants are well-educated, underscoring yoga's appeal to an academically advanced demographic.

Training in Yoga Science

40.1% of participants had formal training, such as short-term courses, certificates, or degrees in yoga. India showed a higher proportion of participants with bachelor's or master's degrees in yoga (20.9% combined vs. 6.7% in North America). 25% had no formal yoga training, with North America showing a slightly higher percentage of these participants (13.4% vs. 11.6% in India). Formal yoga education is more prevalent in India, while North America has a significant portion of self-taught or informally trained practitioners.

Demographics Summary:

India has a younger and more academic demographic, with higher engagement in online yoga and formal yoga education. North America has more long-term practitioners, older participants, and a stronger inclination toward in-person yoga. While online yoga has significant adoption (44.9%), in-person yoga remains the dominant mode, particularly in North America. India's participants are more likely to engage with formal yoga education and lineage-based traditions, whereas North America shows a preference for independent and non-traditional practices. Yoga attracts a diverse audience across age, gender, marital status, and educational backgrounds, with regional nuances highlighting varying cultural approaches to the practice.

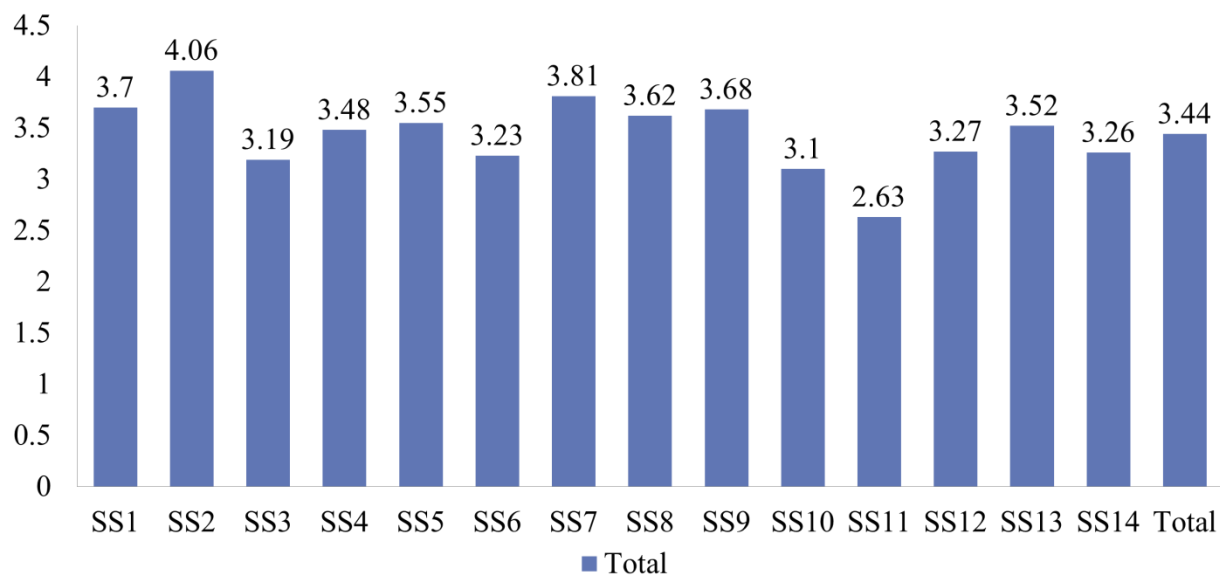
6.3.2 Descriptive:

Appendix 1 Table A8 presents the mean scores for all 14 subscales across the four factors: region, sex, delivery mode, and participation status. Appendix 1 Table A9 compares the mean differences for the 14 subscales by factor. The remote delivery mode scored 3.45, while in-person delivery scored 3.42. The score for women (3.43) was marginally lower than that for men (3.45). Instructors had a higher score (3.52) compared to practitioners (3.33). The lowest scores were for social aspects (2.63), followed by individual attention (3.10). The highest scores were for breathwork (4.06) and body awareness (3.81).

Trends Across Subscales:

Figure 26 shows the highest-rated subscale was SS2 (Breathwork) with a mean of 4.06, highlighting its perceived importance across all groups. SS9 (Health Benefits) also scored consistently high (3.68 overall), indicating its centrality in yoga practices.

Figure 26



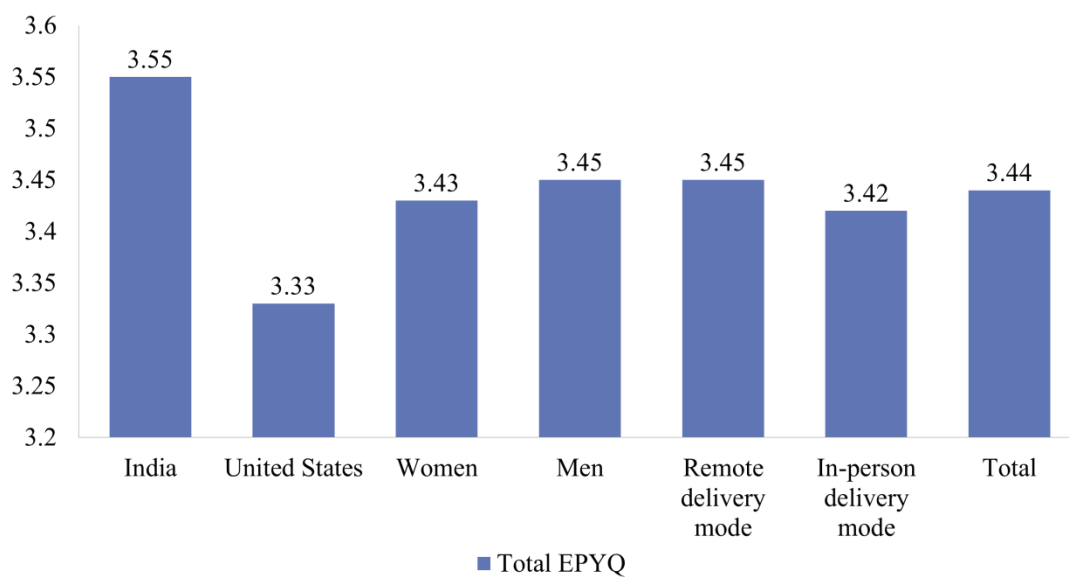
EPYQ subscales mean scores

The lowest-rated subscale was SS11 (Social Aspects) (2.63), reflecting limited social interaction, especially in remote delivery modes. SS6 (Body Locks) (3.23) also scored relatively low, indicating lesser emphasis or difficulty in mastering this aspect of yoga. Breathwork and health benefits are universally valued, while social aspects and body locks are perceived as less significant.

Standard Deviation (SD) Patterns:

Variation Across Subscales - SS10 (Individual Attention) and SS11 (Social Aspects) exhibited the highest variability (SD = 1.14 and 1.08), indicating diverse perceptions among participants. SS1 (Acceptance/Compassion) and SS14 (Yoga Philosophy) had the lowest variability (SD = 0.93 and 0.72), reflecting more consistent responses. Individual attention and social aspects show more variability, likely due to differences in delivery mode and practitioner expectations.

Figure 27



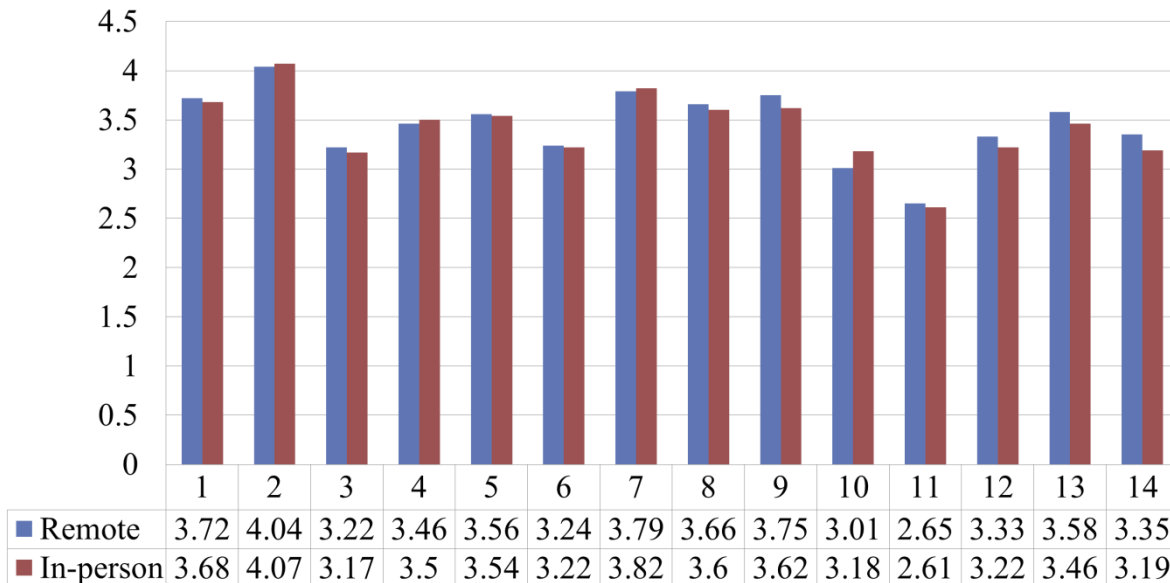
EPYQ Comparative Mean Scores

Comparative mean scores as shown in Figure 27, shows the EPYQ total across factors. These variations are discussed in details below. **Appendix 1 Table A9** compares the mean differences for the 14 subscales by factor.

Delivery Mode Differences (Remote vs. In-Person):

As demonstrated in Figure 28, Remote delivery scored higher on SS9 (Health Benefits) (3.75 vs. 3.62) and SS13 (Meditation/Mindfulness) (3.58 vs. 3.46). In-Person delivery was rated higher in SS12 (Spirituality) (3.22 vs. 3.33) and SS14 (Yoga Philosophy) (3.19 vs. 3.35). Remote delivery is perceived to provide better health and mindfulness benefits, while in-person delivery supports deeper spiritual and philosophical engagement.

Figure 28



Comparative difference for the delivery modes across the 14 subscales

Key Observations:

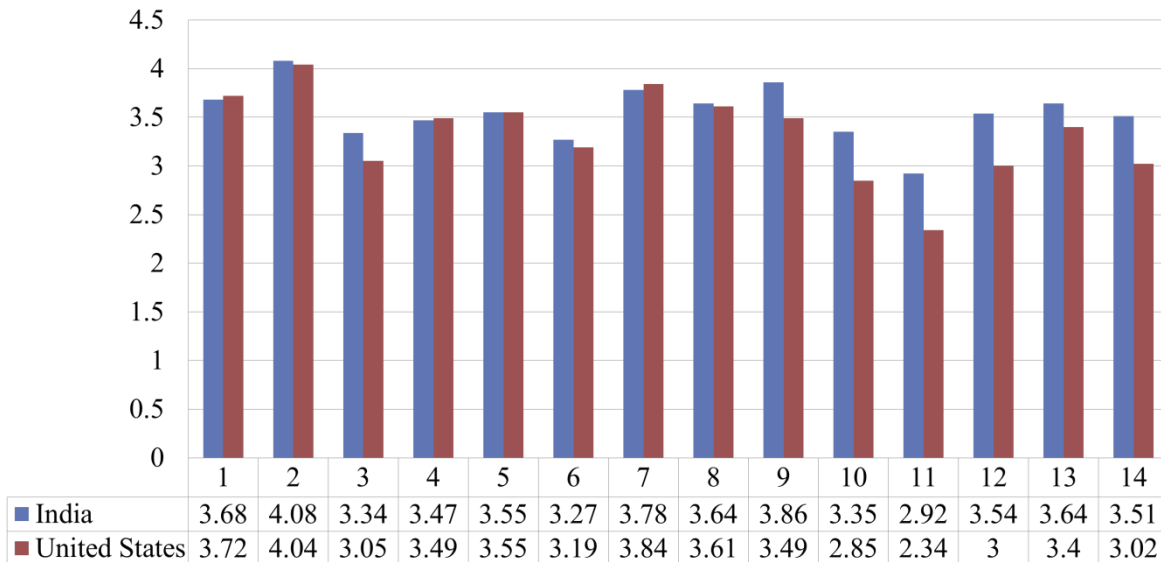
Highest Difference: SS10 (Individual Attention) shows the largest delivery mode difference, with in-person delivery (3.18) scoring 0.17 higher than remote delivery (3.01). This reflects the limitations of remote yoga in providing personalized attention. Other Notable Differences: SS12 (Spirituality) (Remote: 3.33 vs. In-Person: 3.22, Diff. = 0.11, favoring remote). SS9 (Health Benefits) (Remote: 3.75

vs. In-Person: 3.62, Diff. = 0.13, favoring remote).

SS14 (Yoga Philosophy) (Remote: 3.35 vs. In-Person: 3.19, Diff. = 0.17, favoring remote).

Remote delivery slightly outperforms in terms of health benefits, spirituality, and yoga philosophy, but in-person delivery excels in providing individual attention. Regarding delivery mode, remote yoga scored higher on the yoga philosophy and health benefits subscales (mean differences of 0.17 and 0.13, respectively) but lower on individual attention and active postures (mean differences of -0.17 and -0.04, respectively). These findings suggest that remote delivery effectively addresses both physical health and mental well-being. However, the mean differences between delivery modes were generally small for all subscales.

Figure 29



Comparative difference for India and NA regions across the 14 subscales

Regional Differences (India vs. North America)

As shown in Figure 29, the total EPYQ score for India (3.55) was higher than that for the U.S. (3.33). India scored higher than North America in most subscales, particularly SS9 (Health Benefits) (India: 3.86 vs. North America: 3.49) and SS12 (Spirituality) (India: 3.54 vs. North America: 3.00). North

America had slightly higher scores in SS2 (Breathwork) (4.04 vs. 4.08) and SS4 (Active Postures) (3.49 vs. 3.47).

Participants from India show a stronger inclination toward the perceived health and spiritual benefits of yoga. North American participants emphasize physical practices, such as breathwork and active postures, reflecting regional preferences.

Key Observations:

Highest Difference: SS11 (Social Aspects) shows the largest regional difference, with India (2.92) scoring 0.57 higher than North America (2.34). This suggests that participants in India perceive social aspects of yoga more positively than those in North America. Other Notable Differences: SS10 (Individual Attention) (India: 3.35 vs. North America: 2.85, Diff. = 0.50), SS12 (Spirituality) (India: 3.54 vs. North America: 3.00, Diff. = 0.54), SS9 (Health Benefits) (India: 3.86 vs. North America: 3.49, Diff. = 0.37).

In terms of region, the U.S. sample scored higher than the Indian sample on body awareness and acceptance/compassion (mean differences of -0.06 and -0.03, respectively). Conversely, the Indian sample scored higher on the spirituality and social aspects (mean differences of 0.54 and 0.57, respectively). The higher mean score for spirituality in India may be due to yoga's spiritual significance in the country, whereas yoga is often viewed as a mind/body practice in the West, as reflected in the U.S. sample's higher scores for body awareness and acceptance/compassion. Indian participants consistently rate social, spiritual, and health-related aspects of yoga higher, while North American participants lean toward a more physical or individual focus.

Gender Differences (Women vs. Men)

Women scored higher than men in SS2 (Breathwork) (Women: 4.10 vs. Men: 3.98), SS9 (Health Benefits) (3.62 vs. 3.78), and SS12 (Spirituality) (3.20 vs. 3.40). Men scored slightly higher in SS13

(Meditation/Mindfulness) (3.61 vs. 3.47) and SS14 (Yoga Philosophy) (3.42 vs. 3.18).

Women tend to value breathwork and health-related aspects of yoga more, while men emphasize mindfulness and philosophical elements, reflecting differing priorities in practice.

Key Observations:

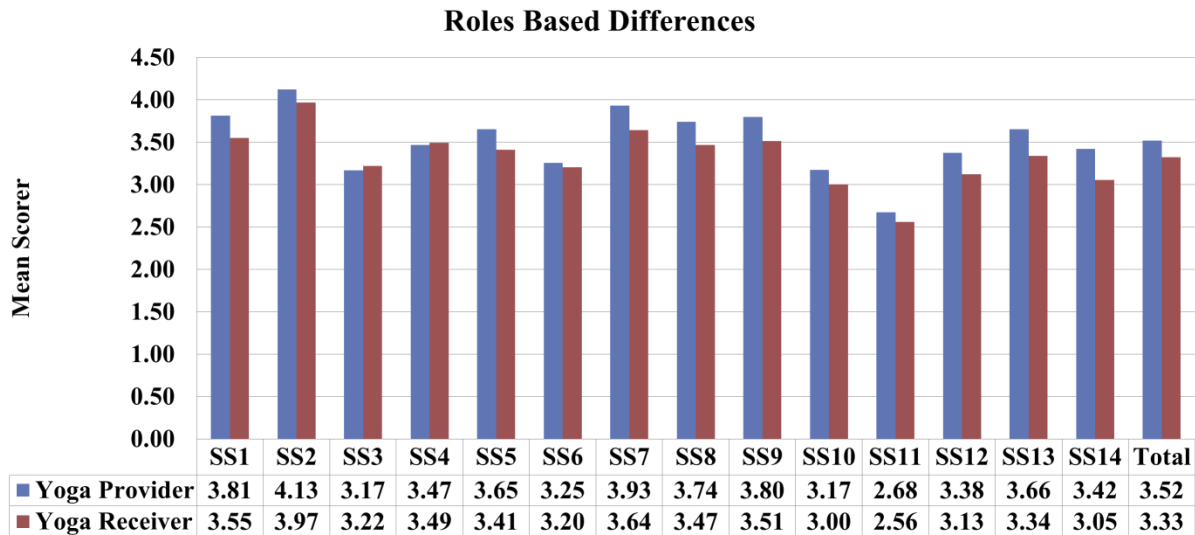
Highest Difference: SS7 (Body Awareness) shows the largest gender difference, with women (3.87) scoring 0.19 higher than men (3.68). Women generally perceive body awareness as more significant than men. Other Notable Differences: SS11 (Social Aspects) (Women: 2.54 vs. Men: 2.79, Diff. = -0.26, favoring men), SS14 (Yoga Philosophy) (Women: 3.18 vs. Men: 3.42, Diff. = -0.24, favoring men), SS5 (Restorative Postures) (Women: 3.61 vs. Men: 3.44, Diff. = 0.17).

Women prioritize body awareness and restorative postures, while men place higher importance on social aspects and yoga philosophy. By sex, men scored higher on social aspects and yoga philosophy (mean differences of -0.26 and -0.24, respectively), while women scored higher on body awareness and restorative postures (mean differences of 0.19 and 0.17, respectively). These results suggest that men may gain more social and philosophical benefits from yoga, while women focus more on physical awareness.

Role Differences (Instructor vs. Practitioner):

As shown in **Figure 30**, Instructors had higher scores across most subscales, especially SS7 (Body Awareness) (Instructors: 3.93 vs. Practitioners: 3.64) and SS12 (Spirituality) (3.38 vs. 3.13). Practitioners scored lower overall but had closer scores in SS4 (Active Postures) (3.49 vs. 3.47). Instructors tend to rate aspects like body awareness and spirituality higher, potentially reflecting their deeper engagement and teaching experience.

Figure 30



Comparative difference for Instructor vs. Practitioner across the 14 subscales

Key Observations:

Highest Difference: SS13 (Meditation/Mindfulness) shows the largest role difference, with instructors (3.66) scoring 0.32 higher than practitioners (3.34). This suggests instructors engage more deeply with mindfulness practices. Other Notable Differences: SS7 (Body Awareness) (Instructors: 3.93 vs. Practitioners: 3.64, Diff. = 0.29), SS9 (Health Benefits) (Instructors: 3.80 vs. Practitioners: 3.51, Diff. = 0.28), SS14 (Yoga Philosophy) (Instructors: 3.42 vs. Practitioners: 3.05, Diff. = 0.37).

In terms of participation status, practitioners scored higher on physicality and active postures (mean differences of -0.05 and -0.02, respectively), whereas instructors scored higher on yoga philosophy and meditation/mindfulness (mean differences of 0.37 and 0.32, respectively). This indicates that as individuals transition from practitioners to instructors, their focus shifts from physical to mental and philosophical aspects of yoga.

6.3.3 Multivariate Analysis:

The result of multivariate analysis and significant differences for the 14 subscales across the four factors are shown in Appendix Table A10, and Table A11. Significant differences were found by region and sex at the 5% level, with an interaction effect observed between region and participation status. Of the 14 subscales, health benefits, meditation/mindfulness, and yoga philosophy showed significant differences across all four factors. Finally, the test of between-participant effects (Appendix Table A12) revealed crucial differences in subscales and interaction effects, though the magnitude of these differences was notably low, warranting careful interpretation.

The MANOVA results reveal significant differences in participants' responses to the 14 subscales based on region, sex, delivery mode, and participation status. These findings highlight the nuanced ways demographic and contextual factors influence perceptions of yoga practices.

Regional Differences:

Significant regional differences were observed in several subscales, particularly SS3 (Physicality) (Diff = 0.291, $p < 0.001$), SS9 (Health Benefits) (Diff = 0.371, $p < 0.001$), and SS12 (Spirituality) (Diff = 0.544, $p < 0.001$). Participants from India rated health benefits, spirituality, and social aspects significantly higher than their counterparts in North America, indicating a greater focus on holistic and traditional dimensions of yoga in India.

Gender Differences:

Sex significantly impacted several subscales, with women scoring higher on SS4 (Active Postures) (Diff = 0.160, $p < 0.001$), SS5 (Restorative Postures) (Diff = 0.166, $p < 0.001$), and SS7 (Body Awareness) (Diff = 0.188, $p < 0.001$). Men, however, scored higher on SS11 (Social Aspects) (Diff = -

0.256, $p < 0.001$) and SS14 (Yoga Philosophy) (Diff = -0.243, $p < 0.001$). These results suggest that women prioritize physical and restorative aspects of yoga, while men value social and philosophical elements.

Delivery Mode Differences:

Delivery mode significantly influenced SS10 (Individual Attention) (Diff = 0.172, $p < 0.001$) and SS14 (Yoga Philosophy) (Diff = 0.368, $p = 0.006$), with in-person delivery scoring higher on individual attention. Conversely, remote delivery was rated more positively for philosophical engagement. This reflects the strengths of in-person sessions in providing personalized experiences and the adaptability of remote delivery in fostering conceptual understanding.

Participation Status (Instructor vs. Practitioner):

Participation status was a significant factor across most subscales, including SS1 (Acceptance/Compassion) (Diff = 0.034, $p < 0.001$), SS9 (Health Benefits) (Diff = 0.128, $p < 0.001$), and SS13 (Meditation/Mindfulness) (Diff = 0.120, $p < 0.001$). Instructors consistently scored higher, indicating their deeper engagement with both physical and mental aspects of yoga. This aligns with their roles as facilitators and advocates of yoga practices.