

Service Quality Dynamics: A Study on Indian Hotel Industry

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Abstract

The significance of assessing service quality for business performance has been acknowledged in various service marketing studies due to its direct influence on customer satisfaction and its indirect implications for customer loyalty. Despite the recognition of service quality and its measurement, very few studies have empirically examined the precursors and consequences of service quality after Covid-19 pandemic which has had a colossal structural impact on the world and from Indian context. In this study we gauge the antecedents and consequences of service quality pre and post the Covid-19 pandemic. The present study endeavors to ascertain whether all the dimensions of SERVQUAL carry equal weight in terms of their impact on overall service quality before and after the pandemic. Additionally, the study intends to evaluate whether the ranking of the SERVQUAL dimensions remains consistent before and after the pandemic. The study further empirically determines whether there exists a disparity in the total service quality score between the pre-Covid and post-Covid periods. The empirical findings suggest that all service quality dimensions are not of equal importance and exhibit a significant difference in their impact on the total service quality score during the post-Covid period. Consequently, in the study we conclude that ranking of five dimensions remains consistent in terms of their effect on the total service quality score during pre- and post-Covid periods.

Keywords: Hotel Industry, India, Service Quality, Pre Covid, Post Covid, Consumer Experience, Regression

INTRODUCTION

In December 2019 the emergence of Covid-19 virus posed a formidable global challenge unbridling widespread disruption upon numerous economic sectors in the subsequent months. Subsequent to 2020, a plethora of studies have been shepherded inquiring into ramifications of Covid-19 on consumer decision-making. This present study with fastidiousness explores into examination of effect of Covid-19 on service quality within hotel industry in India. Analogous effects have been noted athrow several urban centers and nations encompassing locales such as United States, Dubai, Sri Lanka, Abu Dhabi and Singapore. The Covid-19 pandemic has inflicted a significant impediment upon the hotel industry effectually expunging a decade's worth of progress (Johnson, 2021). Since the advent of the Covid-19 outbreak, hospitality dominion has grappled with an incomparable rate of employee turnover (United States Labor Statistics, 2021). Besides the existing geopolitical discord between Russia and Ukraine in February 2022 (Mbah & Wasum, 2022) has further exacerbated the impact on international tourism. Consumer perceptions concerning safety, proclivity and willingness to embark on travel and trepidation surrounding Covid-19 have all communally contributed to a precipitous decline in the demand for hotel reservations (Tarik et al., 2023). The concept of quality being rather elusive and nebulous in nature is frequently misconstrued as imprecise descriptors such as excellence or opulence and is not readily articulated by consumers (Crosby, 1979). Identifying contented and discontented consumers has long been the central focus of hospitality marketers. The significance of service quality within hotels has been underscored in prior scholarly endeavors (Callan & Bowman, 2000; Callan & Kyndt, 2001; Danaher & Mattsson, 1994; Min et al., 2002; Saleh & Ryan, 1991). A multitude of studies have showcased the profound influence of service quality on consumer decision-making (Parasuraman, Zeithaml, & Berry, 1985, 1991). In the fiercely competitive landscape of the hotel industry, the ability to differentiate a hotel's services from that of its competitors is of paramount importance. To gauge service quality within the hotel sector a specialized tool known as

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LODQUAL was formulated derived from SERVQUAL and incorporating analogous dimensions (Getty & Thompson, 1994). Corporate social responsibility within the hotel realm encompasses the maintenance of elevated service quality and assurance of safety particularly in the face of crises such as Covid-19 (Zhang, Xie, & Morrison, 2021).

The outbreak of Covid-19 has ushered in unparalleled circumstances for Indian tourism and hospitality sector. The contagiously virulent novel coronavirus lingers to exert a stifling impact on this sector thereby engendering profound inquiries about both its current state and its prospective survival across the world. Vikrant et al. (2020) in their comprehensive inquiry conducted content analysis and pinpointed several themes such as "Human Resource Management," "Health and Hygiene," "Continuity," and "Concerns" as being the foundational pillars for post-Covid success within the Indian hotel and tourism industry. Anu Chaudhary (2022) expounds upon impact and survival strategies for the hospitality sector in the aftermath of Covid-19 suggesting that organizations ought to undertake robust marketing and promotional campaigns on a national and global scale to instill confidence and foster a positive image within the minds of potential Indian consumers. Vineet Kumar (2020) elucidates the adverse effects of Covid-19 on tourism in India asserting that the Indian Government should have promptly implemented measures to avert deceleration of the tourism industry.

Within the scholarly discourse, a debate has ensued concerning the predominant focus of research on service quality primarily centering around consumer expectations rather than hotel performance. Additionally, scant empirical research exists pertaining to post-Covid consumer expectations. Against this backdrop, the primary objective of this study is to juxtapose service quality within the Indian hotel industry before and after the advent of Covid-19. There exists a notable dearth of research addressing the antecedents and consequences of service quality within the pre- and post-Covid context in India. In this endeavor, we empirically explore the precursors and ramifications of service quality in the pre- and post-Covid-19 pandemic era. Given the pivotal role of tourism in contributing to India's GDP and the paramount importance of service in the context of tourism, this study assumes profound significance for its innovative contributions. The subsequent sections of this paper are structured as follows: Section 2 offers an extensive review of pertinent literature concerning service quality within the hospitality sector, particularly within the Indian hotel industry. In Section 3, we expound the data and research methodology employed outlining the hypotheses formulated for our study. Section 4 presents our empirical findings culminating in our study's conclusion in Section 5.

LITERATURE REVIEW

The SERVQUAL construct comprises five distinct facets denoted as Tangibility (pertaining to an organization's corporeal capacity to address customer requisites), Reliability (pertaining to a company's proficiency in furnishing steadfast and precise services), Responsiveness (pertaining to the adeptness in proactively aiding and dispensing services), Assurance (pertaining to a company's dexterity in cultivating a sense of fiducially reliance within patrons), and Empathy (pertaining to the capacity to acutely discern and attend to individualized customer exigencies). Service quality stands as a universally embraced emblem of organizational competitiveness as posited by Parasuraman, Zeithaml, and Berry (1985). Idiosyncratically, the dimensions of tangibility, reliability, and responsiveness engender disparate repercussions upon customer contentment divergent from impacts of assurance and empathy as expounded by Ismail et al. (2023). The pertinence of service quality finds firm footing within the domain of hospitality and the milieu of hotels (Bowen and Shoemaker, 1998; Zeithaml et al., 1996). The attribution of star ratings to hotels conspicuously foments expectations among sojourning guests (Abrate et al., 2011; Kim et al., 2019). It is observable that anticipation threshold of patrons is generally loftier for establishments endowed with loftier star ratings in contradistinction to those endowed with lower ratings. The apprehended caliber of service is an inherently personalized encounter contingent upon the myriad service rendezvous a lodger undergoes over the course of their sojourn. Antecedent to these encounters, the patron forges expectations harnessed through intrinsic and extrinsic cues which function as indices to the presumptive performance benchmarks (Bitner, 1990; Clow and Vorhies, 1993).

Service quality has fascinated substantial curiosity in marketing literature because it is a challenge defining it as well as measuring it with overall no accord evolving (Wisniewsk, 2001). Service quality is the ability of business to meet or exceed customer expectation. If expectations are superior to the actual performance, the perceived

service quality is less which leads to customer dissatisfaction (Parasuraman, Zeithaml, & Berry, 1985). Kelly and Turley (2001) suggested that revealing customer perceptions of service experiences has continually been important. For a service organization, management needs to monitor whether current services are delivered as envisioned. There has been comparatively inadequate research on service quality measurement in the hotel industry post-Covid. The most recognized tool SERVQUAL to measure service quality was originally proposed by Parasuraman, Zeithaml, and Berry in 1985. There is also an application for the hotel industry named LODGQUAL developed as a derivative of SERVQUAL (Getty and Thompson, 1994). In response to SERVQUAL analysis, Cronin and Taylor (1992) introduced the SERVPERF instrument based on perception ratings several research studies have argued that SERVPERF instrument empirically outperforms the SERVQUAL scale with respect to the service industry (Elliott, 1995; Van Dyke, Kappelman, & Prybutok, 1997; Jain & Gupta, 2004). Although there has been some research on service quality in hotels, the focus predominantly has been on customer expectation rather than hotel performance. While the construct of service quality has been recognized as important, there has been little research that has been empirically tested. The length of time a customer is made to wait is critical as far as customer satisfaction is concerned. Responsiveness has a significant impact on customer satisfaction (Negassa, G.J. & Jaypee, G.P., 2023). Koc (2020) in their study mentioned that the service provider has to train their staff with adequate knowledge of the services and display the right attitude towards customers. In order to gain the trust of the customers and provide a sense of security. Polite employees add an additional layer of comfort to customers (KOC, E. 2020).

The realm of the hotel industry subsists within a fierce arena of competition characterized by a capacious array of offerings thereby engendering a formidable challenge for hotel brands to delineate themselves from the milieu of contenders (Veloso, M. & Gomez-Suarez, M., 2023). In the Indian context, the hotel industry encompasses multifarious segments covering both chain establishments and independent lodgings. These segments further subdivide into categories traversing budget, economy, mid, and luxury hotels. The echelons of mid-tier and luxury hotels are additionally stratified as five-star deluxe, five-star, four-star, three-star, and two-star establishments (Khanna and Tyagi, 2019). Also, India is currently endorsing an upsurge in proliferation of service apartments particularly in metropolitan centers exerting a magnetic pull on tourists hailing from various nooks and crannies of the nation as well as the globe. In the realm of five-star accommodations, the preeminent contenders encompass renowned entities such as Taj, Oberoi, ITC, The Park alongside global behemoths like Marriott, Ritz Carlton, Hilton, and Four Seasons. Evidenced by a report from Mordor Intelligence (2022), the sector is experiencing a compound annual growth rate (CAGR) of 5%.

The landscape of tourism has borne the brunt of a severe maelstrom unleashed by the Covid-19 pandemic. Following the pandemic's advent, scholarly inquiry dedicated to matters of tourism has undergone a resurgence (Gosling et al., 2021). The pandemic has wrought substantial alterations upon consumer psychology and comportment (Huang, S. & Wang, X., 2023). The global health crisis catalyzed by Covid-19 emerged in Wuhan (China) in December 2019, swiftly proliferating its virulent tendrils across the planet including India. Responding to this crisis on 25th March 2020, Prime Minister of India Mr. Narendra Modi promulgated a comprehensive 21-day lockdown across India. Given India's pivotal status as a prominent nexus for travel and tourism, this decree wrought profound repercussions. Notably, even in 2021 India encountered a renewed onslaught from the delta variant of Covid-19. Over a span of two years, myriad industries bore the brunt of this calamity with the tourism and hospitality sector ranking amongst the most severely afflicted (Jain, 2020). Tourists, both domestic and international, embark upon journeys to India for a myriad of motives encompassing heritage exploration, medical expeditions, adventure quests, religious pilgrimages, sporting escapades, and spiritual odysseys (Hussain and Khanna, 2016). The Covid-19 pandemic stands as an unparalleled cataclysmic upheaval dealing an extraordinary blow to the travel and tourism sector with ramifications of a markedly severe nature (Seyitoglu et al., 2022). Concurrently, it becomes an imperative for scholars specializing in the realm of tourism to cast their gaze towards the industry's forthcoming trajectory thereby identifying prospective avenues (Dileep et al., 2022). The annus horribilis of 2020 encapsulated a phase characterized by a precipitous decline in demand, revenue erosion, and proliferation of job losses, concomitant with the shuttering of hospitality enterprises spanning the globe (Shen et al., 2022).

The importance of studying a traveler's decision-making process during a pandemic is important (Zenker & Kock, 2020). There is limited understanding of a traveler's motivation to choose a particular hotel. Studies published during the pandemic indicate that the image of safety by hotels is what matters (Hoque et al., 2020; Kim et al., 2021). In this study, we gauge the antecedents and consequences of service quality pre and post the Covid-19 pandemic. The present study endeavors to ascertain whether all the dimensions of SERVQUAL carry equal weight in terms of their impact on overall service quality before and after the pandemic. Additionally, the study intends to evaluate whether the ranking of the SERVQUAL dimensions remains consistent before and after the pandemic. The study further empirically determines whether there exists a disparity in the total service quality score between the pre-Covid and post-Covid periods.

DATA, RESEARCH METHODOLOGY AND HYPOTHESIS

We adopted a mixed-method approach integrating qualitative data collection through focus groups, and primary data were collected using a Survey Questionnaire. Thematic analysis was employed to discern themes pertaining to dimensions of hotel performance. These identified themes in conjunction with existing literature formed the foundation for constructing multiple scales gauging hotel performance before and after the onset of the COVID-19 pandemic. A survey was administered to hotel guests hailing from various regions of India. The distribution of the questionnaire was facilitated through a Google Form with an online survey link disseminated via email.

The survey inquiries encompassed the capture of demographic particulars (age, gender, occupation, educational level, and frequency of visitation). Furthermore, the participants' reactions were gauged across distinct attributes of the five dimensions of SERVQUAL (Empathy, Assurance, Reliability, Responsiveness, and Tangibility) on a five-point Likert Scale. The survey instrument encompassed 26 attributes pertaining to hotel performance meticulously chosen from the corpus of scholarly works and qualitative investigations. These attributes were then incorporated into the survey in the form of a five-point Likert scale for each attribute thus enabling quantitative analysis. In the realm of gauging service quality, there exists a pervasive consensus that assessments solely centered on performance possess superior quality (Cronin & Taylor, 1994; Parasuraman et al., 1994; Teas, 1994). For the sake of expeditious survey completion, these attributes were systematically clustered into five dimensions, with each dimension containing a range of 4 to 8 attributes. The collective evaluation of these attributes in the context of hotel performance constitutes a comprehensive gauge of perceived service quality. The data analysis was conducted using SPSS (Version 12).

The target audience encompassed 825 individuals who had utilized hotel services. Impressively, 685 respondents provided valid responses, yielding an impressive response rate of around 83%. Of these, 627 complete and viable responses devoid of any missing or irrelevant data were selected for subsequent analysis. Within the respondent demographic, a significant 78% fell within the age bracket of 25 to 38, while a notable 20.5% were between 18 and 24 years of age, and merely 1.2% of the respondents exceeded the age of 38. Among the participants, approximately 36.3% identified as female, with the remaining 63.6% identifying as male. In terms of educational attainment, around 45.6% held a highest educational degree up to the level of "Bachelors," while the remaining 54.4% possessed a highest educational degree categorized as "Masters or above."

Sekaran (2003) expounded on sample size as the concrete count of subjects chosen to represent the broader population. Conversely, Kumar (1996) construed sample size as the number of individuals, families, or voters from whom researchers derive pertinent data. While a consensus generally leans toward larger samples for enhanced representativeness, the escalated costs can sometimes outweigh the benefits (Ruane, 2005). Hair and colleagues (1998) advocated for a minimum sample size of 200 for statistically sound analysis. Remarkably, the study collected a total of 627 complete and viable responses exceeding Nargundkar's recommended sample size in his 2003 methodology by over 1.6 times. The ensuing formula serves to ascertain an optimized sample size as delineated by Nargundkar (2003) with the following formula applied for population estimation:

$$n = p (1 - p) (z/e)^2$$

Where,

- N = Sample Size
- Z = Z value from the standard normal distribution for the confidence level desired for the research. For this study, we have benchmarked a 95 percent confidence level. The Z value from the standard distribution table for this case at 95% confidence level is 1.96
- P = Frequency of occurrence of something expressed as a proportion. We have taken it as 50% as a standard benchmark for an unknown population. Thus, the value of p is referenced at 0.50 for this purpose.
- E = Tolerance error. For this study, we have benchmarked the tolerance error of 0.05 or 5 %. Since our confidence interval was 95%, the significance was 5% and hence the tolerance is also 5% or 0.05.

Referring the above, the sample size calculated is as follows:

$$n = 0.50 (1 - 0.50) (1.96/0.05)^2$$

$$n = 384.16 \sim 385 \text{ samples.}$$

Service quality is widely acknowledged as an indicator of an organization's competitiveness (Parasuraman, Zeithaml, & Berry, 1985). The dimensions of tangibility, reliability, and responsiveness exert distinct influences on customer satisfaction compared to the dimensions of assurance and empathy (Ismail et al., 2023). Service quality is critical to business performance, as widely accepted in academic literature. Service quality is complex as it entails certain characteristics like intangibility and inseparability, which makes it very subjective and difficult to quantify (Ezeh et al., 2022). Several studies have been conducted to explore how dimensions of service quality impact customer satisfaction.

Our research endeavors to scrutinize the equitability of impact among all SERVQUAL dimensions on the comprehensive service quality score in the pre-Covid era. The profound impact of the Covid-19 pandemic on the travel and tourism industry is well-documented (Seyitoglu et al., 2022). As underscored by Dileep et al. (2022), it is imperative for scholars in the field of tourism to envision the industry's future trajectory and discern pertinent opportunities. The decision-making process of travelers assumes a pivotal role in this context (Zenker & Kock, 2020). Given the scarcity of research examining post-pandemic service quality, our study seeks to gauge whether all SERVQUAL dimensions wield uniform influence on the total service quality score during the post-Covid period. With the above rationale, we hypothesize that:

Hypothesis 1: Equivalence exists among all SERVQUAL dimensions concerning their influence on the total service quality score in the pre-Covid period.

Hypothesis 2: Homogeneity prevails among all SERVQUAL dimensions concerning their impact on the total service quality score in the post-Covid era.

The concept of service quality has engendered significant interest in marketing literature due to the challenge of defining and quantifying it owing to a dearth of consensus (Wisniewski, 2001). The service industry literature reveals the salient impact of reliability on customer satisfaction (Beh, 2008; Md. Anisul, Moohammad, & Alauiddin, 2011; Vong, 2007). Kumar et al. (2010) underscore the significance of empathy as a predictor of perceived quality, a notion supported by Ladhari et al. (2009). Nevertheless, dimensions of SERVQUAL have been profoundly affected by the Covid-19 pandemic. Hence, we assess whether the hierarchy of SERVQUAL dimensions remains consistent across both pre-Covid and post-Covid periods. Hoque et al.'s (2020) study indicates that perception of safety significantly influences service quality post-pandemic while dimensions of tangibility and responsiveness exert diminished effects (Hoque et al., 2020; Kim et al., 2021). Building upon this, our investigation seeks to ascertain if disparities exist in the total service quality score between pre-Covid and post-Covid epochs. Thus, we hypothesize:

Hypothesis 3: The hierarchical arrangement of SERVQUAL dimensions remains invariant in both pre-Covid and post-Covid periods.

Hypothesis 4: No disparity exists in the total service quality score between the pre-Covid and post-Covid periods.

EMPIRICAL FINDINGS

The technique of Linear Regression is incorporated for the tenacity of modeling to assess the coefficients of explanatory variables (individual dimension scores of SERVQUAL) concerning the dependent variable (Total Score Across all Dimensions of SERVQUAL) based on samples for estimation in the Pre-Covid era. The dependent variable represents Total Score Across All Dimensions before the onset of the Covid pandemic. The independent variables encompass Total Score across Assurance Dimension (Pre-Covid), Total Score across Empathy Dimension (Pre-Covid), Total Score Across Reliable Dimension (Pre-Covid), Total Score Across Tangible Dimension (Pre-Covid), and Total Score Across Responsiveness Dimension (Pre-Covid). All the explanatory variables exhibit significance at the 95% confidence level, signifying a 5% significance level with p-values below 0.05. The Variance Inflation Factor (VIF) serves as a measure of multicollinearity among the independent factors. Multicollinearity can also be elucidated through the Tolerance Value. Marquardt (1990) postulated that a VIF > 10 signifies the presence of substantial collinearity within the model. However, in our study, VIF values for each explanatory variable derived from the Regression Model remain below 10, indicating an absence of significant multicollinearity effects.

Table 1 presents results of Regression Analysis during the Pre-Covid Times. The aforementioned outcomes stemming from the regression analysis lead to rejection of the null hypothesis for Hypothesis 1. It is deduced that the SERVQUAL dimensions are not equivalent and a notable disparity exists in terms of their influence on the total service quality score before the Covid era. Notably, the cumulative score of all Tangible dimensions wields the most pronounced impact on the total service quality score with a standardized coefficient of 0.321. Subsequently, the cumulative score of all Reliable Dimensions in SERVQUAL follows suit exhibiting a standardized coefficient of 0.290. The third, fourth, and fifth positions in terms of impact on the total service quality score are occupied by cumulative scores of Assurance, Empathy, and Responsiveness Dimensions in SERVQUAL respectively. These dimensions bear standardized coefficients of 0.179, 0.178, and 0.137 sequentially.

Table 1. Results of Regression Analysis during Pre- Covid Times.

Explanatory (Independent Factors) from the Model	Description of the Factors	Standardized Coefficients	Significance Value (p value)	Collinearity Statistics	
				Tolerance	VIF
DMAssurance_TSPreCovid	Summation score of all the Assurance Dimensions in SERVQUAL	0.179	.000	.223	4.493
DMEmpathy_TSPreCovid	Summation score of all the Empathy Dimensions in SERVQUAL	0.178	.000	.219	4.564
DMReliable_TSPreCovid	Summation score of all the Reliable Dimensions in SERVQUAL	0.290	.000	.161	6.211
DMTangible_TSPreCovid	Summation score of all the Tangible Dimensions in SERVQUAL	0.321	.000	.412	2.427
DMResponsiveness_TSPreCovid	Summation score of all the Responsiveness Dimensions in SERVQUAL	0.137	.000	.233	4.300

Table 2 presents results of Regression Analysis during the Post Covid Times. The aforementioned findings arising from regression analysis lead to rejection of null hypothesis for Hypothesis 2 i.e. SERVQUAL dimensions are not equivalent and a substantial discrepancy exists in terms of their influence on total service quality score in post-Covid period. Remarkably cumulative score of all Tangible dimensions exerts most pronounced impact on total service quality score bearing a standardized coefficient of 0.316. Subsequently cumulative score of all Reliable Dimensions in SERVQUAL follows suit displaying a standardized coefficient of 0.293. The third, fourth and fifth positions in terms of impact on total service quality score are seized by cumulative scores of Assurance, Empathy and Responsiveness Dimensions in SERVQUAL carrying standardized coefficients of 0.183, 0.179 and 0.135 sequentially.

Table 2. Results of Regression Analysis during Post- Covid Times.

Explanatory (Independent Factors) from the Model	Description of the Factors	Standardized Coefficients	Significance Value (p value)	Collinearity Statistics	
				Tolerance	VIF
DMAssurance_TSPostCovid	Summation score of all the Assurance Dimensions in SERVQUAL	0.183	.000	.238	4.201
DMEmpathy_TSPostCovid	Summation score of all the Empathy Dimensions in SERVQUAL	0.179	.000	.210	4.756
DMReliable_TSPostCovid	Summation score of all the Reliable Dimensions in SERVQUAL	0.293	.000	.164	6.080
DMTangible_TSPostCovid	Summation score of all the Tangible Dimensions in SERVQUAL	0.316	.000	.416	2.406
DMResponsiveness_TSPost Covid	Summation score of all the Responsiveness Dimensions in SERVQUAL	0.135	.000	.254	3.944

The amalgamation of outcomes from two distinct regression analyses is orchestrated to scrutinize hypothesis 3. The statistical examination has revealed an absence of alteration in hierarchical arrangement of diverse explanatory variables in relation to their influence on customer satisfaction score both in Pre-Covid and Post-Covid epochs. While a marginal modification in standardized coefficients has transpired sequencing of dimensions has steadfastly persisted across Pre-Covid and Post-Covid phases. Evidently cumulative score of all Tangible Dimensions within SERVQUAL framework continues to exert most potent impact on overall satisfaction score. This is pursued by cumulative score of all Reliable Dimensions within SERVQUAL succeeded sequentially by cumulative scores of Assurance, Empathy and Responsiveness Dimensions in SERVQUAL. The aforementioned findings stemming from harmonization of two discrete regression analyses lead to retention of null hypothesis for Hypothesis 3. This conclusion underscores invariability in prioritization of SERVQUAL dimensions concerning their effect on service quality score both in pre-Covid and post-Covid eras.

The Paired T Test is implemented on dataset comprising 627 samples to facilitate a comparative assessment of Total Score encompassing all dimensions of SERVQUAL between Post Covid and Pre-Covid temporal epochs. The subsequent results serve as a reference point for examination of hypothesis 4. Table 3 presents Results of Paired T Test and Table 4 presents the results of Test of Significance for Paired T Test.

Table 3. Results of Paired T Test.

Paired Factors from the Paired Sample Test	Description of the Factors	Mean	N (Number of Samples)	Standard Error Mean
DM_All_TS_PostCovid	Total score of all the Dimensions in SERVQUAL during the Post Covid times	96.42	627	0.749
DM_All_TS_PreCovid	Total score of all the Dimensions in SERVQUAL during the Pre Covid times	95.06	627	0.729

Table 4. Test of Significance for Paired T Test.

Paired Factors from the Paired Sample Test	Description of the Factors	Paired Differences at the 95% Confidence Level (Upper)	t Value	Sig. (2 Tailed)
DM_All_TS_PreCovid	Total score of all the Dimensions in SERVQUAL during the Pre Covid times			
DM_All_TS_PostCovid	Total score of all the Dimensions in SERVQUAL during the Post Covid times	- 0.162	-2.228	0.026

The presented table illustrates an absolute increment of 1.36 in total SERVQUAL score spanning all dimensions during Post Covid era in contrast to Pre-Covid era. The ensuing significance evaluation aims to ascertain whether this observed increment carries statistical weight or if it is a fortuitous occurrence grounded in non-significant sample statistics. The table reveals that calculated t Value of 2.228 attains statistical significance at

95% confidence level signifying a 5% threshold of significance. This determination is deduced from derived p value (0.026) derived from Paired T Test which falls beneath the critical threshold of 0.05. As a result, it can be concluded that a noteworthy escalation in total score spanning all SERVQUAL dimensions during Post Covid period in comparison to pre-Covid period is evident. This in turn leads to rejection of null hypothesis 4. An imperative arises to incorporate an analysis comparing standardized coefficients of each SERVQUAL dimension score between Post Covid and Pre-Covid periods. This comparative analysis is pivotal for elucidating underlying factors contributing to substantial elevation in Total SERVQUAL score during Post Covid era relative to Pre-Covid era.

The conduct of an in-depth root cause analysis regarding discernible surge in the Total SERVQUAL score during Post Covid epoch as juxtaposed with Pre Covid period has revealed noteworthy insights. Specifically, this analysis has unveiled an augmentation in standardized coefficients associated with three distinct dimensions: the summation score of all Reliable Dimensions in SERVQUAL model, summation score of all Assurance Dimensions within SERVQUAL and summation score of all Empathy Dimensions encompassed by SERVQUAL. In particular, standardized coefficient pertaining to summation score of all Reliable Dimensions in SERVQUAL escalated from 0.290 during Pre Covid phase to 0.293 during Post Covid interval. Standardized coefficient pertaining to summation score of all Assurance Dimensions within SERVQUAL exhibited an increase from 0.179 during Pre Covid era to 0.183 during Post Covid era. Standardized coefficient associated with summation score of all Empathy Dimensions within SERVQUAL experienced a rise from 0.178 during Pre Covid period to 0.179 during Post Covid period. Although there exists a minor decline in standardized coefficients linked to summation score of all Tangible Dimensions in SERVQUAL and summation score of all Responsiveness Dimensions within SERVQUAL, this diminishment is counterbalanced by augmented values observed in other three dimensions. This intricate interplay results in a marked and statistically significant elevation in Total SERVQUAL score during Post Covid period when contrasted with Pre Covid timeframe.

CONCLUSION

Within the ambit of this study, a meticulous empirical exploration was undertaken to scrutinize the multifaceted impact of five distinctive dimensions on service quality traversing pre and post-Covid epochs in the context of the Indian hotel industry. Employing an intricate investigative approach bolstered by deployment of Regression Analysis and an array of statistical tests, our scrutiny unveiled a remarkable asymmetry among the dimensions underpinning service quality. Notably, a profound disparity surfaced in terms of their consequential influence on the overarching service quality score both antecedent to and following the Covid pandemic. It was ascertained through this study that the ordinal standing of these five dimensions with regards to their pertinence in shaping holistic service quality score remained invariant across pre and post-Covid epochs. An outcome of profound import, our research corroborated seminal work of Zenker and Kock (2020), thus substantiating the pivotal role played by service quality as a decisive impetus governing traveler decision-making in the aftermath of the Covid upheaval.

Our investigation yielded revelatory insights pinpointing assurance as the preeminent dimension underpinning post-pandemic traveler decision-making milieu significantly influencing perceptions of service quality. The empirical panorama illuminated elevated significance of reliability as the second most discerning dimension aligning seamlessly with prior scholarly discourse in the service sector which underscored its consequential impact on customer satisfaction (Beh, 2008; Md. Anisul, Moohammad&Alauiddin, 2011; Vong, 2007). It is incumbent upon hotels to underscore orchestration of a dependable, pleasurable, and captivating experience by impeccably and consistently delivering pledged services. Intriguingly, our investigatory pursuits also divulged that empathy stands as a potent precursor to the perception of quality within the post-Covid milieu. A commensurate emphasis by hoteliers on attending to patrons' exigencies subsequent to the pandemic is judiciously advised. Our study augmented the extant body of literature, notably echoing findings of Hoque et al. (2020) and Kim et al. (2021), elucidating the substantial role accorded to the perception of safety in the post-pandemic context. In contrast, dimensions such as tangibility and responsiveness, while not devoid of significance, exhibit relatively diminished influence on post-pandemic service quality.

The salience and originality of this research are underscored by its capacity to proffer elemental insights into the anticipations harbored by guests and patrons within the hotel industry traversing pre and post-Covid-19 pandemic. In light of the capricious nature inherent to crises, it is imperative that subsequent scholarly endeavors delve deeper into contemplation of guests' propensities to engage in hotel stays subsequent to the pandemic's ebb. Such elucidations are poised to inform both practitioners and scholars, enabling them to devise prescient health crisis amelioration strategies as advocated by Rivera et al. (2016); the nexus between tourism expansion and contentment emerges as intrinsically interconnected. This study's significance is underscored by its adept elucidation of guest anticipations in the context of service quality, particularly subsequent to relaxation of Covid-19 lockdown strictures. Its findings serve to enrich the corpus of scholarly work centered on service quality by penetrating antecedents and subsequent repercussions within the realm of the Indian hotel industry. The revelations gleaned from this study beckon for further scholarly inquiry, particularly in the domain of shifting demographic and geographic parameters, their complex interplay, and their nuanced effect on service quality dynamics.

REFERENCES

- Abrate, G., Capriello, A., & Fraquelli, G. (2011). When quality signals talk: Evidence from the Turin hotel industry. *Tourism Management*, 32(4), 912-921.
- Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *Journal of Marketing*, 54(2), 69-82.
- Bowen, J. T., & Shoemaker, S. (1998). Loyalty: A strategic commitment? *Cornell Hotel and Restaurant Administration Quarterly*, February, 12-25.
- Callan, R. J., & Bowman, L. (2000). Selecting a hotel and determining salient quality attributes: A preliminary study of mature British travellers. *International Journal of Tourism Research*, 2(2), 97-118.
- Callan, R. J., & Kyndt, G. (2001). Business travellers' perception of service quality: A prefatory study of two European city centre hotels. *International Journal of Tourism Research*, 3(4), 313-323.
- Clow, K. E., & Vorhies, D. W. (1993). Building a competitive advantage for service firms: Measurement of consumer expectations of service quality. *Journal of Services Marketing*, 7(1), 22-32.
- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56(3), 55-68.
- Crosby, P. B. (1979). Quality is free-if you understand it. Winter Park Public Library History and Archive Collection, 4.
- Danaher, P. J., & Mattsson, J. (1994). Customer satisfaction during the service delivery process. *European Journal of Marketing*.
- Dogru, T., Mody, M., Line, N., Suess, C., Hanks, L., & Bonn, M. (2020). Investigating the whole picture: Comparing the effects of Airbnb supply and hotel supply on hotel performance across the United States. *Tourism Management*, 79, 104094.
- Ezeh, P. C., Okeke, T. C., & Nkamnebe, A. D. (2022). Moderating role of religion in the relationship between SERVQUAL dimensions and hotel guest satisfaction. *Journal of Islamic Marketing*, 13(12), 2542-2562.
- Elliott, K. M. (1995). A comparison of alternative measures of service quality. *Journal of Customer Service in Marketing & Management*, 1(1), 33-44.
- Getty, J. M., & Thompson, K. N. (1994). A procedure for scaling perceptions of lodging quality. *Hospitality Research Journal*, 18(2), 75-96.
- Guzman, N., Prema, M., Sood, R., & Walkes, D. (2020). Coronavirus' impact on service organizations: Weathering the storm. McKinsey Company. <https://www.mckinsey.com/capabilities/operations/our-insights/coronavirus-impact-on-service>.
- Hasan, A. A. T., & Rahman, M. T. (2023). Factors influencing green hotel revisit intentions after the COVID-19 in Bangladesh. *International Journal of Tourism Cities*, 9(1), 143-158.
- Hoque, A., Shikha, F. A., Hasanat, M. W., Arif, I., & Hamid, A. B. A. (2020). The effect of Coronavirus (COVID-19) in the tourism industry in China. *Asian Journal of Multidisciplinary Studies*, 3(1), 52-58.
- Huang, S., & Wang, X. (2023). COVID-19 two years on: A review of COVID-19-related empirical research in major tourism and hospitality journals. *International Journal of Contemporary Hospitality Management*, 35(2), 743-764.
- India Hospitality Market Share (n.d.). Mordorintelligence.com.
- Ismail, A., Bakri, M. H., Rusli, N. B., Bakar, M. A. B. A., & Othman, H. (2023). Relationship between Service Quality and Customer Satisfaction: A Systematic Literature Review. *Resmilitaris*, 13(2), 262-281.
- Jam, F. A. (2019). CRYPTO CURRENCY—A NEW PHENOMENON IN MONETARY CIRCULATION. *Central Asian Journal of Social Sciences and Humanities*, 4(1), 39-46.
- Jain, K. R., & Dhyanib, A. (2020). Covid-19 Impact on the Indian Economy: A Review of Uttarakhand's Travel, Tourism and Hospitality Sector. *International Journal of Trade & Commerce-IIARTC*, 13.
- Jain, S. K., & Gupta, G. (2004). Measuring service quality: SERVQUAL vs. SERVPERF scales. *Vikalpa*, 29(2), 25-38.
- Kelley, S. W., & Turley, L. W. (2001). Consumer perceptions of service quality attributes at sporting events. *Journal of Business*

- Research, 54(2), 161-166.
- Khanna, A. (2020). COVID-19 & Its Impact On The Indian Hotel Industry. New Delhi: Hotelivate.
- Khanna, A., & Tyagi, G. (2019). 2019 Indian Hospitality Trends & Opportunities. Gurugram: Hotelivate.
- Khan, T. I., Khan, A. Z., & Khan, S. (2019). Effect of time pressure on organizational citizenship behavior: Moderating role of agreeableness. *Sir Syed Journal of Education and Social Research (SJESR)*, 2(1), 140-156.
- Kim, J. E. (2021). Paradoxical leadership and proactive work behavior: The role of psychological safety in the hotel industry. *The Journal of Asian Finance, Economics and Business*, 8(5), 167-178.
- Kim, J. J., Lee, Y., & Han, H. (2019). Exploring competitive hotel selection attributes among guests: An importance-performance analysis. *Journal of Travel & Tourism Marketing*, 36(9), 998-1011.
- Koc, E. (2020). Do women make better in tourism and hospitality? A conceptual review from a customer satisfaction and service quality perspective. *Journal of Quality Assurance in Hospitality & Tourism*, 21(4), 402-429.
- Jam, F. A., Singh, S. K. G., Ng, B., & Aziz, N. (2016). Effects of Uncertainty Avoidance on Leadership Styles in Malaysian Culture, , *International Journal of Advance Business and Economics Research*, 14(8), 7029-7045.
- Leoni, V., & Moretti, A. (2023). Customer satisfaction during COVID-19 phases: The case of the Venetian hospitality system. *Current Issues in Tourism*, 1-17.
- Li, M., Yin, D., Qiu, H., & Bai, B. (2022). Examining the effects of AI contactless services on customer psychological safety, perceived value, and hospitality service quality during the COVID-19 pandemic. *Journal of Hospitality Marketing & Management*, 31(1), 24-48.
- Liang, L., & Wu, G. (2022). Effects of COVID-19 on customer service experience: Can employees wearing facemasks enhance customer-perceived service quality? *Journal of Hospitality and Tourism Management*, 50, 10-20.
- Mbah, R. E., & Wasum, D. F. (2022). Russian-Ukraine 2022 War: A review of the economic impact of Russian-Ukraine crisis on the USA, UK, Canada, and Europe. *Advances in Social Sciences Research Journal*, 9(3), 144-153.
- Menon, D., Chaturvedi, S., Anbuudayasankar, S. P., & Negi, A. (2022). Present and prospective research themes for tourism and hospitality education post-COVID19: A bibliometric analysis. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 30, 100360.
- Min, H., Min, H., & Chung, K. (2002). Dynamic benchmarking of hotel service quality. *Journal of Services Marketing*.
- Naz, I. (2019). Ease of use and Awareness to use as a Predictor of Confidence in E-Banking Leading to Adoption of E-Banking: The Case of Islamic Banks in Pakistan. *Journal of Islamic Business and Management (JIBM)*, 9(1).
- Negassa, G. J., & Japee, G. P. (2023). The Effect of Bonding, Responsiveness and Communication on Customer Retention: The Mediating Role of Customer Satisfaction. *Journal of Relationship Marketing*, 22(2), 115-131.
- Oğuz, H. U. (2023). The Future of Post-Pandemic Tourism and Hospitality Industry: A Comprehensive Assessment. In *Tourism and Hospitality in Asia: Crisis, Resilience and Recovery* (pp. 299-308). Singapore: Springer Nature Singapore.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Perceived service quality as a customer-based performance measure: An empirical examination of organizational barriers using an extended service quality model. *Human Resource Management*, 30(3), 335-364.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- Saleh, F., & Ryan, C. (1991). Analysing service quality in the hospitality industry using the SERVQUAL model. *Service Industries Journal*, 11(3), 324-345.
- Saydam, M. B., Olorunsola, V. O., Avci, T., Dambo, T. H., & Beyar, K. (2022). How about the service perception during the COVID-19 pandemic: An analysis of tourist experiences from user-generated content on TripAdvisor. *Tourism Critiques: Practice and Theory*.
- Scott, D., Hall, C. M., Rushton, B., & Gössling, S. (2023). A review of the IPCC Sixth Assessment and implications for tourism development and regional climate action. *Journal of Sustainable Tourism*, 1-18.
- Seyitoğlu, F., Atsız, O., Kaya, F., & Taş, S. (2022). The two-way perspective of tourism undergraduates towards (post-) viral world: The future of tourism, and vocational development and career. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 31, 100400.
- Shen, S., Xu, K., Sotiriadis, M., & Wang, Y. (2022). Exploring the factors influencing the adoption and usage of Augmented Reality and Virtual Reality applications in tourism education within the context of COVID-19 pandemic. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 30, 100373.
- Song, Y., Liu, K., Guo, L., Yang, Z., & Jin, M. (2022). Does hotel customer satisfaction change during the COVID-19? A perspective from online reviews. *Journal of Hospitality and Tourism Management*, 51, 132-138.
- Van Dyke, T. P., Kappelman, L. A., & Prybutok, V. R. (1997). Measuring information systems service quality: Concerns on the use of the SERVQUAL questionnaire. *MIS Quarterly*, 195-208.
- Veloso, M., & Gomez-Suarez, M. (2023). Customer experience in the hotel industry: A systematic literature review and research agenda. *International Journal of Contemporary Hospitality Management*, (ahead-of-print).
- Wisniewski, M. (2001). Using SERVQUAL to assess customer satisfaction with public sector services. *Managing Service Quality: An International Journal*, 11(6), 380-388.
- Xin, Y., Irfan, M., Ahmad, B., Ali, M., & Xia, L. (2023). Identifying How E-Service Quality Affects Perceived Usefulness of Online Reviews in Post-COVID-19 Context: A Sustainable Food Consumption Behavior Paradigm. *Sustainability*, 15(2),

- Xu, Y., Li, S., Law, R., Jin, Y., & Lyu, Z. (2023). How does the COVID-19 pandemic influence tourist rating behaviour? An empirical exploration based on expectation theory. *Current Issues in Tourism*, 1-17.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46.
- Zenker, S., & Kock, F. (2020). The coronavirus pandemic—A critical discussion of a tourism research agenda. *Tourism Management*, 81, 104164.
- Zhang, J., Xie, C., Wang, J., Morrison, A. M., & Coca-Stefaniak, J. A. (2020). Responding to a major global crisis: The effects of hotel safety leadership on employee safety behavior during COVID-19. *International Journal of Contemporary Hospitality Management*, 32(11), 3365-3389.
- Zibarzani, M., Abumalloh, R. A., Nilashi, M., Samad, S., Alghamdi, O. A., Nayer, F. K., ... & Akib, N. A. M. (2022). Customer satisfaction with Restaurants Service Quality during COVID-19 outbreak: A two-stage methodology. *Technology in Society*, 70, 101977.