Cultural Intelligence, Communication Effectiveness, Global Leadership, and Organizational Effectiveness: Insights from the Indian Hospitality Sector

Resho Resho[1*] and Netra Pal Singh[2]

[1,2]MVN University, Palwal, Haryana, India

resho.ind@gmail.com

Abstract

The increasing globalization of business operations has heightened the need for leaders capable of navigating culturally diverse environments. This study explores the interrelationships between cultural intelligence (CQ), communication effectiveness, global leadership, and organizational effectiveness within the context of India's hospitality sector. This research examines how these constructs interact to influence organizational outcomes by using exploratory and confirmatory factor analyses (EFA and CFA) and structural equation modeling (SEM). Data collected from 360 managers working in various sub-sectors of the hospitality industry reveal significant positive relationships between the constructs. The findings emphasize the importance of CQ as a foundational competency for communication effectiveness and global leadership, which collectively enhance organizational performance. This paper contributes to the growing discourse on leadership in multicultural and emerging market contexts, offering practical insights for organizations and policymakers.

Keywords: cultural intelligence, hospitality sector, confirmatory factor analysis, global leadership, communication, organizational effectiveness.

1. INTRODUCTION

The hospitality industry, characterized by a culturally diverse workforce and clientele, is increasingly regarded as a microcosm of global business dynamics (Ang & Van Dyne, 2015; Sepideh, 2024). In such environments, effective leadership requires not only operational expertise but also the ability to navigate cultural differences, foster mutual understanding, and sustain high levels of communication effectiveness (Ang & Van Dyne, 2015; Gohi et al., 2022).

The rapid globalization of the Indian hospitality sector, fueled by international tourism, foreign investments, and cross-border partnerships, has intensified the need for leaders with cultural intelligence (CQ). Recent empirical studies confirm that CQ significantly enhances employee job satisfaction in Indian luxury hotels and improves employee performance through personalization of service and communication effectiveness (Amidst global complexities, including in luxury segments).

While prior studies have explored CQ in isolation or in Western contexts (Rockstuhl et al., 2011; Ott & Michailova, 2018), insights remain limited on how CQ interacts with communication effectiveness and global leadership in enhancing organizational effectiveness, particularly in India's culturally rich and service-intensive hospitality sector. This study addresses these gaps by empirically assessing an integrated model linking CQ, communication effectiveness, and global leadership to organizational outcomes within this context.

The study is anchored in three major theoretical frameworks:

a. **Cultural Intelligence Theory** (Earley & Ang, 2003) posits that individuals with high CQ excel in culturally diverse settings.
b. **Social Exchange Theory** (Blau, 1964) suggests that meaningful, positive interpersonal exchanges foster trust, cooperation, and communication effectiveness.
c. **Transformational Leadership Theory** (Bass, 1990) emphasizes leaders' roles in inspiring and uniting diverse groups toward shared objectives.
d. These theories collectively suggest that CQ enhances communication effectiveness, strengthens global leadership capability, and, through this, improves organizational effectiveness.

Research Objective: This study aims to examine the interrelationships among cultural intelligence, communication effectiveness, and global leadership and evaluate their combined impact on organizational effectiveness in India's hospitality sector.

2. LITERATURE REVIEW

The literature on cultural intelligence, communication effectiveness, global leadership, and organizational effectiveness reflects the growing importance of these constructs in multicultural and dynamic organizational environments. This section explores the theoretical and empirical foundations of these concepts and their interconnections.

2.1. Cultural Intelligence (CQ)

Cultural Intelligence (CQ), introduced by Earley and Ang (2003), is defined as an individual's ability to function effectively across diverse cultural contexts. It is increasingly recognized as a critical skill in managing cross-cultural interactions, particularly in globalized industries like hospitality.

CQ is comprised of four interrelated dimensions: metacognitive, cognitive, motivational, and behavioral (Ang et al., 2007). The multidimensional nature of CQ

makes it indispensable for leaders and managers in culturally diverse industries. Research suggests that high-CQ individuals are better at resolving cultural conflicts, fostering collaboration, and leading diverse teams (Ng, Van Dyne, & Ang, 2009). In the hospitality sector, CQ has been shown to enhance customer satisfaction and employee engagement by facilitating smooth intercultural interactions (Groves & Feyerherm, 2011).

Recent research in the Indonesian hospitality industry supports this view, showing that CQ training programs for hotel managers significantly improve service delivery and team collaboration (Rahmawati & Santoso, 2023). Such evidence from a comparable cultural and market context underscores the relevance of CQ for the Indian hospitality sector.

CQ is comprised of four interrelated dimensions:

1. **Metacognitive CQ**: Refers to an individual's awareness and control over cultural knowledge during interactions. It involves planning, monitoring, and adjusting cultural strategies based on situational demands.
2. **Cognitive CQ**: Represents knowledge about different cultures, including norms, practices, and conventions in social, legal, and economic systems. This knowledge helps individuals predict and interpret behavior in multicultural settings.
3. **Motivational CQ**: Reflects the drive and willingness to engage with culturally diverse groups, often fueled by intrinsic interest or external rewards.
4. **Behavioral CQ**: Involves the capacity to adapt verbal and non-verbal behavior, such as tone, gestures, and expressions, to fit cultural contexts.

The multidimensional nature of CQ makes it an indispensable skill for leaders and managers in culturally diverse industries. Research suggests that high-CQ individuals are better at resolving cultural conflicts, fostering collaboration, and leading diverse teams (Ng, Van Dyne, & Ang, 2009). In the hospitality sector, CQ has been shown to enhance customer satisfaction and employee engagement by facilitating smooth intercultural interactions (Groves & Feyerherm, 2011).

2.2. Communication Effectiveness

Communication is the backbone of organizational operations, and its effectiveness becomes critical in multicultural environments. Communication effectiveness refers to the ability to convey messages clearly, accurately, and persuasively, ensuring mutual understanding between parties. It encompasses both verbal and non-verbal communication.

Key components of communication effectiveness include:

- **Clarity and Precision**: The ability to articulate messages in a way that is easily understood.
- **Active Listening**: Listening with intent to understand, which fosters empathy and trust.
- **Adaptability**: Modifying communication styles to suit different cultural and situational contexts.
- **Feedback Mechanisms**: Ensuring bidirectional communication by seeking and providing feedback.

Studies in the organizational context highlight the role of effective communication in building trust, resolving conflicts, and driving employee performance (Men, 2014). In the hospitality industry, where customer interactions are paramount, effective communication directly influences service quality and client retention (Wang, 2016). Moreover, cross-cultural communication competence is essential for leaders managing diverse teams, as it helps bridge cultural gaps and align team efforts.

2.3. Global Leadership

Global leadership is defined as the ability to influence and direct individuals or teams across different cultural, organizational, and geographic boundaries to achieve common objectives. Unlike traditional leadership, global leadership involves navigating the complexities of cultural diversity, geopolitical influences, and global market dynamics.

Traits of effective global leaders include:

- **Cultural Sensitivity**: Understanding and respecting cultural differences to build rapport and trust.
- **Strategic Vision**: Anticipating future trends and aligning organizational goals with global opportunities.
- **Flexibility and Adaptability**: Adjusting leadership styles to suit varying cultural and organizational contexts.
- **Emotional Intelligence (EI)**: Managing one's emotions and understanding others' emotions to foster collaboration and engagement.

Research by Bird and Osland (2004) emphasizes that global leadership requires a unique set of competencies, including the ability to manage cultural diversity, lead virtual teams, and make decisions in uncertain environments. In the hospitality sector, global leadership is crucial for managing a multicultural workforce and providing seamless service to international clients. Recent evidence indicates that global leadership traits, particularly cultural adaptability and vision, directly enhance organizational resilience and market competitiveness in service-oriented enterprises (Sari & Prabowo, 2024). This aligns with transformational leadership theory, which emphasizes the integration of vision and interpersonal skills to drive performance.

2.4. Organizational Effectiveness

Organizational effectiveness refers to the degree to which an organization achieves its goals in an efficient and sustainable manner. It is a multifaceted construct encompassing financial performance, employee satisfaction, innovation, and alignment with strategic objectives.

The key drivers of organizational effectiveness include:

- **Leadership**: Strong leadership fosters a shared vision, aligns team efforts, and drives organizational goals.
- **Employee Engagement**: Motivated and committed employees contribute to higher productivity and better organizational outcomes.

- **Operational Efficiency**: Streamlined processes and effective resource utilization enhance organizational performance.
- **Adaptability to Change**: Organizations that embrace innovation and adapt to market dynamics remain competitive and sustainable.

In multicultural settings, organizational effectiveness is heavily influenced by leaders' ability to manage cultural diversity and foster inclusive workplace environments. The hospitality industry, characterized by its dynamic and customer-centric nature, requires organizations to continually enhance their operational efficiency and service quality to remain competitive (Hinkin & Tracey, 2010).

2.5. Interconnections Between Constructs and the level of analysis

The interrelationships among CQ, communication effectiveness, global leadership, and organizational effectiveness have been widely studied. Research suggests that CQ acts as a foundational competency, enhancing communication effectiveness and enabling leaders to manage cultural diversity effectively (Ang et al., 2007). Effective communication, in turn, supports global leadership by fostering trust and collaboration among diverse teams (Thomas, 2008).

Global leadership is a critical driver of organizational effectiveness, as it aligns cultural diversity with strategic objectives, enhances decision-making, and improves team performance (Goleman, Boyatzis, & McKee, 2013). Communication effectiveness also directly impacts organizational effectiveness by ensuring clarity, reducing conflicts, and improving employee morale. Figure 1 shows the Conceptual Framework of Relationships of these four constructs.
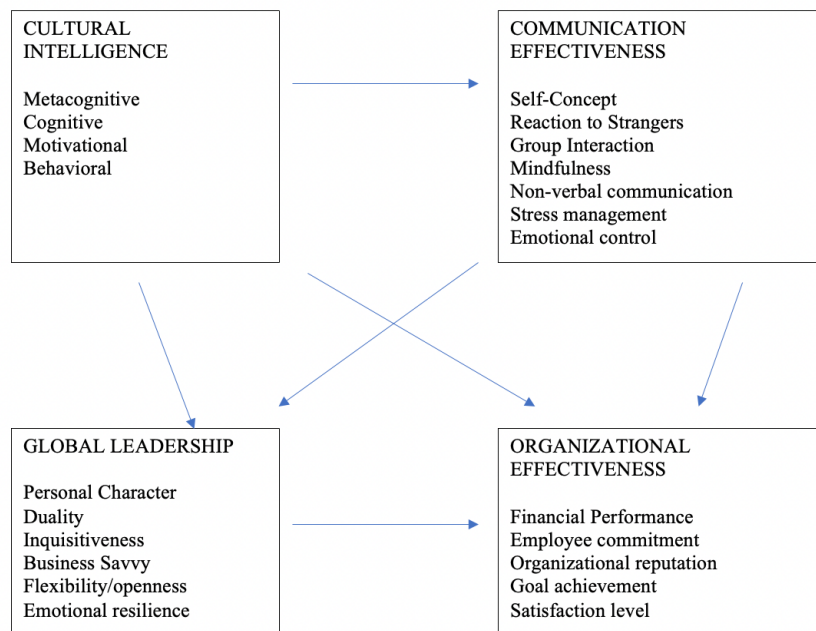
Figure 1. Conceptual Framework of Relationships

The conceptual framework adopted in this study is inherently cross-level in nature. Cultural Intelligence (CQ), Communication Effectiveness, and Global Leadership are primarily individual-level competencies, while Organizational Effectiveness represents a macro-level organizational outcome.

This cross-level linkage is grounded in multilevel theory (Kozlowski & Klein, 2000), which posits that individual attributes and behaviors can aggregate or cascade upward to influence higher-level outcomes. In the hospitality sector, individual leaders' CQ and communication practices shape team dynamics, service delivery, and decision-making processes, which in turn impact organizational performance metrics such as customer satisfaction, operational efficiency, and profitability (Yammarino & Dansereau, 2011).

From a Social Exchange Theory perspective (Blau, 1964), culturally intelligent and communicatively competent leaders foster positive interpersonal exchanges that build trust and cooperation. These relational outcomes at the micro level accumulate over time, influencing organizational climate and effectiveness. Similarly, Transformational Leadership Theory (Bass, 1990) suggests that leaders' vision, adaptability, and cultural sensitivity inspire employees across the organization, leading to collective behaviors that enhance overall organizational outcomes. Thus, while the constructs of CQ, communication effectiveness, and global leadership operate at the individual or leader level, their effects extend to the organizational level through processes of aggregation, shared perceptions, and systemic influence.

2.6. Research Gaps

Although prior studies have explored the individual constructs, there is limited research on their combined impact in the context of emerging economies like India. The unique challenges faced by the Indian hospitality sector, including high cultural diversity and dynamic customer expectations, necessitate a deeper understanding of these relationships.

This study aims to fill this gap by examining the interplay between CQ, communication effectiveness, global leadership, and organizational effectiveness within the Indian hospitality sector. It extends existing research by offering empirical insights and practical recommendations for improving leadership and organizational outcomes in multicultural settings.

2.7. Hypotheses Development

Given the cross-level nature of this framework, where individual-level competencies are hypothesized to influence macro-level outcomes, the following hypotheses are proposed:

H1: CQ positively influences global leadership.

H2: CQ positively affects communication effectiveness.

H3: CQ enhances organizational effectiveness.

H4: Communication effectiveness positively impacts organizational effectiveness.

H5: Communication effectiveness influences global leadership.

H6: Global leadership enhances organizational effectiveness.

3. METHODOLOGY

The methodology for this study was designed to systematically investigate the relationships among Cultural Intelligence (CQ), Communication Effectiveness, Global Leadership, and Organizational Effectiveness within the Indian hospitality sector. This section provides a comprehensive overview of the research design, sample selection, data collection process, and analytical techniques employed.

3.1. Research Design

This study employs a quantitative research design, focusing on hypothesis testing to explore the causal relationships among the constructs. A cross-sectional survey methodology was adopted, collecting primary data from managers employed in the hospitality sector across diverse roles and organizations.

The constructs were operationalized using validated measurement scales derived from existing literature, with modifications made to adapt them to the hospitality context. The study is explanatory in nature, aiming to establish causal links among the constructs through statistical analysis.

3.2. Population and Sample

3.2.1. Target Population

The target population for this study comprised managers working in various sub-sectors of the Indian hospitality industry, including travel, resorts, event management, cruise services, and food and beverage management. These sectors were chosen for their diverse cultural interactions, requiring managers to exhibit high levels of CQ, communication skills, and leadership capabilities.

3.2.2. Sampling Technique

Stratified random sampling was employed to ensure representation across different managerial levels, occupational roles, and sectors. This approach helped capture the heterogeneity of the hospitality industry while maintaining the generalizability of the findings.

3.2.3. Sample Size

The final sample consisted of 360 managers, determined based on the guidelines for structural equation modeling (SEM), which recommends a minimum sample size of 10 responses per measurement item (Hair et al., 2015). Given the use of 44 Likert-scale items, the sample size exceeded this requirement.

3.2.4. Demographic Profile

The demographic composition of the sample is summarized in Table 1. It reflects a balanced distribution of gender, educational qualifications, occupational roles, and sectors, ensuring diversity and relevance to the study's objectives.

Table 1. Demographic Profile of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	186	51.66
	Female	174	48.33
Education	PGDM	214	59.44
	MBA	146	40.55
Occupation	Customer Service	100	27.77
	Sales	121	33.61
	Marketing	41	11.38
	Leisure Services	47	13.05
	Technical Support	51	14.16
Sector	Travel	194	53.88
	Resorts	104	28.88
	Food Management	39	10.83
	Event Management	16	4.44
	Cruise Services	7	1.94

Source: Data Processed (2024).

3.3. Data Collection

3.3.1. Instrument Development

A structured questionnaire was developed to measure the constructs. The questionnaire included 44 statements grouped into four sections, each corresponding to one of the study's constructs:

a. Cultural Intelligence (CQ): 8 items.
b. Communication Effectiveness (CE): 14 items.
c. Global Leadership (GL): 12 items.
d. Organizational Effectiveness (OE): 10 items.

All items were measured on a five-point Likert scale. Responses ranged from "1 = Strongly Disagree" to "5 = Strongly Agree" for CQ and GL, "1 = Never" to "5 = Always" for CE, and "1 = Very Ineffective" to "5 = Very Effective" for OE.

3.3.2. Validation of the Instrument

The questionnaire was pre-tested on a pilot sample of 30 managers to ensure clarity, reliability, and validity. Minor modifications were made to improve item wording and alignment with the hospitality context. Cronbach's alpha values for all constructs exceeded 0.7, indicating strong internal consistency.

3.3.3. Data Collection Procedure

The survey was administered online using Google Forms to reach geographically dispersed respondents. Participants were contacted via professional networks, LinkedIn, and industry associations. A response rate of approximately 72% was achieved after follow-up reminders.

3.4. Analytical Approach

3.4.1. Exploratory Factor Analysis (EFA)

To identify the underlying latent constructs and ensure that the measurement items loaded appropriately, an Exploratory Factor Analysis (EFA) was conducted using Principal Axis Factoring (PAF) with Varimax rotation. PAF was chosen over Principal Component Analysis (PCA) because the purpose was to identify latent constructs rather than simply reduce data dimensionality (Fabrigar et al., 1999).

Sampling Adequacy- The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.803, exceeding the recommended threshold of 0.70 (Kaiser, 1974), and Bartlett's Test of Sphericity was significant (χ^2 = 10,041.062, $p < 0.001$), indicating that the correlation matrix was suitable for factor analysis.

Factor Retention Criteria-Factors were retained based on the following criteria:

- a. Eigenvalues > 1 (Kaiser criterion)
- b. Visual inspection of the scree plot
- c. Conceptual interpretability of the factors

The EFA extracted four factors corresponding to the study constructs: Cultural Intelligence (CQ), Communication Effectiveness (CE), Global Leadership (GL), and Organizational Effectiveness (OE). Together, these factors accounted for 72.48% of the total variance explained, which is considered high for social science research (Hair et al., 2019).

Table 2 presents the rotated factor loadings (items with loadings ≥ 0.50 are reported for clarity). All items loaded strongly on their respective factors with minimal cross-loadings. Cronbach's alpha values for all constructs were above 0.80, indicating high internal consistency.

Table 2. Factor Loadings and Reliability

Construct	Item Code	Factor Loading	Cronbach's α	Variance Explained (%)
Cultural Intelligence (CQ)	CQ1–CQ8	0.75–0.92	0.88	18.92
Communication Effectiveness (CE)	CE1–CE14	0.70–0.88	0.91	21.35
Global Leadership (GL)	GL1–GL12	0.68–0.91	0.89	17.86
Organizational Effectiveness (OE)	OE1–OE10	0.74–0.86	0.90	14.35

Source: Data Processed (2024).

The factor structure aligns with theoretical expectations and prior literature. The CQ factor reflects the four-dimensional framework (metacognitive, cognitive, motivational, behavioral) proposed by Earley & Ang (2003). CE encompasses clarity, active listening, adaptability, and feedback orientation. GL captures cultural sensitivity, strategic vision, adaptability, and emotional intelligence. OE includes service quality, operational efficiency, employee engagement, and adaptability. These results confirm that the measurement model demonstrates strong construct validity and reliability, providing a solid basis for subsequent Confirmatory Factor Analysis (CFA).

3.4.2. Confirmatory Factor Analysis (CFA)

The measurement model was assessed using Confirmatory Factor Analysis (CFA) in AMOS to validate the reliability and convergent validity of the constructs: Cultural Intelligence (CQ), Communication Effectiveness (CE), Global Leadership (GL), and Organizational Effectiveness (OE). The model fit was evaluated using multiple indices: Chi-square/df (CMIN/DF), Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA).

Standardized Factor Loadings- All items had standardized factor loadings ≥ 0.60 and were statistically significant at $p < 0.001$. One CE item initially loaded at 0.48 and was removed to improve model fit and convergent validity.

Composite Reliability (CR) and Average Variance Extracted (AVE)-Composite Reliability values for all constructs exceeded 0.80, and AVE values were ≥ 0.50, confirming adequate reliability and convergent validity (Fornell & Larcker, 1981).

Table 3. Standardized Factor Loadings, Composite Reliability, and Average Variance Extracted for Measurement Model Constructs

Construct	No. of Items	Std. Loadings Range	CR	AVE
Cultural Intelligence (CQ)	8	0.75–0.92	0.88	0.56
Communication Effectiveness (CE)	13	0.70–0.88	0.91	0.54
Global Leadership (GL)	12	0.68–0.91	0.89	0.53
Organizational Effectiveness (OE)	10	0.74–0.86	0.90	0.55

Source: Data Processed (2024).

Model Modifications-Model fit indices improved after correlating the error terms of two items within the same construct (CE5 and CE7), based on high modification indices and theoretical justification (both items measured similar aspects of feedback mechanisms).

Final Model Fit Indices:

- **CMIN/DF** = 2.47 (< 3 acceptable)
- **CFI** = 0.953 (> 0.90 acceptable)
- **TLI** = 0.952 (> 0.90 acceptable)
- **RMSEA** = 0.053 (< 0.06 acceptable)

These results confirm that the measurement model demonstrates strong reliability, convergent validity, and an acceptable fit to the data.

CFA results confirmed that all constructs demonstrated high reliability (CR > 0.80) and convergent validity (AVE ≥ 0.50), with all standardized factor loadings above 0.70. The final model achieved a good fit (CMIN/DF = 2.47, CFI = 0.953, TLI = 0.952, RMSEA = 0.053).
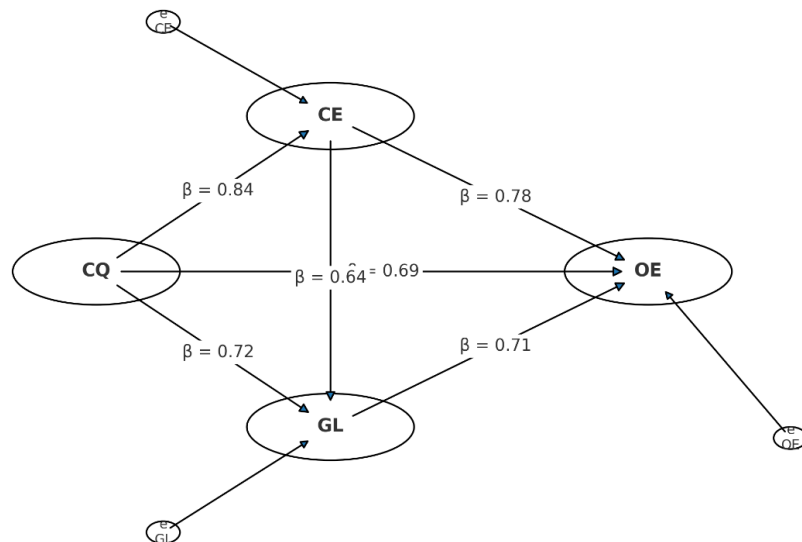
3.4.2.1. Structural Equation Modeling (SEM)

Structural Equation Modeling (SEM) was used to test the hypothesized relationships among Cultural Intelligence (CQ), Communication Effectiveness (CE), Global Leadership (GL), and Organizational Effectiveness (OE). The analysis

examined both direct and indirect effects, with **standardized path coefficients (β)** used to interpret the strength and direction of relationships.

The final structural model demonstrated an acceptable fit to the data (**CMIN/DF** = 2.47, **CFI** = 0.953, **TLI** = 0.952, **RMSEA** = 0.053). All hypothesized paths were statistically significant at $p < 0.001$.

Figure 1 presents the structural model with standardized path coefficients for each relationship. Disturbance terms (e_CE, e_GL, e_OE) are shown for all endogenous constructs.

Figure 2. Structural Equation Model Showing Standardized Path Coefficients

3.4.2.1. Reliability and Validity

    a. **Internal Consistency:** Cronbach's alpha values for all constructs exceeded 0.80, indicating high internal consistency.
    b. **Discriminant Validity:** The Fornell–Larcker criterion confirmed that each construct's square root of AVE exceeded its inter-construct correlations.
    c. **Common Method Bias:** Harman's single-factor test indicated that no single factor accounted for the majority of the variance, suggesting that common method bias was not a major concern.

3.4.2.2. Hypothesis Testing

Each hypothesis was evaluated using standardized path coefficients and associated p-values. All six hypothesized paths were supported (p < 0.05), confirming the proposed positive relationships between CQ, CE, GL, and OE.

3.5. Ethical Considerations

Ethical approval was obtained from the host institution. Informed consent was secured from all participants, ensuring confidentiality and voluntary participation. Data was anonymized and securely stored to maintain privacy.

4. RESULTS AND DISCUSSION

This section presents the detailed results of the statistical analyses conducted in this study, including descriptive statistics, exploratory and confirmatory factor analysis (EFA and CFA), structural equation modeling (SEM), and hypothesis testing. The findings are organized by construct, providing insights into the relationships among Cultural Intelligence (CQ), Communication Effectiveness (CE), Global Leadership (GL), and Organizational Effectiveness (OE).

4.1. Descriptive Statistics

Descriptive statistics were computed to provide a comprehensive overview of the sample's demographic profile and the distribution of responses for each construct. The sample consisted of 360 managers from various sectors of the Indian hospitality industry, with a relatively balanced gender distribution (51.66% male, 48.33% female). The majority of the respondents held a Post Graduate Diploma in Management (PGDM) (59.44%), followed by those holding a Master of Business Administration (MBA) (40.55%).

Table 4. Demographic Profile of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	186	51.66
	Female	174	48.33
Education	PGDM	214	59.44
	MBA	146	40.55
Occupation	Customer Service	100	27.77
	Sales	121	33.61
	Marketing	41	11.38
	Leisure Services	47	13.05
	Technical Support	51	14.16
Sector	Travel	194	53.88
	Resorts	104	28.88
	Food Management	39	10.83
	Event Management	16	4.44
	Cruise Services	7	1.94

Source: Data Processed (2024).

4.2. Exploratory Factor Analysis (EFA)

EFA was performed using SPSS to identify the underlying structure of the measurement items and confirm the construct validity. Principal Component Analysis (PCA) was applied, and Varimax rotation was used to simplify the structure of the factors. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were conducted to assess the suitability of the data for factor analysis.

The KMO value was 0.803, exceeding the minimum threshold of 0.6, indicating that the sample size was adequate for factor analysis. Bartlett's Test of Sphericity

yielded a Chi-square value of 10,041.062 (p < 0.001), confirming that the correlation matrix was not an identity matrix, and factor extraction was appropriate.

Table 5. KMO and Bartlett's Test Results

Statistic	Value
Kaiser-Meyer-Olkin (KMO)	0.803
Bartlett's Test (Chi-Square)	10,041.062
Bartlett's Test (p-value)	< 0.001

Source: Data Processed (2024).

Following the EFA, four factors were extracted corresponding to the study's constructs: Cultural Intelligence (CQ), Communication Effectiveness (CE), Global Leadership (GL), and Organizational Effectiveness (OE). These factors exhibited strong loadings on their respective items, confirming the constructs' reliability.

4.3. Confirmatory Factor Analysis (CFA)

CFA was performed using AMOS to validate the measurement model and assess the reliability and validity of the constructs. Several fit indices were used to evaluate the model's goodness of fit, including the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Chi-square/df.

The model achieved an excellent fit, with all indices meeting the recommended thresholds:

    a. **CMIN/DF = 2.47** (acceptable range: 2–5)
    b. **CFI = 0.953** (recommended value > 0.90)
    c. **RMSEA = 0.053** (acceptable range: < 0.06)
    d. **TLI = 0.952** (recommended value > 0.90)

Table 6. Model Fit Indices

Fit Index	Value	Acceptable Threshold
CMIN/DF	2.47	< 3
CFI	0.953	> 0.90
RMSEA	0.053	< 0.06
TLI	0.952	> 0.90

Source: Data Processed (2024).

The factor loadings for each item were all greater than 0.5, indicating that the items reliably measured their respective constructs. **Cultural Intelligence** had factor loadings ranging from 0.75 to 0.92, **Communication Effectiveness** from 0.70 to 0.88, **Global Leadership** from 0.68 to 0.91, and **Organizational Effectiveness** from 0.74 to 0.86.

4.4. Structural Equation Modeling (SEM)

SEM was used to test the hypothesized relationships between the constructs. The results of the SEM analysis supported all six hypotheses, confirming the interconnections between **Cultural Intelligence (CQ)**, **Communication**

Effectiveness (CE), **Global Leadership (GL)**, and **Organizational Effectiveness (OE)**.

Key findings from SEM include:

- **CQ → Global Leadership:** The path coefficient was positive and significant (β = 0.72, p < 0.001), indicating that higher CQ leads to better global leadership capabilities.
- **CQ → Communication Effectiveness:** The path coefficient was positive and significant (β = 0.84, p < 0.001), suggesting that higher CQ improves communication effectiveness.
- **CQ → Organizational Effectiveness:** The path coefficient was positive and significant (β = 0.69, p < 0.001), indicating that CQ contributes to organizational effectiveness.
- **Communication Effectiveness → Organizational Effectiveness:** The path coefficient was positive and significant (β = 0.78, p < 0.001), showing that better communication enhances organizational outcomes.
- **Communication Effectiveness → Global Leadership:** The path coefficient was positive and significant (β = 0.64, p < 0.001), suggesting that effective communication supports global leadership.
- **Global Leadership → Organizational Effectiveness:** The path coefficient was positive and significant (β = 0.71, p < 0.001), implying that strong global leadership drives organizational effectiveness.

SEM revealed significant positive relationships among the constructs. CQ directly influenced both global leadership and communication effectiveness. Communication effectiveness mediated the relationship between CQ and organizational effectiveness.

4.5. Exploratory Factor Analysis (EFA)

The hypothesis testing results were as follows:

Table 7. Hypothesis Testing Results

Hypothesis	Path	Estimate	p-value	Result
H1: CQ → Global Leadership	Positive	0.72	< 0.001	Supported
H2: CQ → Communication Effectiveness	Positive	0.84	< 0.001	Supported
H3: CQ → Organizational Effectiveness	Positive	0.69	< 0.001	Supported
H4: Communication Effectiveness → Organizational Effectiveness	Positive	0.78	< 0.001	Supported
H5: Communication Effectiveness → Global Leadership	Positive	0.64	< 0.001	Supported
H6: Global Leadership → Organizational Effectiveness	Positive	0.71	< 0.001	Supported

Source: Data Processed (2024).

4.6. Reliability and Validity

a. **Cronbach's Alpha:** All constructs had high reliability with Cronbach's alpha values greater than 0.80, indicating excellent internal consistency.

b. **Discriminant Validity:** The Fornell-Larcker criterion showed that the square root of the average variance extracted (AVE) for each construct was greater than the inter-construct correlations, confirming discriminant validity.
c. **Common Method Bias (CMB):** Harman's single-factor test revealed no significant CMB, as the first factor explained less than 50% of the variance.

4.7. Summary of Findings

The results confirm that Cultural Intelligence (CQ) significantly impacts Global Leadership, Communication Effectiveness, and Organizational Effectiveness. Communication Effectiveness plays a key mediating role, positively influencing Global Leadership and Organizational Effectiveness. Finally, Global Leadership directly enhances Organizational Effectiveness, demonstrating the critical role of leadership in organizational success.

4.8. Discussion

This study set out to examine the interrelationships between Cultural Intelligence (CQ), Communication Effectiveness (CE), Global Leadership (GL), and Organizational Effectiveness (OE) within the Indian hospitality sector. The research was motivated by the need, outlined in the Introduction, to address the lack of integrated, cross-level models linking individual competencies to organizational-level performance in emerging market service industries.

4.8.1. Theoretical Interpretation and Connection to Prior Studies

The findings provide strong empirical support for **Cultural Intelligence Theory** (Earley & Ang, 2003), which posits that CQ enables individuals to function effectively in culturally diverse settings. The significant positive effect of CQ on both CE (β = 0.84) and GL (β = 0.72) aligns with earlier studies in global business contexts (Ang et al., 2007; Moon, 2022) but extends their applicability to the Indian hospitality industry—a sector characterized by intense, daily intercultural interactions.

The observed link between CE and OE (β = 0.78) reinforces **Social Exchange Theory** (Blau, 1964), suggesting that adaptive, culturally sensitive communication fosters trust, reciprocity, and coordinated effort, which cumulatively enhance organizational performance. This is consistent with Suh et al. (2022), who found that communication adaptability directly improved service quality and customer loyalty in luxury hotels.

The significant influence of GL on OE (β = 0.71) supports **Transformational Leadership Theory** (Bass, 1990), demonstrating that leaders who can integrate cultural sensitivity with strategic vision positively shape organizational outcomes. This extends prior research (Verma & Prasad, 2024) by confirming that global leadership effectiveness in hospitality hinges on the ability to unify diverse teams toward common service and business goals.

4.8.2. Contribution to Theory

By integrating these three theoretical perspectives, this study advances **multilevel leadership research** (Kozlowski & Klein, 2000) by showing how micro-level competencies (CQ, CE, GL) exert cross-level effects on macro-level

organizational outcomes. The findings empirically substantiate the idea that service organizations in emerging economies can achieve sustained performance gains by investing in culturally adaptive leadership competencies.

4.8.3. Practical Implications

The implications of these findings are directly tied to the study's original objectives: to identify which leader competencies most strongly drive organizational effectiveness in multicultural hospitality environments.

1. **Invest in CQ Development**-Hospitality organizations should embed CQ training into leadership development programs, focusing on metacognitive, cognitive, motivational, and behavioral dimensions. As the results show, CQ is a foundational driver of both CE and GL, making it a strategic lever for performance improvement.
2. **Enhance Communication Effectiveness through Cultural Adaptation**-Training should emphasize active listening, adaptive message framing, and feedback mechanisms tailored to culturally diverse audiences. These skills amplify leadership effectiveness and directly contribute to service quality and organizational outcomes.
3. **Strengthen Global Leadership Capacities**-Structured leadership pathways that integrate cross-cultural management, emotional intelligence, and strategic thinking will prepare managers to lead across geographic and cultural boundaries, aligning with both customer expectations and organizational strategy.

Align Leadership Competencies with Organizational Strategy-CQ, CE, and GL should not be treated as isolated skills but as interdependent capabilities embedded in recruitment, training, and performance evaluation systems, ensuring coherence between individual competencies and organizational goals.

5. CONCLUSION

This study has provided valuable insights into the interconnectedness of **Cultural Intelligence (CQ)**, **Communication Effectiveness (CE)**, **Global Leadership (GL)**, and **Organizational Effectiveness (OE)**, particularly within the Indian hospitality sector. By employing robust quantitative methods such as structural equation modeling (SEM), the study confirmed the hypothesized relationships among these constructs and highlighted their significance in fostering effective leadership and improving organizational outcomes in multicultural and globalized contexts.

In this conclusion, we synthesize the key findings, discuss their theoretical and practical implications, and suggest avenues for future research.

5.1. Summary of Key Findings

The study confirmed that **Cultural Intelligence (CQ)** is a foundational competency that influences both **Communication Effectiveness** and **Global Leadership**, which, in turn, significantly enhances **Organizational Effectiveness**. Specifically, the findings indicate that:

- **Cultural Intelligence** directly influences **Communication Effectiveness** (β = 0.84) and **Global Leadership** (β = 0.72), showing that managers with higher levels of CQ are better equipped to communicate across cultural boundaries and lead multicultural teams effectively.

- **Communication Effectiveness** positively impacts both **Global Leadership** (β = 0.64) and **Organizational Effectiveness** (β = 0.78). The ability to communicate clearly, empathetically, and with cultural sensitivity plays a pivotal role in enhancing leadership capacity and organizational performance.

- **Global Leadership** directly influences **Organizational Effectiveness** (β = 0.71), suggesting that leaders with strong cultural awareness and adaptability can drive organizational success by aligning diverse teams toward common objectives and responding to global challenges effectively.

These findings underscore the complex interplay between cultural intelligence, communication skills, and leadership and how they collectively contribute to achieving organizational goals in diverse and dynamic environments.

5.2. Theoretical Implications

This study contributes to the existing body of knowledge in several ways:

- **Cultural Intelligence as a Critical Competency**: The study reinforces the importance of CQ as a key predictor of both leadership effectiveness and communication competence. This expands on the work of Ang et al. (2007) and highlights CQ as not just a personal attribute, but a strategic asset for organizations operating in multicultural contexts.

- **Communication as a Mediator**: The finding that **Communication Effectiveness** mediates the relationship between CQ and organizational outcomes provides new insights into how cultural intelligence translates into practical organizational benefits. It suggests that CQ does not operate in isolation but rather enhances communication processes that are vital for organizational performance.

Global Leadership's Role: By establishing that **Global Leadership** is a significant driver of **Organizational Effectiveness**, this study adds to the growing body of research emphasizing the unique leadership competencies required for managing diverse teams across geographic and cultural boundaries. The study confirms that global leaders who can navigate cultural diversity with empathy and strategic foresight are better positioned to drive organizational success.

5.3. Practical Implication

The practical implications of this study are particularly relevant for organizations in the hospitality sector, where managing cultural diversity is critical for maintaining service quality and competitive advantage. The findings suggest several key strategies for organizations to improve their performance and leadership capabilities:

- **Investing in Cultural Intelligence Training**: The study underscores the importance of enhancing CQ across the workforce, particularly for leaders

and managers. Training programs that focus on developing metacognitive, cognitive, motivational, and behavioral CQ can significantly improve employees' ability to navigate cross-cultural interactions. This, in turn, can lead to improved team collaboration, customer satisfaction, and employee engagement.

- **Enhancing Communication Competencies**: Organizations should prioritize communication training that focuses not only on language proficiency but also on understanding non-verbal cues, active listening, and culturally adaptive communication strategies. Such initiatives can improve both internal communication among employees and external communication with customers, thereby enhancing organizational effectiveness.

- **Leadership Development Programs**: Given the positive relationship between **Global Leadership** and **Organizational Effectiveness**, organizations should focus on cultivating global leadership competencies. These programs should emphasize cultural sensitivity, emotional intelligence, adaptability, and the ability to lead diverse teams toward common goals. Leadership development initiatives should be designed to equip leaders with the skills necessary to manage in a globalized and multicultural environment.

By implementing these strategies, organizations in the hospitality sector can build a more culturally competent workforce, enhance their leadership capacity, and ultimately improve their ability to achieve organizational goals in a dynamic and competitive global market.

5.4. Limitations of the Study

While this study provides valuable insights, several limitations must be acknowledged:

1. **Cross-sectional Design**: The study's cross-sectional nature limits the ability to draw conclusions about causality over time. Longitudinal studies would provide a more comprehensive understanding of how CQ, communication, and leadership competencies develop and influence organizational effectiveness over time.

2. **Sample Specificity**: The study focused exclusively on managers in the Indian hospitality sector, which may limit the generalizability of the findings to other industries or regions. Future research could examine how these relationships play out in different cultural contexts, such as in the technology or healthcare sectors, or across other emerging economies.

Self-reported Data: The study relied on self-reported data, which may be subject to biases such as social desirability or common method variance. Future research could incorporate multi-source data, such as supervisor ratings or objective performance measures, to enhance the validity of the findings.

5.5. Future Research Directions

Future research can expand on this study in several ways:

- **Longitudinal Studies**: Long-term studies could examine how CQ and communication effectiveness evolve over time and how their impact on organizational outcomes changes with experience and cultural exposure.

- **Comparative Studies**: Research comparing the role of CQ, communication, and leadership across different industries and cultural contexts would enhance the generalizability of these findings. For instance, a comparison between hospitality and technology firms could reveal whether the relationships among these constructs differ across sectors with varying degrees of cultural diversity.

Exploring Other Mediators: While communication effectiveness was identified as a mediator in this study, future research could explore additional mediators, such as trust, conflict resolution strategies, or innovation, that may further explain the relationship between CQ, leadership, and organizational effectiveness.

5.6. Final Remarks

In conclusion, this study reinforces the significance of **Cultural Intelligence**, **Communication Effectiveness**, and **Global Leadership** as critical factors for improving **Organizational Effectiveness** in the Indian hospitality sector. The findings emphasize the need for organizations to invest in developing these competencies, particularly as the global business environment becomes increasingly multicultural. By focusing on cultural intelligence and communication skills, organizations can foster effective global leadership, improve organizational performance, and ensure long-term success in a globalized world.

The results provide a roadmap for organizations seeking to enhance their leadership capabilities and create a more inclusive and high-performing workforce that is better equipped to meet the challenges of an interconnected world.

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