



Relevance Of Cultural Intelligence And Communication Effectiveness For Global Leadership Preparedness: Study Of Indian Managers

Shoma Mukherjia^a, Neera Jain^b, Radha R. Sharmab^b

^a Delhi School of Business, New Delhi

^b Management Development Institute, Gurugram

ABSTRACT

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Business environment world over has undergone major transformation in the last fifty years. Global organisations, where operations are not restricted to home or host country, need business leaders with a global mindset and multicultural effectiveness. This paper examines and confirms the relevance on leadership preparedness of global managers of two important constructs - cultural intelligence and communication effectiveness in the context of anxiety and uncertainty management. Adding to extant literature, the study empirically confirms the suitability of three assessment instruments. It establishes the importance of cultural adaptability and AUM theory for assessing leadership potential of managers working in multicultural environments with culturally diverse teams.

1. Introduction

The objective of this study is to understand the relevance of cultural intelligence and communication effectiveness for leadership preparedness in a multicultural environment. The present century is seeing accelerated transformation of businesses into truly global entities. As organizations operate in a boundary-less world, multicultural teams are the order of the day. Business leaders, who are able to understand, accept, and effectively respond to cultural differences are therefore in great demand.

The effects of globalisation have also impacted business houses in India in the twenty years that have gone by since the liberalisation of the economy. Not only are Indian origin CEOs heading some of the leading Fortune 500 companies of the world, born Indian companies too are widening their canvas, setting up operations away from home and employing a culturally diverse workforce. Global success in information technology has changed the world's perception of India, whose growth potential is widely acknowledged.

Although in the globalized world, a culturally diverse work environment is the norm rather than an exception, companies struggle with national, regional and local differences among their employees, shareholders and customers (Earley, Ang & Tan, 2006). Not only do people, who travel overseas on business, come into contact with new cultures; even those who remain in their own domestic environment often need to interact with people

from other cultures. Greater knowledge of cultural differences provides business leaders with behavioural flexibility and motivates them to engage with culturally different partners. There is need for "cultural intelligence" to deal with people with different worldviews (Peterson, 2004). Culture also has an important bearing on the way people communicate (Gudykunst, Ting-Toomey, & Chua, 1988). Global managers aspiring to assume team leadership positions need cultural sensitivity to avoid miscommunication and ensure business success. They need to understand aspects of other cultures to create a team, establish appropriate communication channels to foster understanding and increase organizational effectiveness (Thomas and Inkson, 2004). Communication effectiveness, which goes a long way in enabling global managers provide appropriate leadership to multicultural teams is also impacted by uncertainty and ambiguity. Gudykunst's (2005) Anxiety/Uncertainty Management Theory which focuses on cultural in-groups and strangers therefore warrants consideration for our study.

Cultural intelligence and its linkages with leadership (Earley & Ang, 2003) have been studied in developed countries. The phenomenon however has not been extensively studied in Indian firms operating in the global environment. Scholars have researched (Samovar, Richard, Porter & McDaniel, 2012; Kumar & Sethi, 2005) issues faced by Western managers conducting business with India. There is a dearth of studies on communication challenges faced by Indian managers working in

the multicultural environment. Review of literature indicates that culture impacts communication. There is however a dearth of studies examining the interaction of cultural intelligence and communication effectiveness of managers and the relevance of these constructs in preparing potential leaders for operating in the multicultural arena. Our study addresses this knowledge gap.

The method used is quantitative, conducted using questionnaires for assessing cultural intelligence, communication effectiveness and global leadership preparedness of managers working in multicultural environments. The sample has been drawn from the IT and IT related sectors, which pioneered India's globalization initiative.

2. Literature review

2.1 Cultural Intelligence: A Research-based, Interdisciplinary Meta-model

The concept of cultural intelligence (CQ) was first introduced by Earley and Ang in 2003. Culture, an integrated pattern of learned beliefs and behaviours shared by groups includes thoughts, styles of communicating, ways of interacting, views on roles and relationships, values, practices and customs. Moving ahead from the concept of social intelligence (Thorndike & Stein, 1937; Goleman & Boyzatis, 2008), emotional intelligence (Mayer & Salovey, 1995; Goleman, 2006) and practical intelligence (Sternberg, 2000), the research-based, interdisciplinary meta-model of CQ (Earley & Ang, 2003; Peterson, 2004; Thomas & Inkson, 2004; Van Dyne, Ang, Ng, Rockstuhl, Tan, & Koh, 2012) helps us understand why some managers adapt easily when placed in different cultures, while others struggle. Cultural dimensions identified by Hofstede (1980, 2001), Trompenaars and Hampden-Turner (1998) and House, Hanges, Javidan, Dorfman, and Gupta (2004) provided the basis for developing the CQ construct.

The CQ framework comprises four interactive fundamental components: metacognitive, cognitive, motivational, and behavioral (Earley et al. 2006). Metacognition signifies an ability to plan, monitor, revise, and adjust encroaching mental models (Nelson, 1996). Cognition indicates ability to make accurate interpretations of cultural interactions (Triandis, 1995). Motivation refers to one's self-motivation and commitment to adapt and adjust to a new cultural environment. Individuals with high behavioral CQ display situationally appropriate behavior through words, tones, gestures, and facial expressions (Hall, 1959; Gudykunst et al., 1988).

2.2 Communication Effectiveness and AUM Theory

Researchers classify communication behaviours as verbal, nonverbal and speech acts which are words and phrases used to convey specific messages (Lustig & Koester, 2012). Communication occurs even if verbal or nonverbal behaviour is unconscious when observed and assigned meaning. Theories explain how communication varies across cultures (Burgoon, 1995; Ting-Toomey, 1988) or takes place between people from different cultures (Gudykunst & Kim, 1997; Oetzel, 1995). Being dynamic, communication may either promote understanding or

build defences. When communicating across cultures, those with cognitive flexibility are able to observe the situation, understand perception of others and then make necessary adjustments to make the communication successful. Behavioural flexibility enables message construction in the other person's frame of reference. Metacognitive skills enables one determine the timing of interpersonal events, places for discussing topics, the physical distance separating speakers.

A unique aspect of intercultural interactions is uncertainty and ambiguity concerning the ground rules by which the interaction will occur, and the differing meaning of signals (Gudykunst & Nishida, 2001; Gudykunst, Nishida, & Chua, 1986; Gudykunst, Yang, & Nishida, 1985). Intercultural interactants engage with each other in a verbal language that is often not a native language for at least one, and sometimes both thereby creating intrinsic uncertainty in the meaning of the words. This uncertainty makes conflict and misunderstandings inevitable. During intercultural encounters, chances are high that when others' behaviours do not conform to our expectations, we interpret them as transgressions against our value system. People may become impatient with or intolerant of the ambiguity, leading to anger, frustration, or resentment. Even after uncertainty is reduced, conflict is inevitable because of the differences in the meaning of verbal and nonverbal behaviours across cultures, and the associated emotions and values inherent in the cultural system.

Gudykunst's (2005) Anxiety/Uncertainty Management Theory which focuses on cultural in-groups and strangers warrants consideration for our study. Communication, according to him is effective when the person interpreting the message attaches a meaning to the message that is relatively similar to what was intended by the person transmitting it. When a person lacks confidence on account of anxiety, it is difficult to remain motivated towards adaptive action. Gudykunst assumes that at least one person in an intercultural encounter is a stranger. Through a series of initial crises, strangers experience both anxiety and uncertainty as they are not sure how to behave and thus feel insecure. Uncertainty and anxiety (defined as the feeling of being uneasy, tense, worried or apprehensive about what might happen) are the twin threats which need to be managed to achieve effective communication.

2.3 Global Leadership Preparedness

Scholars emphasise the need for preparing leaders with global competencies (Alldredge & Nilan, 2000; Bartlett & Ghoshal, 1992; Conner, 2000; Gregersen, Morrison & Mendenhall, 2000; Ireland & Hitt 2005; Oddou, Mendenhall, & Ritchie, 2000; Sutari, 2002). Aspects covered are varied but consensus about their respective importance is lacking. Kets de Vries and Mead (1992) include envisioning, empowerment ability, network building, cognitive complexity, hardiness and cultural adaptability. Moran and Riesenberger (1994) suggest global mindset, change orientation, conflict management, understanding own values, demonstrating knowledge and respect for other countries. Srinivas (1995) includes curiosity and concern with context, acceptance of complexity and its contradictions, faith in

organizational processes and systems thinking. Brake (1997) lists 15 competencies under three categories - business acumen, relationship management and personal effectiveness. Conner includes business savvy as an important characteristic of a global leader. Rosen and Digh (2000) discuss literacy - personal, social and business. Boyacigiller, Beechler, Taylor, and Levy (2006) emphasise the importance of global mindset.

Most of the findings of these above named scholars are covered in the empirical study of Gregersen, Morrison and Black (1998) who posit that global leaders need a set of context-specific abilities for dealing with corporate cultures, industry dynamics and management practices of the country of origin. However there are four key characteristics (inquisitiveness, duality, personal character and business savvy) exhibited by global leaders irrespective of the context specific abilities. Inquisitiveness implies being open towards new experiences and learnings and willingness to communicate in diverse situations. Duality means understanding different viewpoints and having concern for people from different cultures. Personal character whereby the leader is able to conduct business in unfamiliar environments without giving up values and ethics is perhaps one of the most important aspects. Business savvy enables the leader to draw on critical knowledge areas, mobilize resources and leverage opportunities. Business managers operating in a globalized environment and dealing with multicultural teams when aspiring to leadership roles need to develop these competencies

2.4 Interaction of the Three Constructs

The challenge for global business leaders is to manage diverse teams and understand stakeholder demands across cultures. As resources (information, knowledge and expertise) have to be accessed globally, culturally intelligent business leaders are able to mitigate risks. Bartlett and Ghoshal (1992) believe that the three core roles are to serve as the strategist for the organization, be the architect of its worldwide asset and resource configuration, and coordinate transactions across national borders. Black, Morrison and Gregersen (2008) denote this as business savvy which is a combination of a) global business savvy (being able to perceive new market opportunities, arbitrage cost and quality differences across company affiliates, and maximize efficiencies by toning down redundancies) and b) organizational savvy (knowing the organization's strengths and weaknesses, being familiar with the company's subsidiaries and competitor's positions, and having awareness of key personnel in the firm).

Scholars have indicated that firms often focus on technical competence as a key selection criterion for international assignments, giving scant attention to the relational (Dowling & Schuler, 1990; Mendenhall & Oddou, 1985; Tung, 1981). Ronen (1989) described relational characteristics (tolerance for ambiguity, behavioural flexibility, non-judgmentalism, interpersonal skills, cultural empathy, and low ethnocentrism) and motivation (interest in overseas experience, interest in the specific host-country culture, and willingness to acquire new patterns of behaviour and attitudes) as among the important

predictors of success while working in multicultural environments. Earlier customers would keep multiple suppliers to keep alive the competitive and confrontational mindset. In the globalized world, customers, manufacturers, distributors and service providers realize that long term cooperation and trust are the order of the day.

A culturally intelligent communicator can analyze the audience in every situation and develop effective strategies to fulfill the firm's communication objectives. For instance, Marschan, Welch and Welch (1997) cited a case involving formal company communication in which one Spanish manager ignored the information received from headquarters in Finland because he could not read it and argued that such documents should be translated into Spanish. In another study, Monks (2006) cited the case of the Irish HR director of a French bank who admitted that as all documents and policies received in the office were written in French and not translated, staff in the subsidiary rarely paid them any attention.

Global business leaders work with multicultural teams. Team diversity can lead to better performance if adequate communication mechanisms are established (Larkey, 1996) and the knowledge and skills of diverse team members (Lagerstrom & Andersson, 2003) are leveraged. Better communication should lead to better team performance by enabling global team leaders to identify and overcome differences.

Communication is one of the most important skills which business leaders need to possess (Barrett, 2006) as good communication skills enable, foster and create the understanding and trust necessary to encourage followership. Clarity of expression is the hallmark of a leader. Leaders not only know what they want and why they want it. They are able to communicate what they want to others to gain co-operation and support (Bennis, 1989).

2.5 Research Gap and Hypotheses

Leadership research has focussed on how values, biases, characteristics and capabilities of top executives influence strategic decision choices and resultant performance of firms (Finklestein & Hambrick, 1996). However significant research is needed for determining the values or capabilities required to be effective as global leaders of multicultural firms.

Cultural Intelligence is a basis for comprehending and learning the cognitive, motivational, and behavioural components of effective intercultural adaptation (Bailey, 2004). Very few studies (Akhouri & Sharma, 2009; Arora & Rohmetra, 2010) on construct of cultural intelligence have been carried out in India. Also, there is a dearth of studies on cultural intelligence of Indian business leaders. While some leadership qualities may be universal, others may be culture specific. A number of researchers (Earley & Ang, 2003; Earley & Mosakowski, 2004; Janssens & Brett, 2006; Peterson, 2004; Thomas & Inkson, 2004; Triandis, 2006) have established that cultural intelligence can help leaders successfully deal with different national,

organizational, and professional cultures. This study investigates the role of cultural intelligence among Indian managers in team leadership role in the multicultural environment. Therefore we have the first hypothesis:

Hypothesis 1: *There is a significant positive relationship between Cultural Intelligence and Global Leadership Preparedness of Indian managers.*

Communication is one of the most important skills which business managers need to possess as it helps in creating understanding and trust necessary for business success (Barrett, 2006; Bowman, Jones, Peterson, Gronouski, & Mahoney, 1964). Business leaders must have clarity in their minds about what they want and should be able to communicate their vision to others to gain co-operation and support. Ability to communicate by effectively managing anxiety and uncertainty in the midst of cultural diversity enables global managers provide effective leadership to multicultural teams. Although scholars have developed Indian models on leadership (Chakraborty, 1995; Jain & Mukherji, 2009; Sinha, 1984), there are few significant studies linking communication effectiveness and leadership. Thus the second hypothesis states

Hypothesis 2: *There is a significant positive relationship between Communication Effectiveness and Global Leadership Preparedness of Indian managers.*

Globalization has created the need for business managers who are able to work successfully in multicultural environments. One of the greatest challenges facing organizations is identification of talented managers who are able to function across diverse cultures. Scholars have advocated international assignments as an important vehicle for developing global leadership skills (McCall & Hollenbeck, 2002; Osland, 2001). Travelling on business trips, working in cross cultural teams, going on expatriate assignments and managing foreign or regional offices are examples of how global managers gain experience dealing with different cultures (Dalton & Ernst, 2004). Ng, van Dyne and Ang (2009) question whether special efforts need to be made to ensure maximization of learning from such assignments. We hypothesize that managers who are based in overseas locations or having opportunities of interacting with culturally diverse teams have better cultural intelligence, communication effectiveness and global leadership preparedness.

Hypothesis 3a: *Cultural Intelligence of managers based outside India is higher than the Cultural Intelligence of managers based in India.*

Hypothesis 3b: *Communication Effectiveness of managers based outside India is higher than the Communication Effectiveness of managers based in India.*

Hypothesis 3c: *Global Leadership Preparedness of managers based outside India is higher than the Global Leadership Preparedness based in India.*

Hypothesis 4a: *Managers in India interacting with multicultural teams have higher Cultural Intelligence than those not interacting.*

Hypothesis 4b: *Managers in India interacting with multicultural teams have higher Communication Effectiveness than those not interacting.*

Hypothesis 4c: *Managers in India interacting with multicultural teams have higher Global Leadership Preparedness than those not interacting.*

3. Method

Although multiple factors may be responsible for creating impact, this study focuses on the independent variables cultural intelligence and communication effectiveness and strives to examine the nature of the relationship with global leadership preparedness of managers working in multicultural environments.

3.1 Sample

Data were collected from managers working in the IT and ITes industry located in the National Capital Region of Delhi (NCR), comprising Delhi and 22 districts in the surrounding states of Haryana, Rajasthan and Uttar Pradesh. Individuals working in the IT and ITes sectors often have the opportunity of working in multicultural teams. They are often based away from the home country while working on projects or work in teams which have members located across the globe. The Confederation of Indian Industry was approached for information on IT companies in the NCR. Parameters for shortlisting companies were as follows:

Table 1: Selection of Companies

	Dimension	Measure
1	Annual Revenue	Not less than INR 50 million
2	Number of Employees	Not less than 400
3	Operating lifespan.	Minimum 5 years
4	Number of Operating Locations outside India	Not less than 5

Requests were sent to Human Resource managers of 65 companies, selected at random from a list of 200 companies, explaining the purpose of the study and seeking access to employees who had experience of working in multicultural teams. Finally eight companies agreed to participate in the survey on condition of anonymity.

As our objective was to study managers of culturally diverse teams, stratified random sampling was followed and criteria while drawing the samples was:

1. Employees working in multicultural teams
2. Employees interacting with multicultural teams
3. Employees with minimum of 4 years work experience
4. Employees holding at least Project Manager positions

Criteria for multicultural exposure were:

- work experience in teams having members from other cultures
- work related interaction with colleagues from other cultures
- working on short term projects away from home country

Questionnaires were given to 550 managers who were assured complete anonymity of responses. Finally, 427 (78%) completed questionnaires were received. Of these, 406 (95%) were found acceptable for analysis.

3.2 Demographics

All 406 respondents had engineering degrees. 175(41%) were management degree holders. The sample comprised 313 (77%) male managers and 93 (23%) female managers. The sample age ranged from 24 years to 48 years with the M age = 28.56 years and SD = 7.43. About 70% of the sample fell in the below 35 bracket and 6% were in the above 45 bracket. 367(90%) managers were based in India and 39 (10%) were working outside the country. Of the 39 managers who were based away from the home country, 3 were female. There were 349 (86%) managers who had worked in culturally diverse teams and thus had multicultural exposure.

3.3 Measures

A standardized instrument- the Cultural Intelligence Scale (CQS), developed and tested by Van Dyne, Ang and Koh (2008) was used to measure the independent variable, CQ. The tried and tested CQS is a 20-item instrument derived from the four-factor model of the CQ constructs— Metacognition, Cognition, Motivation, and Behaviour. The second independent variable of Communication Effectiveness was measured by an instrument developed by the researchers and its validity confirmed through a Confirmatory Factor Analysis. The scale comprised four factors, namely, Self-concept (7 items), Reaction to strangers (7 items), Group interaction (6 items), and Mindfulness (4 items). An adapted version of The Global Leadership Scale (Black, Morrison & Gregersen, 2008) was used to measure the dependent variable, Global Leadership Preparedness. The scale comprised four factors, namely, Inquisitiveness (6 items), Duality (6 items), Business savvy (6 items), and Personal character (7 items). A reliability coefficient of .70 or higher is considered "acceptable" in most social science research situations (Cooper & Schindler, 2011; Creswell, 2005). The reliability of each of the scales was assessed through Cronbach's coefficients alpha.

Table 2: Reliability Analysis of the Scales

	Cronbach's Alpha	Items
Cultural Intelligence	.912	20
Communication Effectiveness	.888	24
Global Leadership Preparedness	.749	25

Validity of the scales was tested by a confirmatory factor analysis. Each construct was operationalized as the mean of its items.

Data Analysis

Analysis of the collected data was done by using two statistical programmes. SPSS 18 was used for Descriptive Analysis, Correlation Analysis, t-Test and Regression Analysis. AMOS 20 was used for Confirmatory Factor Analysis and Path Analysis.

The statistical model included a measurement model. The path model based on the hypotheses was subjected to fit tests. Apart from the descriptive statistics and Pearson's correlation, a variety of statistics including the normed Chi-square (χ^2/df), goodness-of-fit, centrality parameters, and normed-fit-indices as provided by AMOS 4.0 (Arbuckle and Wothke, 1999) were utilized to investigate the relationships.

4. Results

4.1 Descriptive Statistics and Correlations

The means, standard deviations and inter-correlations among the variables reported in Table 3 show high internal reliabilities, with coefficient alphas ranging from 0.75 to 0.92. The pattern of correlations was consistent with the hypothesized relationships.

Table 3: Mean, Standard Deviation, Inter-correlations and Reliability Indices (n=406)

	Mean	SD	Cultural Intelligence	Communication Effectiveness	Global Leadership Preparedness
Age	28.56	7.43	--	--	--
Sex	1.23	0.42	--	--	--
Cultural Intelligence	4.04	.448	(.912)	--	--
Communication Effectiveness	4.08	.306	0.758*	(.888)	--
Global Leadership Preparedness	3.95	.290	0.716*	0.719*	(.749)

* $p \leq .01$

Values in parenthesis represent Cronbach's Alpha

The results shown in Table 3 demonstrate a significant positive relationship ($r = .716$, $p \leq .05$) between the independent variable Cultural Intelligence and the dependent variable Global Leadership Preparedness, thereby confirming Hypothesis 1.

The results in Table 3 also demonstrate that a significant positive relationship ($r = .719$, $p \leq .05$) exists between Communication Effectiveness and Global Leadership Preparedness, thereby confirming Hypothesis 2.

4.2 Mean Comparisons

In this section, the sample was divided into various categories and the differences among these were investigated. The sample was segregated as per workplace location (i.e. managers based in the home country and managers based outside the home country) and tested for differences across three study constructs. The results are presented in Tables 4 and 5.

Table 4: Results related to Workplace Location
(Hypotheses 3a to 3c)

	Managers located in India (N=367)	Managers located outside India (N=39)
Cultural Intelligence(CQ)	4.06 (t = .989)	3.89 (t = .908)
Communication Effectiveness (CE)	4.10 (t= -.472*)	3.90 (t= -.578*)
Global Leadership Preparedness(GLP)	3.97 (t= .494*)	3.78 (t= .499*)

(* P<.05)

Mean score of CQ indicate a score of 4.06 for managers based in India and 3.89 for managers based outside India. Mean score of CE indicate a score of 4.10 for managers based in India and 3.90 for managers based outside India. Mean score of GLP indicate a score of 3.97 for managers based in India and 3.78 for managers based outside India.

In this set of results, the Levene's test showed value of $p < .05$. This indicates rejection of the assumption of equal variances. As per the results above, the t-test failed to reveal a statistically significant difference between the managers based in the home country and managers based outside the home country with regard to cultural intelligence. With regard to communication effectiveness and global leadership preparedness, the differences were significant. With respect to the 'test statistic', Hypothesis 3a was not supported but Hypotheses 3b and 3c were supported.

Table 5: Results related to Multicultural Interaction
(Hypotheses 4a to 4c)

	Managers interacting with multicultural teams (N= 349)	Managers not interacting with multicultural teams (N=57)
Cultural Intelligence	4.09 (t = 5.342*)	3.76 (t = 3.822*)
Communication Effectiveness	4.11 (t= 5.281*)	3.89 (t= 3.519*)
Global Leadership Preparedness	3.97 (t= 4.367*)	3.80 (t= 3.398 *)

(* P<.05)

Finally, the study sought to identify significant differences in the profiles of managers with multicultural exposure and managers without any kind of multicultural exposure with respect to the

three constructs. The sample was segregated as per multicultural interaction (i.e. managers interacting with multicultural teams and managers not interacting with multicultural teams) and tested for differences across three study constructs. The results are presented in Table 5.

The results in Table 5 show mean values of managers interacting with multicultural teams and those not interacting with multicultural teams. Mean score of CQ indicate a score of 4.09 for managers interacting with multicultural teams and 3.76 for those not interacting with multicultural teams. Mean score of CE indicate a score of 4.11 for managers interacting with multicultural teams and 3.89 for those not interacting with multicultural teams. Mean score of GLP indicate a score of 3.97 for managers interacting with multicultural teams and 3.80 for those not interacting with multicultural teams.

In this set of results, the Levene's test showed value of $p < .05$. This indicates rejection of the assumption of equal variances. As per the results above, the t test revealed a statistically significant difference between the managers interacting with multicultural teams and managers not interacting with multicultural teams with regard to all three construct. With respect to the 'test statistic', Hypotheses 4a to 4c were supported.

4.3 Regression Analysis

Results obtained from a regression analysis of the data showed positive impact of both cultural intelligence and communication effectiveness on global leadership preparedness. Both the variables were seen as being significant.

Table 6: Regression Analysis

Dependent variable	Independent variables	Beta	Standard Error	Sig.
Global Leadership Preparedness	Cultural Intelligence	0.415	.027	.000
	Communication Effectiveness	0.451	.039	.000
R Square	0.657			
Adjusted R Square	0.659			

* $p \leq .01$

Regression analysis was carried out taking age and gender. Results showed that these two variables were not significant and did not have any impact on the dependent variable.

Table 7: Regression Analysis with age and gender

Dependent variable	Independent variables	Beta	Standard Error	Sig.
Global Leadership Preparedness	Cultural Intelligence	0.415	.027	.000
	Communication Effectiveness	0.451	.039	.000
	Age	0.031	.001	.319
	Gender	- 0.005	.019	.875
R Square	0.657			
Adjusted R Square	0.659			

4.4 Confirmatory Factor Analysis: Check for Discriminant Validity of the Constructs

In order to examine whether the three constructs CQ, CE and GLP are distinct, a confirmatory factor analysis was conducted using AMOS version 20, (Arbuckle & Wothke, 1999) to compare the fit of two nested models: a one-factor model incorporating the three constructs and a three-factor model distinguishing cultural intelligence, communication effectiveness and global leadership preparedness.

Table 8: Single vs. Three factor Model

	CMIN/df	GFI	AGFI	RMSEA	NFI	RFI	IFI	TLI
Model A Single factor model	7.981	.831	.765	.131	.855	.829	.871	.847
Model B Three factor model	2.450	.963	.926	.060	.969	.948	.981	.968

The selection of indices for the study was based on the recommendations of Hu and Bentler (1995) and Hair, Tatham, and Anderson (2006). Following the suggestion of McIntosh (2007), the first overall test of model fit selected was the chi-square test. As the chi-square test is extremely sensitive to sample size (Bentler 1990), the chi-square normalized by degrees of freedom (χ^2/df) was used. An acceptable ratio for χ^2/df value should be less than 3.0 (Hair et al. 2006). According to Hair et al. (2006), the recommended fit values for GFI and AGFI are .0.90. Likewise, while an RMSEA of 0.0 indicates perfect fit, values that are less than 0.06 are considered as good fits. The range of the normed chi-square is generally accepted as 1 - 3. The chi-square for the three factor model was 2.45 compared to 7.98 of the single factor model.

Compared to the one-factor model, the three-factor model also had better indices with the GFI (.96 vs. .83), the AGFI (.93 vs. .77), and the RMSEA (.06 vs. .13) showing better fit for the latter. Therefore the three constructs i.e. CQ, CE and GLP were adjudged as distinct.

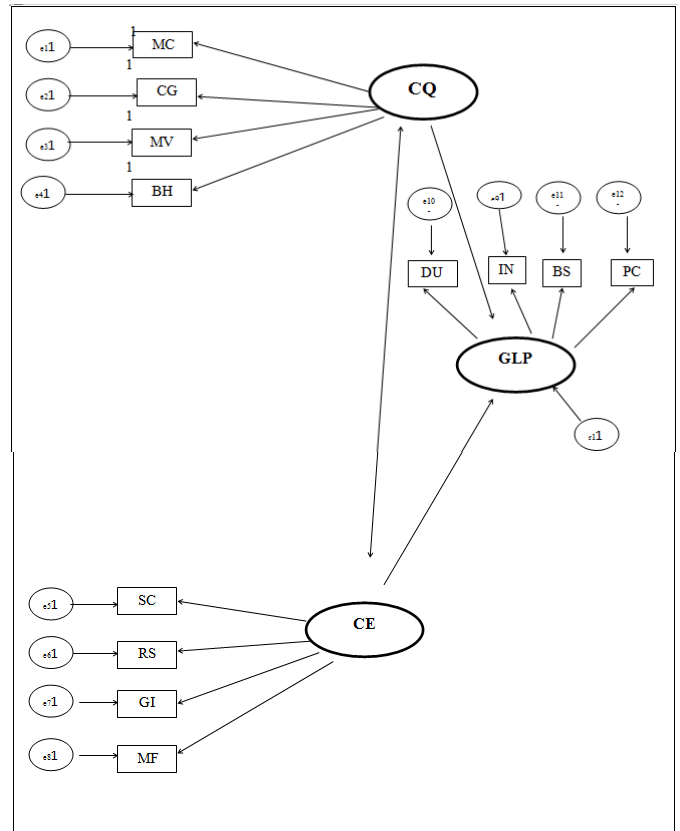


Fig 1: Default Model

Table 9 : Legend relating to the model shown in Fig 1

CQ	Cultural Intelligence	CE	Communication Effectiveness	GLP	Global Leadership Preparedness
MC	Metacognition	SC	Self-Concept	DU	Duality
CG	Cognition	RS	Reaction to Strangers	IN	Inquisitiveness
MV	Motivation	GI	Group Interaction	BS	Business Savvy
BH	Behaviour	MF	Mindfulness	PC	Personal Character

5. Discussion

5.1 Cultural Intelligence and Global Leadership Preparedness

The study reveals a strong positive relationship between overall CQ and GLP. Bartlett and Ghoshal (1992) had posited that effectiveness in multicultural leadership roles necessitates a multicultural perspective and balancing local and global demands. The findings (0.716, Table 3) at 99% level of confidence support the earlier conclusion drawn by Rockstuhl, Seiler, Ang, van Dyne and Annen (2011) and Deng and Gibson (2008) that CQ is a critical leadership competency for those with cross border responsibilities. Researchers further support this view by emphasizing that culture influences leadership styles (House et al., 2004), managerial behaviours (Shin & Koh, 2007) and the nature of relationships (Yeung & Ready, 1995). The concept of leadership varies across cultures. Some prefer leaders who are assertive, highly visible and easily take charge, others prefer those who are less visible, humble and remain behind the scene (Aycan, 2008; Tsui, Nifadkar, & Ou, 2007). Managers, working with culturally diverse team members having differing expectations about hierarchy, power, and interpersonal relations,

are challenged with understanding the influence of cultural dynamics on effective leadership. Strategies and structures, appropriate in one cultural setting may not succeed in another (Dickson, Den Hartog & Mitchelson, 2003).

Studies have established the positive relationship between CQ and leadership effectiveness (Alon & Higgins, 2005; Ng, et al. 2009; Van Dyne et al., 2008; Van Dyne, Ang & Livermore, 2010) in countries other than India. A study of 152 managers in Qom, Iran, established a positive and meaningful relationship between CQ and transformational leadership (Ismail, Reza & Mahdi, 2011). Managers with high CQ exhibit 'openness' which positively impacts their leadership capability (Verghese & D'Netto, 2011). Managing relations between the multicultural organization and cultural environment is a matter of accurate perception, diagnosis and appropriate adaptation (Miroshnik, 2002; Deng & Gibson 2009).

Our study reinforces these findings and further establishes that high CQ results in high GLP of managers working with multicultural teams. An interesting observation is the high 'mean' value of responses to the CQ questionnaire. This may be because India, often referred to as a sub-continent, is an amalgam of several cultures. Each state has its unique language and dialects, food habits, social and religious rituals. Indians grow up in diversity right from childhood and CQ should come to them naturally. However, examination of the individual factors of CQ, reveal a phenomenon which needs further investigation. Although most respondents score high on cognition and motivation, scores tend to be lower on behavioural aspects, thereby indicating that the managers are hesitant to move out of their comfort zones. Though they appreciate the cultural diversity and understand that there is a need for taking appropriate action to deal with it, they do not quickly take the necessary steps to overcome the challenges. This indicates a need for appropriate training interventions.

5.2 *Communication Effectiveness and Global Leadership Preparedness*

The study also establishes a strong positive relationship (0.719, Table 3) at 99% level of confidence, between CE and GLP. The literature on CE as a key for leadership success amongst Indian managers is limited. We did not find empirical work examining the relation between CE and GLP of Indian managers. For the purpose of our study, communication effectiveness was defined, as the ability of managers to have meaningful verbal and nonverbal goal oriented interactions in culturally diverse environments so as to overcome anxiety and uncertainty. Communication effectiveness is hampered when there is a gap between reality and perception. This gap becomes acute in culturally diverse situations. Managers working in culturally diverse environments need understanding of cultural cues for adapting communication behaviour to avoid undesired situations. Lutz (2008) posits that leaders must communicate using the style effective for shaping the reality of the organization. This is possible when they are attentive towards the situation of the other

persons in the organization and are able to grasp their perspectives.

The finding of the current study is in accordance with the recognition given to the strong relationship between effective communication and effective management since the 1950s (Reinsch & Shelby, 1997; Weiss, 1999). Leadership communication is a combination of skills, knowledge and attitude which fosters understanding and trust. Globalization, resulting in expansion of businesses on a worldwide scale has made it necessary for managers to go beyond traditional communication skills and become competent intercultural communicators. Ignoring cultural sensitivity may lead to blunders in international operations (Ricks, 1983; Chin, Gu & Tubbs, 2001). For instance, efficiency oriented American managers are focused on closing deals in the shortest possible time and with iron clad contracts. Indian or Chinese managers whom they deal with are completely put off by their unwillingness to invest time for long term relationship building.

Gudykunst and Nishida (2001) examined the effect of anxiety and uncertainty on perceived effectiveness of communication in two relationships (strangers and close friends) and two cultures (United States and Japan). They concluded that a moderate, negative relationship existed between anxiety and attributional confidence (the inverse of uncertainty) across relationships and cultures. Drawing on the AUM theory, the scale thus developed by the researchers measured communication effectiveness against four dimensions – self-concept, reaction to strangers, group interaction and mindfulness. An effective leader first and foremost has knowledge of one's self. Self-knowledge brings clarity of understanding, perception and focus. This clarity combined with the right attitude is what sets apart the individual and draws follower commitment. The right balance of skills, knowledge and attitude enables the leader to see the big picture, seize the right opportunities at appropriate moments and influence action leading to desired change.

Analysis of data showed that Indian managers also consider the factor of Self- Concept (mean = 4.12 in a scale of 5, range 2.71 to 4.86) to be an important factor of the construct of communication effectiveness. The comparative mean score of Group Interaction was 3.73 (range 2.43 to 4.33) which is supported by the earlier findings of Pearson and Chatterjee (1999) who concluded that expectations and priorities of Indian managers have undergone a change. Though India is believed to be a collectivist society, the globalized business environment is changing the mind set of Indian managers who exhibit nuances of individualism and are trying to shake out of the age old traditions and "who you know" syndrome. Gudykunst's description of mindfulness is similar to the conceptualization of "conscious competence" in Howell and Fleischman (1982)'s model which states that in order to be more effective one needs to continually think about one's communication and work at it. Though the mean score of "mindfulness" was 4.17 the range was 1.7 to 4.2. The item read as:

“When I work with people from other cultures, I am cautious about my nonverbal expressions” showed the greatest variability in responses.

5.3 Impact of Multicultural Exposure and Workplace Location

Global managers have been described as having open minds, respecting diversity, having global brains cued to quick understanding of business trends, government policies and competitive strategies (Brake, Walker & Walker, 1995), having collaborative negotiation style and cultural flexibility (Black & Gregersen, 2000). Black and Gregersen assert however that an essential quality of global managers is inquisitiveness. A person who is intelligent but without inquisitiveness, which implies being adventurous, curious and open minded about enjoying new cultural experiences, will take much longer to adapt to the new environment.

Managers who are based outside the home country are exposed to an alien culture for longer durations. They have to perforce learn to adapt, else their learning curve becomes longer. The result of no significant difference in CQ of managers residing outside India as compared to those based in the home country is contrary to conclusions drawn from review of literature. However with respect to CE and GLP, the differences between managers residing outside India and those based at home were significant. With respect to the ‘test statistic’, Hypothesis 3a was not supported but Hypotheses 3b and 3c were supported.

One explanation of why managers based outside did not exhibit higher CQ than managers based in India could be that growing up in diversity from childhood, one adjusts to differences in languages, food habits, social customs and attitudes to life in as one goes through school, college and finally the workplace. Communication competence and leadership preparedness however, increases as one goes through diverse experiences and interacts with more and more people. Thus those living outside the country score higher on these two dimensions.

Another set of hypotheses was that managers in India interacting with multicultural teams have higher CQ, CE and GLP than those not interacting. The difference was significant in the case of managers interacting with multicultural teams as compared to those not interacting, with respect to all three constructs. Interactions with people of different cultures have a positive effect on cognition, motivation and behaviour aspects. One may conclude that this also helps managers in improving communication behaviour and this in turn results in better leadership preparedness.

6. Conclusion

6.1 Contribution

We conclude that both CQ and CE are important for leadership preparedness in cross cultural settings. This study establishes the importance of the concept of CQ in the Indian IT sector. Van Dyne, Ang and Nielsen (2007) commented that the CQ scale has been developed, validated, and cross-validated in both Asian (Singapore) and Western (United States) cultural settings using

expatriates and global professionals from diverse cultural backgrounds. They emphasized the need for validation of the scale in other cultural settings, especially India. This study fulfils this need as data obtained from 406 Indian managers working in IT and ITeS companies confirms reliability and validity of the scale in Indian settings. Further the conclusion of Koh, Joseph and Ang (2009) that CQ is a critical individual capability for IT professionals working in global collaborative IT environments is reconfirmed as this study draws its sample from IT and on ITeS enabled firms in India.

An interesting addition to theoretical literature is obtaining of lower scores on the behavioural aspect. While cognition of cultural diversity comes naturally, Indians prefer to hold on to the traditional way of doing things and maintain the exiting ritual and customs. This could be a possible reason which needs further investigation. One could also examine how cultural intelligence is impacted when a person moves to another part of the country for studies and thereafter work as there is immense cultural diversity in India from region to region.

The study provides empirical evidence of the relationship between anxiety and uncertainty in developing global managers. Though intercultural communication as a competency has been studied extensively, not much work has been reported on Gudykunst’s Anxiety and Uncertainty Management theory. After globalization, the management of anxiety and uncertainty has become extremely important in culturally diverse contexts. When global managers are confident about understanding the attitudes, feelings, values and behaviours of others, their communication becomes more effective. Coming to the crux of intercultural communication, the AUM theory puts it succinctly - communicators have to understand strangers and the meanings they attach to messages in order to communicate effectively. Being mindful, which involves making conscious choices, helps communicators understand strangers’ cultures, their ethnicities and other group memberships, as well as how these influence strangers’ communication so that they can negotiate meanings with strangers.

Although scholars have addressed the concept of global leadership, there is need for extensive research in the Indian context. This study addresses this issue and adds to the theoretical literature on global leadership in the Indian context. Scholars (Black, Morrison, & Gregersen, 2008; Boyacigiller et al., 2006; Osland, 2008) are turning their attention to dimensions of leadership such as inquisitiveness, global mindset, ambiguity, complexity. Leadership issues have been addressed by Indian scholars and Western scholars writing on India. Further research on these new dimensions will add to our understanding and this is what the study attempts. It adds to theoretical literature on global leadership by establishing that in the post globalization business environment, it is essential to consider aspects such as the global mindset, dealing with ambiguity and duality and having a thirst for the unknown for being successful as a leader.

Selection for global assignments has been predominantly based upon technical competence and job knowledge. The study provides useful information which can be used to design intercultural training programmes for companies seeking to enhance their operations in the multicultural environments. The information gleaned from the study can be used to increase teamwork and promote better interpersonal relationships for organizational success.

6.2 Future Research

Future researchers may like to expand the scope of the current study by including research participants from different industry segments such as automobile, pharmaceuticals, banking. This would enable greater generalizations of the results. Also, an extended longitudinal study may be conducted to check if CQ, CE and GLP increase with greater international exposure

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