Emotional Intelligence: An Empirical Study of Indian Managers in IT Industry

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Abstract

The present study is an assessment of gender difference in Emotional Intelligence (EI) among Indian managers in IT sector. The study was conducted in major IT hubs of India that include NCR (Noida, Delhi and Gurgaon), Pune & Bangaluru. The Emotional Intelligence (EI) of participants was evaluated through a structured questionnaire based on emotional intelligence competencies. The findings in this research study support the existence of a relationship between gender and emotional intelligence at leadership position.

Keywords: Emotional intelligence, IT industry, Self-awareness, Self-regulation, Motivation, Empathy, Social Skills.

Introduction

The importance of Emotional Intelligence (EI) in the workplace is quite legion. Prior research confirms the association between emotional intelligence and workrelated variables (Weisinger, 1998). It is believed emotional intelligence may explain differences in the quality of intrapersonal and interpersonal relationships, contribute to job performance, management effectiveness (Mayer, Caruso & Salovey 2000; Mayer, Salovey & Caruso 2002) and predict success (Goleman 1995, 1998a, 1998b, 2000). Further it is found that EI, compared to Intelligence Quotient (IQ), has a more significant effect on individual performance (Dulewicz & Higgs, 1999). The above mention studies has been conducted in various sectors of business as retailing, services, hospitality, tourism, manufacturing, medical profession etc (e.g. Barling et al., 2000; Palmer et al., 2002; Gardner and Stough, 2002; Sivanathan and Fekken, 2002). However importance, role and applications of emotional intelligence in IT industry are still unexplored. The present research study is an attempt to assess the gender difference at leadership position in Indian IT industry, where technical skills are still considered as paramount for any leader to be successful.

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Emotional Intelligence

"Emotional intelligence" (EI) refers to emotional awareness and emotional management skills, which provide the ability to balance emotion and a reason to maximize productivity and happiness. Emotional intelligence has its roots in the concept of "social intelligence" that was first identified by Thorndike in 1920 however the term EI was coined by Psychologists Peter Salovey and John Mayer in year 1990. But it was Daniel Goleman (1995) who popularized the concept with his book "Emotional Intelligence Why It Can Matter More Than IQ (1995) and as a result of that both practicing managers and academia have started believing in its importance in the organization. Denial Goleman (1995) describes EI as "abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope." Goleman (1998a,1998b) further identified the five elements as the components of emotional intelligence: Self-awareness, Selfregulation, Motivation, Empathy and Social Skills, he grouped them as Emotional competencies. These five essential components of emotional intelligence and the competencies based on these abilities are crucial for success in personal, social and professional life. A brief description of them is given in Table 1.

Table-1: Goleman's (1998) Emotional Intelligence Competencies

EI Competencies	Definition	Corresponding Attributes		
Self-awareness	The ability to recognize and understand one's moods, emotions and drives as well as the effect on others	Self-confidence; realistic; self-assessment; self-depreciating sense of humor		
Self-regulation	The ability to control and redirect impulses and moods. The propensity to suspend judgment - to think before acting	Trustworthiness and integrity; comfort with ambiguity; openness to change		
Motivation	A passion to work for reasons that go beyond money or status. A propensity to pursue goals with energy and enthusiasm.	Strong drive to achieve optimism; even in the face of failure; organizational commitment.		
Empathy	Ability in managing meaningful relationships and building networks; Skills in treating people according to their emotional reactions.	Expertise in building and retaining talent; cross-cultural sensitivity; service to clients and customers.		
Social skill	Proficiency in managing relationships and building networks. An ability to find common ground and support	Effectiveness in leading change; persuasiveness; expertise in building and leading teams		

Above mentioned EI Competencies have been considered for calculation of EI score in present study.

Gender Difference

Gender difference has always been considered important in organizational behavior researches. Since the popularization of emotional intelligence in business arena over the past decades, researchers have been studying about gender differences in terms of emotional intelligence as women are joining the workforce more day by day and are contributing to the economy of the country so the differentiating aspects of the male and female workers have gained considerable attention from researchers worldwide. There are many points of views given by the researchers regarding gender differences as the male and female are physically and mentally different from one another so they have the differences relating to work and managing emotions. It has been affirmed that women tend to be more emotionally expressive than men, that they understand emotions better and that they have a greater ability as regards certain interpersonal skills for example strong relationship have been found between the emotional intelligence and the performance of female employees (Higgs 2004), though female gender, and boundary role responsibilities were not found to be statistically significant (Dimitrides 2007), it is also reported that female employees recognize other people's emotions better, are more perceptive and have greater empathy (Hargie et al 1995; Lafferty 2004; Tapia and Marsh 2006; Trobst et al 1994), another research says that women are generally more aware of their emotions, show more empathy and are more adept interpersonally though both males and females generally have equivalent abilities to develop their emotional intelligence (Fatt 2002). On other hand no significant difference was reported in the male and female leaders with respect to the social and emotional intelligence leadership roles (Hopkins & Bilimoria 2007).

Leadership, Emotional Intelligence and Gender Difference

The literature on emotional intelligence is replete with studies on association between leadership and EI. So much research has been done to establish a relationship between leadership and EI. An increasing number of researchers have argued that emotional intelligence is a core variable that affects the performance of leaders (Goleman 1998a, 2000; Wong and Law 2002).

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Further a considerable body of research concludes that there are differences between male and female leaders as the female leaders demonstrate emotional and social intelligence to a greater degree than male leaders. Female leaders are also shown better progress than their counterparts on measures of emotional and social intelligence (Boyatizs and Sala 2004; Schutte et al 1998). Further certain qualities like the decision making power, the courage, the view of power in rational terms, encouraging the conflict resolution and the development of team work oriented environment etc.; have been identified as the female leadership qualities (Helgeson 1990; Rosener 1990). In another research finding, Rutherford has reported that women leaders have better people skills than men (Rutherford 2001). On other hand certain researches explain that there are no significant differences in the behavior of the male and female leaders (Maher 1997; Powell 1990; Vilkinas and Cartan 1993). Hence in the light of literature reviewed above following hypothesis (null) was set to be explored.

H_a: There is no difference in Emotional Intelligence of Male and Female Managers in Indian IT industry.

Methodology

Present section explains research methodology adopted for present study.

Sample

A sample of total 145 respondents was utilized. Sample consists of employees working as managers in different IT companies in NCR (Delhi, Noida and Gurgaon), Pune and Bangaluru. A structured questionnaire was administered to the respondents. Out of the total sample of 145 respondents, 86 were male while 59 were female managers. Further Given below are the details of respondents on the basis of region they belong.

Table- 2: Distribution of Respondents (Region Wise)

Region	Gender	Number of Respondents	Total
NCR (North)	Male	35	58
	Female	23	
PUNE (West)	Male	26	42
	Female	16	
BANGALURU (South)	Male	25	45
	Female	20	
		Total	145

Sampling Technique

NCR, Pune and Bangaluru in India are considered as favorite destinations among IT companies. Together they are host to more than 100 fortune 500 companies. There are several Special Economic Zones (SEZ) commonly known as IT parks in these three major IT hubs. Data was collected from these three cities in present study. Total 9 companies were covered for present study. On the basis of area sampling, first IT firms were divided into areas, based on geographical location of IT companies and based upon random sampling IT companies were selected for present study. Data from Individual respondent was collected through convenience sampling in each area.

Data Collection Instrument

Data for present study was collected by a well-defined structured questionnaire. The Questionnaire was drafted on the basis of Daniel Goleman's (1995, 1998) parameters of Emotional Intelligence. The main items included were Self-Awareness, Self-Regulation, Self-Motivation, Empathy and Social Skills. The questionnaire had two sections, section one aimed to cover demographic variables, while section two aimed to check emotional intelligence level of respondent. Section two of questionnaire had 40 items related to emotional intelligence, rated at five point Likert scale, having 1 = strongly disagree to 5 = strongly agree and 3= undecided. The higher score represented higher emotional intelligence.

Table-3: Reliability Statistics for Scales

Name of Subscale	Reliability Statistics (Cronbach's Alpha)	No. of Items
Self –Awareness	0.851	8
Self-Regulation	0.740	8
Self-Motivation	0.729	8
Empathy	0.745	8
Social Skills	0.848	8
Overall Questionnaire	0.801	40

Reliability of the Questionnaire

The reliability of scales was assessed using Cronbach's Alpha. It may be mentioned that its value varies from 0 to 1 but, satisfactory value is required to be more than 0.6 for the scale to be reliable (Cronbach, Lee J. and Richard J. 2004). In the present study the Cronbach's alpha reliability coefficient has been checked of overall questionnaire as well as of subscales too as given in table3.

The questionnaire had an overall score of Cronbach's Alpha (0.801) and its 5 sub-scales range from 0.729 to 0.851. These results indicate that the instrument has a high internal consistency and is reliable for further use.

Data Analysis and Results

Data collected was coded, transformed, entered and checked for data entry errors prior to analysis. Data analysis was completed with the help of SPSS. Independent sample t-test was applied to examine whether the difference in EI scores of female and male respondents in the current study was statistically significant or not. The test was applied on overall EI Score as well on each EI parameters too. Table 4 shows the results of independent samples t-test regarding influence of gender on EI and its parameters.

Table-4: Results Independent Sample t-test

Parameter	Male(N=86)		Female(N= 59)				
	Mean	Standard Deviation	Mean	Standard Deviation	Mean Difference	t-value	p-value
Self- Awareness	24.2000	4.7266	28.5217	2.7776	-4.32174	3.952	.000**
Self- Regulation	25.7714	3.3875	28.0435	3.6366	-2.27205	2.427	.018*
Self- Motivation	26.1143	4.5488	28.4783	2.6435	-2.36398	2.251	.028*
Empathy	24.3429	4.4321	26.5217	3.0431	-2.17888	2.058	.044*
Social Skills	26.1143	4.1071	28.7391	2.5622	-2.62484	2.731	.008**
Total EI Score	130.23	11.7400	138.57	12.1910	-8.33665	2.606	.012*

^{**} Significant at 0.01 Level

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^{*} Significant at 0.05 Level

Region Standard Mean N Mean t-value p-value Category **Deviation Difference** North (NCR) 25 131.47 14.1936 6.75 .002** Male 3.113 Female 20 124.72 11.3317 West (Pune) Male 26 130.39 -1.05 0.441 .660 12.9285 Female 16 131.44 13.5489 South Male 35 .023* 145.70 6.8303 4.57 2.315 (Bangaluru) 23 Female 141.13 14.7824

Table-5: Results Independent Sample t-test (Region-wise Comparison)

Observations from table 4 reveal that not only in overall score of EI but in all parameters significant differences existed, female respondents scored higher than their male counterparts. The maximum difference was found in self-awareness parameter (4.32174) while minimum was in the parameter of empathy (1.503) while in overall EI score the difference is 8.33665 favoring female respondents. These findings taken together indicate that female respondents, on an average, were more emotionally intelligent-capable.

Further on utilizing independent samples t-test, it is clear from results that the significance value (p-value) is < 0.050 for all the parameters, they range from .000 to .044 and for total EI Score it is .012 these all value are less than set criteria of being statistically significant i.e. for being significant p value should be <.05. However for self-awareness it is 0.000 while for empathy it is .044 which is close to set criteria. Thus the results of Independent sample t-test revealed a statistically reliable difference between the mean EI scores of overall Male and Female respondents not only in total EI score (t = 2.606, p = .012, $\acute{a} = .05$) but in each parameter too (refer table 4), These t-test results support the rejection of null hypothesis.

Further region wise comparison was done in order to find out if there exist any differences in the mean EI score of male and female managers in the data set of NCR, Pune and Bangaluru. Results are given in table 5.

Findings show that there is a difference in the mean EI scores of the respondents from NCR and Bangaluru (6.75 and 4.57 respectively) favoring female respondents. However in the data set of Pune, male respondents scored higher than their counterpart, the difference is 1.05 favoring male respondents. Also the results of t-test are mixed in nature as they show statistically reliable difference in EI score of male and female respondents in the data set of NCR and Bangaluru (p value is .002 and .023 respectively) while results show no difference in the data set of Pune (as p value is .660). The same is clear from Table 5 also as in data set of Pune, male scored higher than female respondents though the difference was marginal (1.05). However findings t-test of overall respondents and total score of EI encourage the rejection of null hypothesis. Hence in the light of above findings null hypothesis is rejected.

Discussion and Conclusion

The purpose of current research was to examine gender differences in emotional intelligence (EI) as well as in

Hypothesis Test Summary(H₀)

Null Hypothesis	Test	Significance	Decision
H _o : There is no difference in Emotional Intelligence of Male and Female managers in Indian IT industry.	Independent sample t-test	.012 (for overall EI score)	Reject the null hypothesis.

^{**} Significant at 0.01 Level

^{*} Significant at 0.05 Level

EI competencies and the findings of study say that there is a difference between the male and female managers with respect to EI in Indian IT organizations. These findings support earlier studies conducted by Sutarso (1999), Wing and Love (2001) and Srivastava, K. B. and Bharamanaikar, S.R. (2004). They all revealed that women have higher level of emotional intelligence than men. These results are also in line with the work of Hopkins (2004) who concluded that women leaders demonstrate a broad range of emotional competencies in comparison to male leaders and with Rutherford who reported that women leaders have better people skills than men (Rutherford 2001), in present study too female managers have scored higher on social skills in comparison to their counterparts. Further Mandell and Pherwani (2003) affirmed the gender differences between males and females in emotional intelligence

score (using ECI). One reason of such findings could be that women react with stronger emotions than men under similar circumstances (Bradley, Codispoti, Sabatinelli, & Lang, 2001; Fujita, Diener, & Sandvik, 1991) and they recognize more emotions in comparison to their counterpart (Grossman & Wood, 1993). It may also be argued that women are more interested than men are in emotional relationship, problems & issues, and share those interests with other women. Subsequently they develop skills and knowledge related to emotional life. The present study fills a gap in existing body of knowledge as role and application of EI has not yet been explored in Indian IT industry. Its findings reveal importance of EI for IT managers however there is a difference in terms of gender. It suggests organizations must adopt EI as part of their training & development policy to bridge this gap.

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