



## THE INFLUENCE OF DEMOGRAPHIC VARIABLES ON EMPLOYEE EMOTIONAL INTELLIGENCE (EEI) – A STUDY OF IT & ITES FROM INDIA

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### Abstract

The intent of this present study is to explore the determinants that are associated with the Employee Emotional Intelligence (EEI) and to highlight the degree to which the emotional intelligence of the employees was influenced by the demographic variables (i.e., gender, age, marital status, and education level). This study was performed using a structured questionnaire, which consisted of different scales that measure "Emotional Intelligence" of the employees. This research was primarily carried out to present the results of an exploratory study conducted on 400 employees working for IT & ITES sectors in central provinces of India and the samples for the study were drawn on basis of area-cum-purposive sampling technique. The findings of this research study clearly revealed that the employees have the ability to sense their emotions and effectively manage them in the workplace. This study also disclosed a high degree of correlation existed between demographic variables and EI variables. The survey results of this study also confirmed that the emotional intelligence level of employees was significantly influenced by the demographic variables.

**Keywords:** Employee Emotional Intelligence (EEI), Demographic Variables, Self-Awareness, Self-Control, Empathy, and Self-Motivation.

### INTRODUCTION

#### Emergence of EI

Emotional Intelligence (EI) sometimes plays a subtle but important role in effective and productive workplace behaviors. EI has become a buzzword in the domain of organizational behaviour since the publication of book titled "Emotional Intelligence" by the bestseller Dr. Daniel Goleman in October, 1995 (Goleman, 1995). Although the construct of emotional intelligence is not new, its application in the workplace, designed to increase individual performance and organizational productivity, has begun at a rather frenzied pace during the past decade.

The precursors of these efforts extend back to the post Second World War era with extensive surveys conducted by the United States Office of Personnel Management and with the pioneering work of David McClelland at Harvard University that focused on the importance of emotionally and socially intelligent behaviour among managers. Despite the heightened level of interest in this 'new' idea, scholars have actually been studying this construct for the greater part of the twentieth century, and its historical roots can be traced back to the nineteenth century (Darwin, 1965).

#### Theoretical View on EI

In the literature of scientific psychology, the concept of EI was coined by Salovey and Mayer, in 1990, and popularized by Goleman (1995), with his best-seller "Emotional Intelligence". Since then, the field has been developed greatly and become a central focus for the research. Theoretically, emotional intelligence refers to an array of such skills as self-control, persistence, self-motivation and sensitivity to the feelings of self and others. The concept of emotional intelligence was defined and explained by different scholars in the form of models & approaches consisting of a set of emotional skills. Over the years, several researchers have provided definitions of EI (e.g., Bar-On, 1997; Goleman, 1995). The most widespread in the academic world is given by Salovey and Mayer (1990).

In 1990 they first defined EI as a type of social and personal intelligence involving "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions". In 1997, they refined this definition by including four interrelated dimensions: perception, appraisal, and expression of emotions; emotion facilitation of thinking; understanding and analyzing emotional information, employing emotional knowledge; and regulation of emotions (Mayer & Salovey, 1997). As Cartwright and Pappas (2008) noticed, they remain committed to the idea that "EI lies at the intersection between mental processing of emotional information and its integration with cognitive information".

#### Models of EI

During the past decade in particular, significant research activity has focused on addressing the question of how best to define and measure EI. Various approaches have been proposed, and a number of different conceptualizations of this construct have



appeared, creating some degree of confusion regarding the best way to define, measure and apply emotional intelligence. To help clarify this situation, the Encyclopedia of Applied Psychology (Spielberger, 2004) suggests that there are currently three major EI models:

- a) The Bar-On Model (1997b) which describes this construct as an array of interrelated emotional and social competencies, skills and facilitators that impact intelligent behavior, measured by self-report (Bar-On, 1997a) as well as multi-rater or what is also referred to as 360-degree assessment (Bar-On & Handley, 2003a, 2003b);
- b) The Goleman Model (1998) which views it as an assortment of competencies and skills that contribute specifically to managerial performance, measured by multi-rater assessment (Boyatzis, Goleman & Hay Group, 2001); and
- c) The Mayer-Salovey Model (1997) which defines emotional intelligence as the ability to perceive, understand, manage and use emotions to facilitate thinking, measured by an ability-based measure (Mayer, Salovey & Caruso, 2002).

### Measurement of Intelligence

The study and measurement of intelligence has its roots in the work of such psychometric pioneers as Binet, Thorndike, and Wechsler, among others (Fracher, 1985). Intelligence can be viewed as representing, primarily, the capacity to carry out abstract thought, as well as the general ability to learn and adapt to the environment (Sternberg & Detterman, 1986; Terman, 1921; Wechsler, 1997). This ability is often said to be represented by a common general factor or 'g' (Carroll, 1993; Detterman, 1983; Spearman, 1927). Different types of intelligence are often distinguished according to the kinds of information on which they operate (Carroll, 1993; Horn & Cattell, 1966; Wechsler, 1997). For example, verbal-propositional intelligence concerns understanding vocabulary, sentences, and extended textual passages. There exists, too, a perceptual-organizational intelligence that involves the capacity to see patterns, to recognize missing parts of pictures, and to put puzzle pieces together (Wechsler, 1997), as well as a spatial intelligence (Shea, Lubinski, & Benbow, 2001).

### REVIEW OF LITERATURE

During a couple of years, emotional intelligence has become a major topic of interest in the circle of business as well as in the lay public (Bar-On, 2006). The term Emotional Intelligence (EI) refers to the mental processes involved in the recognition, use, understanding, and management of one's own and others' emotional states to solve problems and regulate the behaviours (Mayer & Salovey, 1997). Researchers analyzed the relationships between EI and different demographic variables (Mayer & Salovey, 1997). A relevant amount of research suggests that EI leads to better social relations and mental and physical well-being (Mayer, Roberts, & Barsade, 2008), and predicts job satisfaction and job performance (O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011). Nevertheless, despite the increasing interest on EI as a key factor for career success, to date little research has analyzed the relationship between EI and individual differences in entrepreneurship (Ahmetoglu, Leutner, & Chamorro-Premuzic, 2011; Zampetakis, Beldekos, & Moustakis, 2009).

In this context, the aim of the present study is to explore the determinants that are associated with the EEI and to analyze the influence of demographic variables (i.e., gender, age, marital status, and education level) on the EI of the employees.

### Approaches to EI

In the current psychological literature, different approaches to the construct can be found, the specific-ability approach, the integrative approach, and the mixed model, which are somehow compelling and complementary (Fernandez-Berrocá & Extremera, 2006).

The specific-ability approach focused on particular skills and capabilities important for EI (Mayer *et al.*, 2008). The principal abilities identified by the authors are: emotional perception and identification; the use of emotional information in thinking, reasoning about emotions, in particular the appraisal, classification, categorization of emotions and language abilities to communicate these emotions; last but not least, the emotion management in self and in others, through which one is able to engage, prolong or detach from an emotional state, monitor and reflect on feelings, and reframe the perception of certain situations (Cartwright & Pappas, 2008; Mayer, *et al.*, 2008).

The specific-abilities identified by the authors reflect the four branch model developed by Mayer and Salovey (Mayer & Salovey, 1997; Salovey & Mayer, 1990). It is an integrative approach, as they join each area to have an overall EI. Each area is viewed as developed from early childhood onward (Mayer *et al.*, 2008). Moreover, these four branches are hierarchically organized: perception of emotion is at the basic level, and emotion management is at the highest and most complex level, so the regulation of one's and other's emotion is built on the basis of the competencies of the three other branches (Fernandez-Berrocá & Extremera, 2006).

Another approach to EI is the Mixed-Model, so called because it targets mixed qualities. It has been proposed by Bar-On (1997), who defined EI as an “array of non-cognitive capabilities, competencies, and skills that influence one’s ability to succeed in coping with environmental demands and pressures”. Cartwright and Pappas (2008) noticed that this model, similarly to Goleman’s, included five broad categories: intrapersonal emotion skills, interpersonal emotion skills, adaptability, stress management, and general mood.

### **EI Variables**

Emotional intelligence is somewhat unusual in psychology, as the majority of writers and researchers are in agreement as to its definition, at least at the broadest level. Daniel Goleman (1996, 1998) has probably influenced the definition of emotional intelligence more than any other writer, due to the popularity of his books on the subject, though he draws heavily on the landmark work of Salovey and Mayer who previously defined emotional intelligence as:

*“the ability to monitor one’s own and other’s emotions, to discriminate among them, and touse the information to guide one’s thinking and actions”* (1990, p189).

Three distinct aspects of emotional intelligence follow from Salovey and Mayer’s definition:

- a) The ability to accurately appraise emotions in the self and others, through both verbal and nonverbal channels;
- b) The ability to regulate or control emotion in the self and others;
- c) The ability to use emotion to regulate and direct thought.

Emotional intelligence involves both the individual and others; it is the ability to understand your own emotions and those of people around you. Emotions also need to be managed effectively, not by shutting them off but by appreciating their origins and potential effects. A further theme involves how different emotional states can enhance activities such as problem-solving, influencing others and leadership by being motivational, adding depth and authenticity to interactions. Goleman (1998, p27-8) brings many of these ideas together in his five emotional competencies:

- a) Self-awareness – knowing one’s internal states, resources and intuitions;
- b) Self-control – managing one’s internal states, impulses and resources;
- c) Empathy – awareness of others’ feelings, needs and concerns;
- d) Self-motivation – emotional tendencies that guide or facilitate reaching goals;

### **Demographic Profiles & EI**

Studies on emotional intelligence in relationship with demographic factors like age, gender, education, marital status, income and experience are gaining importance in present scenario. A wide number of studies were intended to find out the relationship between demographic profile and emotional intelligence of an employee. However, the findings of these studies don’t reach to similar conclusions but, have reported significant relationships between demographic profile and emotional intelligence of an individual. According to Salovey and Mayer, (1990) emotional intelligence of individual develops with increase in age and experience. Researchers report that emotional maturity of an individual is positively related to physiological maturity.

Goleman (1998) opined that emotional intelligence is not innate rather it can be learned, developed and increased with age and life experience. Mayer *et al.*, (2000) proved emotional intelligence as ability rather than a personality trait through a series of studies revealing emotional intelligence increases with age and experience. Wong and Law (2002) found that, age is positively correlated with emotional intelligence. Akras and Porter (2003) opined that as the age of individual increases, emotional intelligence also develops higher as compared to lower age. Kafetsios (2004) found that people with higher age scored high in emotional intelligence. Van Rooy, Alonso and Viswesvaran (2005) observed that emotional intelligence score increases with age.

### **Outcome of EI**

Emotional intelligence have often been associated with important life outcomes, such as better psychological well-being (Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007), high-quality social relationships (Lopes *et al.*, 2004), and increased career success. Indeed, results of previous studies showed that EI predicts work performance (O’Boyle *et al.*, 2011), job satisfaction, work commitment, and job involvement (Carmeli, 2003). Lopes, Grewal, Kadis, Gall, & Salovey (2006) investigated the relation between emotional intelligence and positive workplace outcomes. They found that the overall EI was significantly related to several indicators of work performance, to ratings of interpersonal facilitation, to affect, and to attitudes. In line with these findings, a previous longitudinal study (Snarey & Vaillant, 1985) found that work performance was influenced more by individuals’ abilities to cope and manage emotions, handle stress and frustration, and get along with



other people, than by IQ. Accordingly, it is possible to infer that EI is an important predictor of significant outcomes across different samples in a number of real-world domains.

### **Workplace EI**

In the ever more competitive world of today's workforce, there is increasing focus on effective practices for staff recruitment and hiring, for training and promotion from within, and for retention of outstanding performers. The importance of conducting these practices effectively is underscored by the growing costs related to sophisticated recruitment techniques, not to mention the substantial cost of promoting someone with inadequate skills (Langley, 2000). A considerable amount of literature advocates for EI as a key ingredient on which human resource professionals and organizations must focus. Research indicates a correlation between EI and top performers and performance climates in the workplace. According to such research, EI is supported as a vital element in excellent job performance profiles, in employee behavior and organizational practices leading to an outstanding climate for service delivery, and in employee concern for quality and ability to deal with workplace conflict.

Goleman's (1998) analysis of performance profiles from various positions in 121 companies around the world revealed that EI abilities rank as more than twice as crucial for excellence as technical and cognitive abilities. In their tools used to measure performance competencies, worldwide professionals deemed critical excellence skills to be 23 percent based on intellect and technical expertise, and 67 percent clearly centered on EI capacities. Research also links EI with customer satisfaction, quality assurance, and problem solving ability. Organizational policies and procedures that reward employee behavior based on EI and treat employees as internal customers result in a climate for services regarded as excellent by customers (Bardzil and Slaski, 2003). Further, a study of 222 participants resulted in positive correlations between the EI competencies of self-regulation and empathy and manager's concern for product and service quality; and between the self-awareness and self-regulation competencies and effective problem-solving skills during subordinate conflict (Rahim and Minors, 2003).

### **STATEMENT OF THE PROBLEM**

The emotional lives of the employees have been a prominent area of study over a couple of years. Emotional intelligence is the ability to understand and manage one's own feelings and emotions and the feelings and emotions of others (Bennis, 1969). Though its roots can be traced back over a century, the organisations today recognized emotional intelligence as a key element in developing a productive workforce in the workplace. From the previous studies, organisations have learned that emotions serve a biological purpose at the workplace. There are social, mental, and physical consequences to the ability of the employees as and when they deal with their emotions in the workplace. Emotions of the employees are the way their body, mind and soul can react either favourably or adversely to the productivity of the workplace. The previous studies revealed that people with a high level of EI are more successful, healthier, happier, and enjoy better relationships with others. It has paved the way for the researchers to explore the determinants that are associated with the EI of the employees and highlight the influence of the demographic variables on the emotional intelligence of the employees.

### **RESEARCH QUESTIONS AND OBJECTIVES**

To explore the influence of demographic profiles on the emotional intelligence of IT & ITES employees in India, the researchers have developed three main research questions:

- a) What are the determinants that are associated with the emotional intelligence of the employees working for IT & ITES sectors in India?
- b) To what extent is the "Employee Emotional Intelligence (EEI)" influenced by the demographic variables?
- c) What is the significant relationship among major research variables of the study?

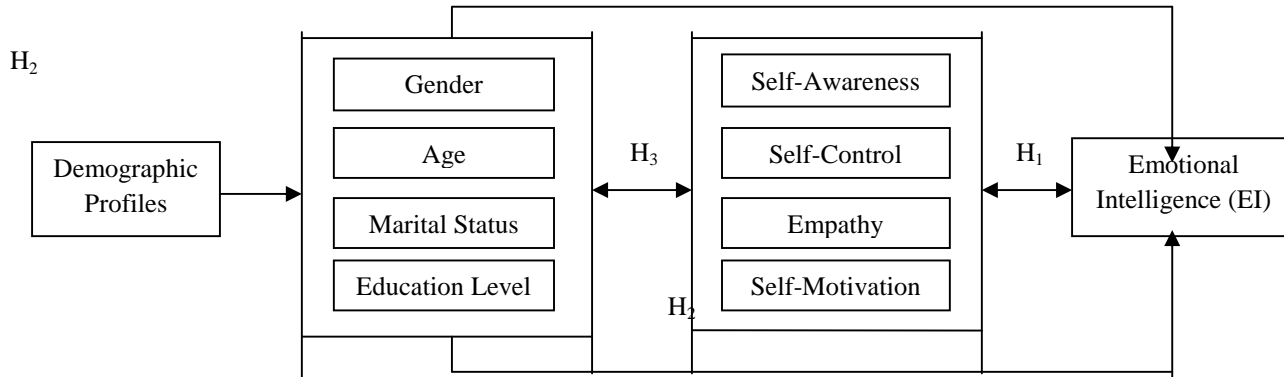
These were the overall questions to be answered by the present study and defined by the following three research objectives:

- a) To throw a light on the determinants that are associated with emotional intelligence of the employees working for IT & ITES sectors in India.
- b) To explore the influence of demographic variables on emotional intelligence of the employees working for IT & ITES sectors in India.
- c) To highlight the subtle correlation between demographic profiles of the IT & ITES employees and various facets of EI.

### **RESEARCH FRAMEWORK**

As stated earlier, the main objective of this research is to throw a light on the determinants that are associated with emotional intelligence of the IT & ITES employees in India. The other significant objective of this study is to explore the degree to which the emotional intelligence of IT & ITES employees was influenced by the demographic variables. In order to realize

these objectives, the research framework was developed by the researchers as shown in Figure 1. This research framework is a simple linear model of relationship between the independent and dependent variables. The demographic variables such as gender, age, marital status, and education level were considered as the independent variables. The emotional intelligence of the employees was considered to be the dependent variable of the research model. The arrows in Figure 1 represent the relationships or the proposed hypotheses to be tested in order to achieve the research objectives.



**Figure 1: Demographic Variables and Their Influence on Emotional Intelligence (EI) of the Employees**

### HYPOTHESES FORMULATION

In this study, Emotional Intelligence (EI) is a dependent variable and demographic variables (e.g., Gender, Age, Marital Status, and Education Level) are the independent variables. Thus, hypotheses of this study are designed to find out whether there is any significant relationship between the dependent variable and independent variables (or) either one of these independent variables or some of them may have the positive effect to influence the emotional intelligence of the employees.

- H<sub>1</sub>: The employees, who tend to manage their emotions, are likely to be oriented with various determinants of Emotional Intelligence (EI).
- H<sub>2</sub>: The level of emotional intelligence of the employees significantly varies with each of the demographic variables.
- H<sub>3</sub>: There is a significant relationship between demographic variables and EI variables.

### METHODOLOGY

The survey reported here was conducted among the employees of IT & ITES sectors at central provinces of India. The development of the research instrument was mainly based on EI scales developed by (Bar-On, 1997; Goleman, 1998 and Salovey & Mayer, 1990). However, and wherever possible, the researchers used validated measures that have been previously applied. The reliability and validity of the constructs and scale items used in the research instrument were tested through pilot survey and Cronbach's Alpha. All of the items/statements in the structured questionnaire were being asked using 5-point Likert scale. The data required for the study were purely primary data collected by the means of structured questionnaires mailed to 500 consumers. A sample size of 500 consumers was drawn on the basis of area-cum purposive sampling technique. This procedure resulted in 400 useful questionnaires or 80 % overall response rate. Thus, the sample size of the study was confined to 400 consumers only.

### DATA ANALYSIS, RESULTS & DISCUSSIONS

The data analysis, survey results and conclusive discussions of the study are summarized in the following section.

#### Sample Characteristics

From the survey, it was observed that majority of the respondents are male (53.3%) and 46.7% are female. With respect to age groups, the mean age of the sample respondents was found to be 26.40 years with a standard deviation of 2.34 years. In terms of marital status, majority of the sample respondents were married (56.7%) and 43.3% were single. With regard to education level, 36.7% were under graduates, 33.3% have completed their post-graduation, and 30.0% were diploma holders.

#### Factor Analysis of Employee EI

The crux of this research is to explore the determinants that are associated with “Employee Emotional Intelligence” and the degree to which the emotional intelligence of the IT & ITES employees is influenced by the demographic variables. The first hypothesis (H<sub>1</sub>) of this study clearly indicated that the employees, who tend to manage their emotions, are likely to be

oriented with various determinants of EI. For this purpose, an exploratory factor analysis was performed using SPSS Statistic 17.0.

Principal component analysis with varimax rotation was used to identify the underlying factors that determine the emotional intelligence of IT & ITES employees in India. The 22 statements, that best reflect the views of the employees on “Emotional Intelligence”, have been subjected to a multivariate data analysis technique (Factor Analysis) to reduce them to a few uncorrelated factors. First, all the 22 items were used for the factor analysis which extracted five factors. It was observed that some items were not loaded on any of the factors and some items were duplicating. Therefore, 4 items were deleted from the original list. Another factor analysis was done with 18 research items and four factors were obtained with eigenvalues greater than 1.

In order to test the suitability of the data for factor analysis, the correlation matrix was computed and examined. This revealed that there were enough correlations to go ahead with factor analysis. Anti-image correlations were computed. These showed that partial correlations were low, indicating that true factors existed in the data. Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA) for individual variables was studied from the diagonals of partial correlation matrix. This was found to be sufficiently high for all variables. Overall MSA was calculated to find if the sample was good enough for sampling. (Table 1).

Bartlett’s Test of Sphericity was calculated to find whether the number of correlations among the variables is statistically significant or not. Overall Kaiser-Meyer-Olkin MSA was found to be 0.841 and Bartlett’s Test of Sphericity was also significant (Chi-Square = 5547.863, df=153, significance = 0.000) indicating the suitability of data for factor analysis. Thus, all of these examinations revealed that data was fit for factor analysis. Principal Component Analysis was employed for extracting factors. The number of factors to be extracted was finalized on the basis of ‘Latent Root Criterion’ (Table 1).

**Table 1: Statistics for Construct Validity of Research Construct “Employee EI”**

Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy		0.841
Bartlett's Test of Sphericity	Approx. Chi-Square	5547.863
	df	153
	Sig.	0.000

**Table 2: Total Variance Explained for the Research Construct “Employee EI”**

Factors	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.753	26.404	26.404	4.753	26.404	26.404	4.452	24.736	24.736
2	3.643	20.239	46.643	3.643	20.239	46.643	3.596	19.976	44.712
3	3.062	17.013	63.655	3.062	17.013	63.655	3.208	17.825	62.536
4	2.492	13.846	77.501	2.492	13.846	77.501	2.694	14.965	77.501

**Extraction Method: Principal Component Analysis.**

All factor loadings greater than 0.50 (ignoring signs) have been considered for the analysis. Guidelines for identifying significant factor loadings based on sample size suggest considering factor loading of 0.30 for sample size 350 or more. (Hair *et.al.*, 1998, p.385). The results of Principal Component Analysis with Varimax Rotation for sample are shown in Table 4. It shows that four factors have been extracted which together accounted for 77.501% of the variance. The last column in the table shows communalities. Communality is the amount of variance an original variable shares with all other variables included in the analysis. Large communalities indicate that a large amount of variance in the variable has been accounted for by the factor solution.

Eigenvalues for the factors 1 to 4 are 4.753, 3.643, 3.062, and 2.492 as revealed by the anti-penultimate row of the Table 2. The percentage of the variance explained by individual factors is shown in the penultimate row of the table. It is observed that the percentage of variance explained by factors 1 to 4 is 26.404, 20.239, 17.013 and 13.846. The reliability of the research variables was assessed by the Cronbach’s reliability coefficient. The internal consistency of the measurement scales is tested using the Cronbach’s alpha for each research variable as well as for the complete construct. Internal

consistency analysis was used to assess the reliability and validity of the measurements. Cronbach's alpha was calculated to analyze the internal consistency of the construct and its reliability (Table 3).

**Table 3: Factor Loadings, Percentage of Variance Explained and Cronbach's Alpha for Extracted Factors for the Research Construct "Employee EI"**

Sl.No.	Factors	Statements	Factors Loadings	% of Variance Explained	Cronbach's Alpha
1	Self-Awareness	D1. I can usually figure out what emotion I am feeling at any given moment.	0.839	26.404	0.964
		D2. I am clear about my feelings and their effect on my performance.	0.849		
		D3. I realize immediately when I lose my temper at workplace.	0.799		
		D4. I always know when I'm being unreasonable.	0.836		
		D5. I can consciously alter my frame of mind or mood according to circumstances.	0.814		
		D6. I can recognize the situations that trigger my emotions.	0.712		
2	Self-Control	D7. I am good at managing my moods, and I seldom bring negative emotions to the workplace.	0.828	20.239	0.924
		D8. I can deal calmly, sensitively and proactively with the emotional displays of others.	0.806		
		D9. I express my views honestly and thoughtfully, without being pushy.	0.819		
		D10. I usually don't have any difficulty to regulate and control my emotions.	0.771		
		D11. I have ability to adjust my feelings and emotions according to the circumstances.	0.674		
3	Empathy	D12. I can sense, understand and respond to what other people feel at workplace.	0.828	17.013	0.843
		D13. I can easily engage in an interaction with another person's feelings.	0.822		
		D14. I often see things from another person's points of view.	0.847		
		D15. I try to understand what other people feel and think in workplace.	0.829		
4	Self-Motivation	D16. I can inspire and encourage others when I am taking to them.	0.809	13.846	0.873
		D17. I can always motivate myself even when I feel low.	0.850		
		D18. On the whole, I'm a highly motivated person.	0.852		

**Table 4: Principal Component Analysis with Varimax Rotation of the Research Construct "Employee EI"**

Dimensions	Factor 1	Factor 2	Factor 3	Factor 4	Communality
D-1	0.839				0.823
D-2	0.849				0.833
D-3	0.799				0.737
D-4	0.836				0.780
D-5	0.814				0.739
D-6	0.712				0.823
D-7		0.828			0.780
D-8		0.806			0.777

D-9		0.819			0.643
D-10		0.771			0.775
D-11		0.674			0.793
D-12			0.828		0.817
D-13			0.822		0.802
D-14			0.847		0.907
D-15			0.829		0.908
D-16				0.809	0.821
D-17				0.850	0.758
D-18				0.852	0.885
Eigenvalue	4.753	3.643	3.062	2.492	
% of Variance	26.404	20.239	17.013	13.846	
Cumulative %	26.404	46.643	63.655	77.501	
<b>Extraction Method: Principal Component Analysis. a. 4 Components Extracted</b>					

The recommended minimum Cronbach's alpha coefficient reliability of 0.70 (Nunnally, 1978) was used to test the reliability and validity of each factor. The results are presented in Table 3. The reliability test was satisfied as the Cronbach's  $\alpha$  was found to be more than 0.70 for all the research variables. The alpha values for the extracted factors such as Entrepreneurial Intent, Entrepreneurship Image, Entrepreneurial Personality, and Entrepreneurship Development are 0.964, 0.924, 0.843, and 0.873 respectively.

### Naming of Factors

The four extracted factors have been given appropriate names on the basis of variables represented in each case. The names of factors, the statement labels and factor loadings have been summarized in Table 3. The factors representing entrepreneurial propensity among engineering students have been discussed below.

#### Factor 1: Self-Awareness

This factor has emerged as the most important factor explaining 26.404% out of the total variance. This factor has an eigenvalue of 4.753 and Cronbach's Alpha of 0.964. In total, six statements load on to this factor. Highest loading is for the statement "I am clear about my feelings and their effect on my performance (0.849)". Followed by, "I can usually figure out what emotion I am feeling at any given moment (0.839)", "I always know when I'm being unreasonable (0.836)", "I can consciously alter my frame of mind or mood according to circumstances (0.814)", "I realize immediately when I lose my temper at workplace (0.799)", and "I can recognize the situations that trigger my emotions (0.712)" (Table 3).

#### Factor 2: Self-Control

The second factor explains 20.239% out of the total variance. This factor has an eigenvalue of 3.643 and Cronbach's Alpha of 0.924. It is made up of five correlated statements. Highest loading is for the statement "I am good at managing my moods, and I seldom bring negative emotions to the workplace (0.828)". Linked to this, "I express my views honestly and thoughtfully, without being pushy (0.819)", "I can deal calmly, sensitively and proactively with the emotional displays of others (0.806)", "I usually don't have any difficulty to regulate and control my emotions (0.771)", and "I have ability to adjust my feelings and emotions according to the circumstances (0.674)" (Table 3).

#### Factor 3: Empathy

The third factor explains 17.013% out of the total variance explained. This factor has an eigenvalue of 3.062 and Cronbach's Alpha of 0.843. It is made up of four correlated statements. The highest loading is for the statement "I often see things from another person's points of view (0.847)". Followed by, "I try to understand what other people feel and think in workplace (0.829)", "I can sense, understand and respond to what other people feel at workplace (0.828)", and "I can easily engage in an interaction with another person's feelings (0.822)" (Table 3).

#### Factor 4: Self-Motivation

Three highly correlated statements load on to this factor and explain 13.846% out of the total variance explained. This factor has an eigenvalue of 2.492 and Cronbach's Alpha of 0.873. Highest loading in this factor is for the statement "On the whole, I'm a highly motivated person (0.852)", Linked to this, "I can always motivate myself even when I feel low (0.850)", and "I can inspire and encourage others when I am taking to them (0.809)" (Table 3).



### One-Way ANOVA Test

ANOVA test was employed to examine whether there were any significant differences in the emotional intelligence of the employees with regard to the demographic variables. The second hypothesis ( $H_2$ ) of this study was specially designed to test whether the research variable “Employee Emotional Intelligence (EEI)” was influenced by the demographic variables. This hypothesis was tested with the help of One-Way ANOVA Test and the consequent results were presented in the Table 5. It could be noted from the Table 5 that the p-value for each of the demographic variables with respect to “EEI” was statistically significant and less than the significance level 0.01 ( $p < 0.01$ ). Therefore, there was enough evidence to accept the hypothesis ( $H_2$ ). It proves that there was a significant difference in the “EEI” with respect to each demographic variable of the study. In other words, the research variable “EEI” was highly influenced by the demographic variables.

**Table 5: One-Way ANOVA Test for Demographic Variables and Overall Employee EI**

Dependent Variable: Overall EEI						
1. Gender	Between Groups	11.873	1	11.873	10.546	0.001*
	Within Groups	448.104	398	1.126		
	Total	459.978	399			
2. Age	Between Groups	15.900	1	15.900	18.368	0.000*
	Within Groups	344.537	398	0.866		
	Total	360.437	399			
3. Marital Status	Between Groups	11.614	1	11.614	12.324	0.000*
	Within Groups	375.083	398	0.942		
	Total	386.698	399			
4. Education Level	Between Groups	18.457	1	18.457	15.327	0.000*
	Within Groups	479.293	398	1.204		
	Total	497.750	399			

\*Significance at 1% ( $p < 0.01$ ), df: Degree of Freedom, & F Statistics

### Pearson Correlation Analysis

The correlation matrix was performed to test the third hypothesis ( $H_3$ ) of the research study. The third hypothesis ( $H_3$ ) of this study was framed to explore whether there is a significant correlation among the research variables and between the research variables such as demographic variables (i.e., Gender, Age, Marital Status, and Education Level) and EI variables (i.e., Self-Awareness, Self-Control, Empathy, Self-Motivation, and Overall EI). The results obtained in this regard are summarized in the following Table 6.

**Table 6: Descriptive Statistics and Correlations among Research Variables**

Research Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1. Gender	1.47	0.51	1								
2. Age	26.53	2.34	.869*	1							
3. Marital Status	1.43	0.50	.934*	.865*	1						
4. Education Level	2.03	0.81	.845*	.890*	.826*	1					
5. Self-Awareness	3.82	0.94	.812*	.737*	.766*	.710*	1				
6. Self-Control	3.77	0.94	.890*	.806*	.853*	.749*	.806*	1			
7. Empathy	3.86	0.80	.761*	.637*	.789*	.548*	.634*	.760*	1		
8. Self-Motivation	3.73	1.01	.841*	.759*	.806*	.783*	.794*	.832*	.633*	1	
9. Overall EI	3.80	1.10	.820*	.642*	.730*	.683*	.715*	.789*	.641*	.802*	1

\*Correlation is significant at the 0.01 level (2-tailed).

Descriptive statistics and correlations among the research variables are shown in Table 6. The average age of the sample respondents was 26.40 years with a standard deviation of 2.34 years. The gender of the sample respondents was equally balanced and good mean and variation were found for the remaining characteristics of marital status and education level of the sample respondents. It was obvious from the results of the study presented in the Table 6 that the research variables of EI such as self-awareness, self-control, empathy, self-motivation and overall EI were highly significant as the mean scores of these variables were found to be more than the mid-value 3.0. It indicates that the employees have the ability to sense their emotions and effectively manage them in the workplace.

One of the objectives of this study was to replicate the significant correlations between the major study variables. The results of the correlation matrix clearly revealed significantly positive correlations among research variables and between research variables. Demographic variables (i.e., Gender, Age, Marital Status, and Education Level) have significant positive correlations with four EI constructs and overall EI. It was also clear from the Table 6 that the gender was highly positively correlated with the research variable “Self-Control” ( $r = 0.890$ ,  $P < 0.01$ ) and “Overall EI” ( $r = 0.820$ ,  $p < 0.01$ ), age was also highly positively correlated with the research variable “Self-Control” ( $r = 0.806$ ,  $P < 0.01$ ), marital status was also highly positively correlated with the research variable “Self-Control” ( $r = 0.853$ ,  $p < 0.01$ ), education level was highly positively correlated with the research variable “Self-Motivation” ( $r = 0.783$ ,  $p < 0.01$ ). The results of the correlation matrix with respect to EI variables clearly indicated that there were strong positive correlations between EI variables and among EI variables at 1% level of significance. These findings were absolutely consistent with the results of the factor analysis and ANOVA.

## CONCLUSION AND RESEARCH IMPLICATIONS

Emotional Intelligence (EI) is a dynamic force that serves as a key to achieve the productive workforce in the modern’s era of business. As EI is far more powerful than IQ, the employees in today’s era of workforce need to recognize their emotions, understand them, and handle them effectively in the workplace. Psychologists have identified emotional capabilities are the key to understand and manage one’s own feelings and emotions and the feelings and emotions of others. Emotional capabilities also help promote effective functioning and well-being among employees.

Employees differ in terms of the extent to which they know how they, themselves, are feeling, why they are feeling that way, and their ability to manage those feelings. Similarly, they differ in their ability to understand what other people are feeling and why, and their ability to influence or manage the feelings of others. However, it is plausible that EI may facilitate job performance in a number of ways and a low level of EI may actually impair employee performance. It has paved the way for the researchers to study about the determinants that are associated with EI of employees and to determine the extent to which the EI of the employees was influenced by the demographic profiles.

It was concluded from the results of this exploratory study that the employees have the ability to sense their emotions and effectively manage them in the workplace as the most of the dimensions of the research variables concerning “Emotional Intelligence” of the employees were observed to be significant from the factor analysis. It was also evident from the study that a high degree of correlation existed between demographic variables and EI variables. The survey results of this study also confirmed that the emotional intelligence level of employees was significantly influenced by the demographic variables.

## LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

Despite its strengths, this research study has a number of limitations which will restrict the generalization of the results. It is important to view this study in the context of its limitations. First, the research model developed in the study was an initial attempt in understanding the underlying factors that measure the ‘Employee Emotional Intelligence (EEI)’. Second, the outcome of the survey was confined to only 400 employees of IT & ITES sectors in few central provinces of India. Clearly, there is a need to replicate the results of the study to other parts of India and abroad as well. Another limitation worth mentioning here was that due to the paucity of resources and time, it has not been possible to explore the possibilities of changes in the perceptions of the sample respondents over time. Furthermore, more research needed to study how the perceived importance of these proposed research variables may differ across different organizations, provinces and countries. Finally, these findings cannot be generalized to the employees of other IT & ITES sectors located in other provinces of India, which were not included in this study.

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