

**A STUDY OF EMOTIONAL INTELLIGENCE (EI) OF EMPLOYEES  
WORKING IN THE PRIVATE SECTOR INSTITUTIONS OF HIGHER  
EDUCATION IN THE NCR & ITS IMPACT ON QUALITY OF THEIR  
WORK LIFE (QWL)**

**Submitted By**

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# **Chapter 1**

## **INTRODUCTION**

An organization is a social system, where people collectively contribute to growth and advancement. Often, it needs to harness the capabilities of its employees to face the onslaught of competition. It does so by undertaking several development programmes. Human resources are the most important factors that accord efficiency and effectiveness in an organization. Many organizations are now realizing the benefits of harnessing the emotional competencies of the employees in addition to their intellectual proficiencies. Employees spend a major part of their day in work. Thus, their experiences during work hours have been a concern for them as well as their managers. The concept of "quality of work-life" has been found to play a major role in ensuring dynamism, creativity, and innovation in organizations. The interplay of the work environment and a person's reactions to it determines the effectiveness of the work systems. It also ensures optimal utilization of the organization's resources, both human and material. This demonstrates the existence of a nexus between the individuals' capabilities and the organization's environment. Higher Educational Institutions are organizations of immense importance to the society. These are vibrant organizations that impart knowledge and inculcate many capabilities among youth. Thus, the present research is an attempt to understand the relationship between the HEI's employees' emotional capabilities and the quality of their work-life.

### **Quality of Work Life**

Quality of Work Life may be understood as the all-encompassing quality of an individual's working life. From the employee's point of view, a good QWL was one in which there were no adverse influences on personal life and wellbeing. Additionally, there would be either no or minimal inappropriate demands from work. It may be mentioned that QWL may be considered as a subsidiary of the comprehensive concept of quality of life, which included the diverse aspects of a person's life.

At this point, a brief back ground of the conditions of the work was mandated. Focus towards the human's involved in the production process increased in the early twentieth century. Tremendous momentum was accorded in this direction with the works of F W Taylor when he proposed the theory of Scientific Management. He was a key advocate of the "Efficiency Movement" which began across the industrialized nations of the world during the early twentieth century. Exponents of this movement proposed measures to enhance industrial efficiency and productivity. The Hawthorne Studies conducted in late 1920s and early 1930s were a milestone. They drew the attention towards the needs and aspirations of the humans at work. The workers or employees were earlier considered as a mere input factor among the other factors of production (viz. men, machines, methods, money and materials). The twentieth century witnessed the conceptualizations regarding work being referred to as scientific management, human relations, behavioural studies, socio-technical systems theory etc.

The phrase "quality of working life", (QWL) was introduced at the first International Conference on QWL at Arden House in 1972 (Davis & Cherns, 1975).

QWL may be understood as the overall climate of work and its impact on people as well as an organizational effectiveness. Cohen and Rosenthal (1980) believed that QWL was an "intentionally designed effort to bring about increased labor management cooperation to jointly solve the problem of improving organizational performance and employee satisfaction".

QWL was concerned with activities such as participative problem solving, work restructuring, quality circles, reward systems and work environment. Walton (1975) proposed eight elements as contributing to QWL after an extensive research. He identified the factors as adequate and fair compensation, safe and healthy working environment, opportunities to develop human capabilities, growth and security, social integration, constitutionalism, total life space and social relevance.

Hence, it may be emphasized that a good QWL would lead to higher creativity and the fulfilment of the higher order needs of the employees. This would in turn lead to the alignment of the individual's and the organization's goals.

Guest (1979) a renowned behavioral scientist expressed the role of "feelings" of an employee regarding his work while defining QWL. He further elaborated "the effect of

QWL on a person's feelings about every dimension of work including economic rewards and benefits, security, working conditions, organizational and interpersonal relations, and its intrinsic meaning of a person's life." He postulated that it was "the process" by which an organization could bring out the creativity and innovativeness of its employees. This could be done by involving them in decisions regarding the work.

Hence, we may say that an individual's interpretation of emotions and his/her responses have a profound impact on shaping the relationships at work and leading to higher levels of achievement both for the individual as well as the organization.

Researchers have argued that the response of an individual to his surrounding is vital in deciding his chances of survival. The concept of EI brings new dimension to the concept of intelligence. It is believed to be an important constituent of an individual's overall intelligence. Goleman (1995) believed that prediction of success in an individual's life may be made more accurately by EQ compared to IQ. Bar-On (2006), on the basis of extensive research, projects that EI "addresses the emotional, personal, social and survival dimensions of intelligence", which according to him were "often more important for day-to-day life than the more traditional cognitive aspects of intelligence".

## **Emotional Intelligence**

The term "emotional intelligence" first appeared in a 1964 paper by Beldoch, and then in the year 1966 with a paper by Leuner. Later, Wayne Payne used the term "emotional intelligence" in his doctoral thesis. In 1985. In the year 1989, Greenspan proposed a model to describe EI, followed by another by Salovey and Mayer in the year 1990.

However, the term EI gained much popularity and became a much-discussed topic in the academia and industry with Goleman's opus titled "Emotional Intelligence – Why it can matter more than IQ" in 1995. Numerous researches have been carried out across the world relating EI to various life outcomes.

## Emotional Intelligence at Workplace

Furnham (2008) reported the existence of extensive empirical research relating EI to a spectrum of behaviors such as interpersonal relationships, health and education. Researchers were unanimous in their belief that EI was to be accepted as a much desired trait or ability (depending on how it was conceptualized) and was to be considered as an entity that had numerous behavioral dividends.

Zeidner et al. (2004) furnished a critical scrutiny of the role of EI at the workplace. They projected that firstly *if EI* did predict satisfaction, productivity, teamwork etc., then the next step would be to identify the “*process or mechanism*” that accounted for these positive outcomes? They asserted that high EI people were more articulate in communicating their thoughts, plans and objectives. They added that such people were more lucid, decisive and empathetic. Also, EI was believed to be strongly related with teamwork and social skills. Furnham (2008) opined that business leaders who were endowed with high EI, built supportive climates that increased organizational commitment of the employees.

There was a great likelihood that managers/leaders possessing high EI were more insightful and were knowledgeable about their own and their teams' strengths and shortcomings. This enabled them to take benefit of the former and make amends for the latter. Additionally, EI was related to efficacious coping skills that enabled people to handle stresses, demands and work pressure in a better manner. It could be that managers/leaders scoring high in EI could identify precisely what followers felt and needed. They were found to be more encouraging and nurturing. Managers possessing high EI were believed to be less prone to negative and insidious decision-making. They also had a positive coping mechanism at work. In the words of Singh et al.(2011), people with low EI were believed to be “poor at emotional identification, regulation and responses.”

In the book by Goleman and Cherniss (2001), “*The Emotionally Intelligent Workplace*”, the authors projected that the major challenge at the workplace included

coping with massive and rapid change. The advent of newer and advanced technologies that permeated all walks of life were bound to impact the work methods and processes. The other challenge included enhancing creativity to come up with newer solutions to existing problems. Organizations were also required to recruit and retain talented workforce. They were also required to maintain a work culture that promoted effective communication and sharing of information. Another important aspect was to maintain a committed and motivated workforce whose needs were aligned with the objectives of the organization.

The authors concurred that emotional intelligence played an important role fulfilling all the above-mentioned needs. Perhaps the greatest challenge was change management. Change may be implemented smoothly through effective communication by the leaders. This may be facilitated by the accurate judgment of leaders and appropriate implementation strategy. According to Bunker (1997), leaders must first control their own anxiety and uncertainty. Later they need to adopt suitable strategies to address the concerns of their subordinates in a humanistic manner.

## **Higher Education**

According to Socrates, “Education means bringing out of the idea of universal validity which is latent in the mind of every man” . Knowels (1995) believed that education meant the blossoming of all those capabilities in the individual which would enable him to deal with his environment and lead to fulfilment. In the words of Mrunalini (2010), education was responsible for changing behavior pattern of people and the art of utilization of knowledge.

Education was the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits (Lamichhane, 2018). Education frequently took place under the tutelage of educators and through the practice. Education could be gained in a formal or informal environment. It was believed that any experience that had a determinative effect on the approach one adopts in his/her thoughts or behaviour could be considered education. Learning acquired in the institutions play a vital role in shaping in terms of proving the knowledge and skills required to pursue a given career as adults. It also shapes the personality of an individual, making him/her a mature adult

who will be able to cope up with stresses and challenges in life and yet remain human and compassionate towards others while having satisfying and fulfilling life.

In the words of Erasmus, the great humanist writer, “The best hope of a nation lies in the proper education of its youth.”

## **Higher Education in India**

India’s education sector was in the grip of major challenges and opportunities. About twenty-nine per cent of her population was below the age of 14 years. Higher education division was projected to amount to US\$ 35.03 billion by 2025. On the whole, the education sector was estimated at US\$ 91.7 billion in the financial year 2017-18 and was anticipated to extend to US\$ 101.1 billion in 2018-19 (IBEF,2019).

According to the same report, India had over two hundred and fifty million school going students, an excessively high figure in comparison to any other country, world-wide. It also had the largest number of HEIs . The number of colleges and universities stood at 39,931 and 993, respectively in the year 2018-19.

The higher education system in India has to deal with multiple issues. The most important being- the number of institutions which is very low considering the burgeoning young population. The country’s Gross Enrolment Ratio (GER) in higher education stood at 25.8 per cent which was much below the world’s average figure of 27 per cent.

The next major challenge was that the performance of undergraduate students was substantially low This was brought out by the fact that out of approximately thirty million students who enrolled at undergraduate level, a bare minimum of six million completed their graduation in 2017. Iyer (2019) projected that by 2030, a staggering 14 million, the largest number of people attending college would be from India. At present there were 889 universities which accommodated 28.6 million students. According to estimates of Iyer (2019), the country would need a minimum of 800 new universities and 40,000 new colleges by the year 2030.

Another matter of concern was the rising aspirations of the middle class who were keen on exploring the overseas market. Their underlying belief was that the experiential learning opportunities offered abroad would equip them with better job prospects.

Though the annual expenditure was phenomenally higher for education abroad, it was argued that the benefits would outweigh the costs. According to an article in The Statesman (an Indian newspaper) by Iyer (2019), the amount Indians spent per year on overseas education was double the amount allocated in the Union budget for higher education. This amount was a staggering figure which was approximately twenty times the amount collectively spent by the Indian higher education institutions on research. The main reason for rise in student's preference to international universities for higher education was the acquaintance with a diverse socio-economic environment and culture. Additionally, there was a perception that the quality of higher education was superior compared to that in India as it furnished a balance between theory and application. This was considered ideal for meeting the employment criteria and consequently ensuring employability.

In order to address these issues, the Central Government disbursed US\$ 1 billion to states for the launching of skill development programmes. The Pradhan Mantri YUVA Yojana was launched by the Ministry of Skill Development and Entrepreneurship. This initiative was introduced in the year 2016 at a cost of Rs 521.93 crore (US\$ 74.68 million). Its main objective was to build up their employability by providing entrepreneurship education and training. The Skill India Mission launched in 2015 aimed at skilling 400 million Indian youth by 2022.

A hundred percent per cent Foreign Direct Investment (FDI) in the education sector has been permitted by the government since 2002. As a result, this segment received cumulative FDI of Rs 17,262.83 crore (US\$ 2.47 billion) by March 2019. During 2017, this sector documented eighteen 18 mergers and acquisitions worth Rs 342.4 crore (US\$ 49 million). In terms of private equity and venture capital funding, the expected investments were to the tune of US\$ 500 million by end of 2019 and beginning of 2020.

With the enormous thrust to the education sector by the government and the mammoth moral responsibility of grooming the future generations, institutions of learning face myriad challenges.

For achieving sustainable growth, these organizations need to focus on providing a favorable work environment which enhances the capabilities of its employees. Hence the coping abilities and the overall work environment move hand in hand in providing



a conducive work environment to the employees of the higher educational institutions and an enriching experience for the younger generation.

### **Purpose of the study**

The purpose of this study is to understand the impact of emotional intelligence on the quality of work life of the employees working in the private sector institutions of higher learning in the National Capital Region of India. This study is of significance with the increasing pressure on the Private sector due to a highly competitive market place. The onus of meeting the demanding deadlines is automatically transmitted to the employees. This results in long working hours. Hence each extra hour spent at the workplace is at the cost of some sacrifice of work time or leisure time at home. If this pattern continues over a long duration of time, it is bound to have an adverse impact on the employees. Hence, organizations are increasingly responsive to the needs of the employees as the costs of turnover and absenteeism are high. This is of vital significance primarily to the employees of the educational institutions especially in the Indian society, where imparting knowledge or ‘shiksha’ is considered to be a noble profession. Indians idolize their teachers or ‘gurus’ as embodiments of the Divine Force.

The study is meaningful since it explores the impact of EI of the employees on their QWL in institutions of higher learning. A good QWL will ensure higher degree of organizational commitment and more satisfying career options for the employees in the academic institutions. Their satisfaction from the content of work, the services they render and the environment of positivity will automatically trickle down to the recipients of knowledge or beneficiaries of the institutes. This would lead to better grooming of the students to transform them into more mature adults.

### **Statement of the Problem**

Emotional intelligence is found to be of immense help in coping with the demands and pressures both in professional and personal lives. It has been found that the students or children learn and imbibe the verbal and nonverbal messages from the parents/ teachers and peers. The students who are on the threshold of adulthood are required to gain

knowledge and learn the skills during their time spent in the higher educational institutions. These students learn a lot from their educators and also from the staff about the world in which they would be stepping in soon. Hence it is imperative that the faculties and staff display emotionally stable behavior and help in nurturing mental and emotionally sound individuals. The work environment of the faculties and staff must be such that it honours their work and gives them a sense of pride in their chosen field. Hence it is of importance to know the level of EI and the QWL of the employees of the higher educational institutions.

The present research is intended to study the EI and the QWL of the employees of the higher educational institutions. It also aims to analyze the extent of relationship between EI and QWL if any. It is pertinent to check whether the two attributes are independent or dependent (with the help of Chi Square test). This will be followed by an attempt to explore the impact of EI (the independent variable) on QWL (the dependent variable). Additionally, the impact of different sub-domains of EI on QWL will also be assessed.

## **Scope of Study**

The study will carry out an assessment of the EI and the QWL of the employees of private colleges in the NCR. The study will also include the impact of EI on the QWL.

The scope of this study will be limited to:

- a) Private Institutions of Higher Education only
- b) Study will be conducted in Delhi NCR only as we get a good population mix from diverse backgrounds.
- c) The study would be based on the responses received during February, 2020 to September, 2020.

## **Objectives of the Study**

The main objective of the study was to examine the relationship between EI and QWL of the employees of the HEIs in the NCR. There was a need to examine whether the two variables were independent of each other. The following step was to assess the impact of EI and its subdomains on QWL.

### **Statistical Tests/Analysis**

In order to analyze the data in light of the formulated objectives, the following Statistical tests were proposed:

1. Correlation Analysis (and testing its significance)
2. Chi square test of independence
3. Simple regression analysis to find out the impact of EI (independent variable) on QWL (dependent variable) and testing the validity & significance of the model. Also performing simple regression to find out the impact of different sub-domains of EI (independent variable) on QWL (dependent variable) different sub-domains of EI.
4. Multiple regression analysis to find out the impact of sub-domains of EI (independent variables) on QWL (dependent variable) and testing the validity & significance of the model.

### **Test Instruments**

The test instrument was divided into three parts:

Part A : Demographic profile

Part B : Assessing Emotions Scale proposed by Schutte et al. (1998). This scale was adapted for the present study

Part C : Quality of Work Life Scale developed by Walton. R.E. (1979) was adapted for the present study.

The demographic profile consisted of the age, gender, designation, years of service in the current institution, total work experience and marital status. The responses were sought on a 5-point Likert scale for Part B and C of the questionnaire.

## **Research Methodology**

The research design was descriptive, that is it aimed to provide a comprehensive and detailed explanation of the emotional intelligence and QWL of the employees of the higher educational institutions running in the private mode in the NCR. The employees of the afore mentioned institutions constituted the population of the study. Convenience sampling was adopted for the study. This sample size was in accordance with the sample size for various populations as recommended by Israel (1992).

The research procedure was divided into two parts. In the first phase, pilot testing was carried out on a sample size of fifty. The questionnaire or the test instrument was tested for reliability and validity. The EI questionnaire yielded a Cronbach alpha value of 0.804 and the QWL questionnaire had a Cronbach alpha value of 0.904. This revealed that both instruments had high internal consistency. At this stage, the opinion of the experts was also sought and their suggestions were incorporated in the questionnaire.

Then the questionnaire was shared with the faculties and staff of different Institutes with the help of Google Forms. This phase of data collection marked the beginning of the second phase. During this phase, the respondents were encouraged to clarify their doubts if any regarding the questionnaire. Data were collected till the end of September 2020.

Data were collected about the demographic particulars of the faculty and staff, their emotional intelligence and quality of their work life. Data were analyzed using IBM SPSS 20. All the tests were carried out at a level of significance of five percent. Correlation analysis was performed for measuring the magnitude and direction of relationship between EI and QWL. Correlation analysis was also carried out to assess the extent of relationship between the subdomains of EI and QWL. The above analyses yielded the value of Pearson Product Moment Correlation Coefficients.

The scores of EI were classified as low, moderate and high and the scores of QWL were categorized as poor, average and good. The Chi square test of independence was carried out between the EI and QWL of all the employees to find out whether these two attributes were independent of each other. This was done with an objective of finding whether a person possessing high EI would also have a good QWL or there were other factors that contributed to a good QWL.

This premise was further tested with the help of regression analysis. The regression model was constructed by considering EI as the independent variable and QWL as the dependent variable.

### **Significance of the Study**

The study is of immense significance as it will help in understanding the emotional abilities and the QWL of the employees of the Higher Educational Institutions. The present study may be replicated pan-India to get the broader view of the emotional competence of the employees and the overall work environment of the HEIs.

An assessment of the emotional intelligence may require the introduction of training programmes to develop EI of the employees. This may result in increasing emotionally intelligent manpower which would ultimately lead to fruitful social and societal outcomes.

The inputs of this study related to QWL may help the policy makers in improving the existing policies related to the functioning of the HEIs of the Country.

### **Delimitations of the Study**

- The study will be focussing on the employees of the Private Sector institutes of higher learning, so it may not be possible to generalize findings to other Sectors (Central and State Universities)
- The findings may not apply to the employees of schools
- It will be presumed that respondents would give their responses with utmost honesty; however, the possibility of bias cannot be eliminated.

### **Terms and concepts used in the Study**

## **Emotional Intelligence**

1. Perception of Emotion
2. Managing Own Emotions
3. Managing Others' Emotions
4. Utilization of Emotion

## **Quality of Work Life**

1. Adequate and fair compensation,
2. Safe and healthy working environment,
3. Opportunity to develop human capabilities,
4. Growth and security,
5. Social integration,
6. Constitutionalism,
7. Total life space and
8. Social relevance.

## **Higher Educational Institutions**

The Higher Educational Institutions were classified as follows according to AISHE Report (2019) as follows:

1. Central University
2. Central Open University
3. Institution of National Importance
4. State Public University
5. Institution Under State Legislature Act
6. State Open University
7. State Private University
8. State Private Open University
9. Deemed University-Government
10. Deemed University-Government Aided

### 11. Deemed University-Private

For the present study, the private universities and colleges affiliated to private universities which were located in the NCR were chosen. The responses were collected from the employees working in these institutions.

## **Chapter 2**

### **REVIEW OF LITERATURE**

An extensive literature review was carried out to explore the theoretical background and evolution of the variables of concern in the study. Related work and the research carried out in similar areas were also reviewed. Then, the study was conceptualized in the context of the present research problem. The chapter reflects the role of emotions, the evolution of emotional intelligence, the conceptualization of quality of work life and the importance of the Higher Educational Institutions. The chapter is organized in accordance with the following framework:

#### **I. Concept of Emotions and Emotional Intelligence at workplace**

- 1.1 Emotions defined
- 1.2 Theories of emotion
- 1.3 Role of Emotions
- 1.4 Emotions, feelings and mood
- 1.5 Developments in the field of EI/Genesis of EI
- 1.6 Models of EI
- 1.7 Scales of EI
- 1.8 Role of EI at workplace
- 1.9 Studies based on EI at workplace
- 1.10 EI in different domains of work



## **II. Quality of Work Life and its Implications**

### 2.1 QWL

### 2.2 Theories of QWL

### 2.3 QWL and link with emotions

### 2.4 Studies based on QWL in academic institutions (schools and higher educational institutions)

## **III. Higher Educational Institutions in India: framework and functioning**

### 3.1 All India Survey on Higher Education (AISHE) Report

### 3.2 National Education Policy, 2020

## **IV. Summary of the literature review**

## **V. Research Gap**

## **VI. Theories that support the study**

### 6.1 Social Exchange Theory (SET)

### 6.2 Customer Engagement Theory (CET)

## **VII. Conceptual framework for the study, developed on the basis of the researches reviewed**

## **I. Concept of Emotions and Emotional Intelligence at workplace**

### ***1.1 Emotions defined***

According to the Oxford Learners' dictionary, emotion is defined as “a strong feeling such as love, fear, or anger; the part of a person's character that consists of feelings.” (<https://www.oxfordlearnersdictionaries.com/definition/english/emotion>)

According to Lexico, emotion is believed to be “A strong feeling deriving from one's circumstances, mood, or relationships with others.” At Lexico, they concur that emotion has its origin during the mid-16th century from French *émotion*, that is, *émouvoir* (or ‘excite’), denoting a public disturbance. It has its roots from Latin *emovere*, from *e-* (variant of *ex-*) ‘out’ + *movere* ‘move’. However, they believe that, the current context of usage finds its earliest reference in the early nineteenth century. (<https://www.lexico.com/definition/emotion>)

Perhaps the earliest documented study on emotions were by Charles Darwin. According to a research by Peter Snyder, a neuroscientist, which relies on biographical documents which were never published earlier; but got published later in an issue of the *Journal of the History of the Neurosciences*, Darwin conducted the first study explaining the manner in which people recognized emotion in faces.

Darwin’s work “*The Expression of the Emotions in Man and Animals*”, published in 1872, brought out that all humans, and even other animals, displayed emotion through extraordinarily similar behaviors. Darwin believed that emotion had an evolutionary history that could be traced for different cultures as well as species.

As quoted by Freud & Breuer, 1895/1955), “Freud's earliest view that emotions were remnants of actions which had served a purpose earlier in the history of the species was adopted from Darwin” (1872). “It is surely of the essence of an emotion that we should be aware of it.” (Freud, 1915/1957d, p. 177)

Researchers have attempted to identify and categorize different emotions. In the year 1972, psychologist, Ekman propounded that there were six basic emotions that were ubiquitous across cultures: happiness, sadness, anger, surprise, fear and disgust. Later in 1999, he extended his list to include amusement, contempt, embarrassment, excitement, pride, satisfaction, and shame (Ekman et al., 1999).

In the following decade, Plutchik introduced another system of classifying emotions known as the "wheel of emotions." In his model, he explained the manner in which different emotions could be combined or amalgamated, in a manner analogous to an artist's mixing of primary colors to obtain new colors. He cited the example that happiness plus anticipation could lead to excitement. He suggested eight key dimensions of emotions, namely "happiness vs. sadness, anger vs. fear, trust vs. disgust, and surprise vs. anticipation"(Plutchik, 1984).

## ***1.2. Theories of Emotion***

In the book "Discovering Psychology" by Don Hockenbury and Sandra E. Hockenbury, emotion has been explicated as a "complex psychological state that involves three distinct components: a subjective experience, a physiological response, and a behavioral or expressive response" (Hockenbury, D. and Hockenbury, S.E.,2007).

Regarding the subjective experience, experts are of the opinion that though the basic emotions experienced by people of different background and /or culture are the same across the world, experiencing of emotions could be highly subjective (Barret et al.,2017). They attribute these phenomena to the broad classification of emotions such as 'angry', 'happy' etc. They elaborate that there may be different degrees of anger such as mild annoyance or discomfort to blinding rage. In the same manner, the elaborate that certain life events may be accompanied by both happiness and anxiety in different proportions.

The physiological responses such as cold sweats from fear, sweaty palms or goose flesh or thumping heartbeat are accompanied during the experience of certain emotions. These physiological responses were regulated by the sympathetic nervous system (which were a part of the autonomic nervous system). These phenomena were explained by the "Cannon –Bard theory of emotion." It is popularly known as the "Thalamic theory of emotion." It suggested that emotions resulted when the thalamus sent a message to the brain in response to a stimulus. This response was in the form of a physiological reaction (Fama, R.& Sullivan, E.V.,2015).

It may be mentioned that the autonomic nervous system dealt with the involuntary functions of the body, for example blood circulation, digestion of food etc. On the other hand, the sympathetic nervous system was in charge of the body's "fight-or flight reactions."

The earlier studies of the physiology of emotions focused on the autonomic responses. In the recent studies, the prime focus is on the role of brain. Brain scans have revealed the changes in the amygdale, a tiny almond shaped structure in response to emotions, and fear in particular. In fact, we observe a convergence of neuroscience and psychoanalysis and the rise of a new branch of study known as neuro-psychoanalysis. The concept of Jaak Panksepp's emotional systems are an integration of neurobiology of affect, behavioural biology, evolutionary psychology and psychoanalysis.

The third was the behavioural response. It deals with the expression of emotions. The manner in which emotions were expressed/displayed on the overall personality of an individual and his/her interaction with others. Researchers believe that while some expressions such as happiness or response to fear are universal, some are culture specific. For example, in the western culture, display of negative emotions is acceptable both in public and private; while in the more conservative cultures such as Japanese, negative emotions are seldom displayed in public

### ***1.3. Role of Emotions***

Emotions play a vital role in our lives. Appropriate display of emotions influences social interactions and transactions. In the book, "I'm Ok, You're Ok", the authors describe how effective transactions with appropriate display of emotions can lead to understanding and strengthen the bonds of camaraderie and understanding.

According to Hwang and Matsumoto (2020), emotions played a pivotal role in three aspects of our lives, namely intrapersonal, interpersonal, social and cultural domain.

At the intrapersonal level, emotions may be understood as rapid information processing systems that define our actions with minimum amount of thinking (Tooby and Cosmides, 2008). In other words, common life occasions such as birth, death, battle

attack evoke emotions to cope up rapidly with a minimum amount of cognitive intervention. For example, fight or flight in response to an attack, defend or care for something or someone useful or dear are representations of inherent willingness to survive and evolve. In the words of Cosmides and Tooby (2000) and Tooby and Cosmides (2008), emotions prepare us for certain types of behaviors. They also prepare the system to act in response to the stimuli from the environment (Levenson, 1999). He professes that emotions were responsible for the initiation of subjective experiences, physiological reactions, cognition, etc for certain inputs from the environment. In the words of “Baumeistere”, though emotions prepared the body for action, whether the person actually undertakes that "action" depended on factors such as the subject/chosen one for a particular emotion, the perceived consequences, past experiences, etc. Hence emotion maybe considered as a "trigger" for action but not necessarily followed by action. Emotions may also motivate future behaviour (Hwang and Matsumoto, 2020), that is having experienced negative emotions in the present, one may strive to focus one's energy in the direction of avoidance of such unwanted/undesirable emotions in the future.

Emotions played an important role in influencing our thoughts. Matsumoto et al. (2006) believed that critical thinking gets hampered when one was overwhelmed by intense emotions. Memories were etched in the brain and coloured with the associated emotions (Wang and Ross, 2007). Emotions also served as the effective basis of attitude, beliefs and values regarding the world around us.

At the interpersonal level emotions find both verbal and nonverbal expression. According to Elfenbein and Ambady (2002) and Matsumoto (2001), during interactions with others they can judge or decipher the emotions. Hence, emotions form an important input in initiating a specific behaviour in the perceiver. In the words of Dimberg and Ohman (1996) and Esteves et al. (1994), certain types of emotional display evoke complementary emotional response. Example, anger evokes fear. Emotional expressions also mirror the nature of relationship between interacting people or groups. Notable studies in this field were carried out on married couples by Gottman et al. (2001). Particular set of emotional expressions revealed marital discord.

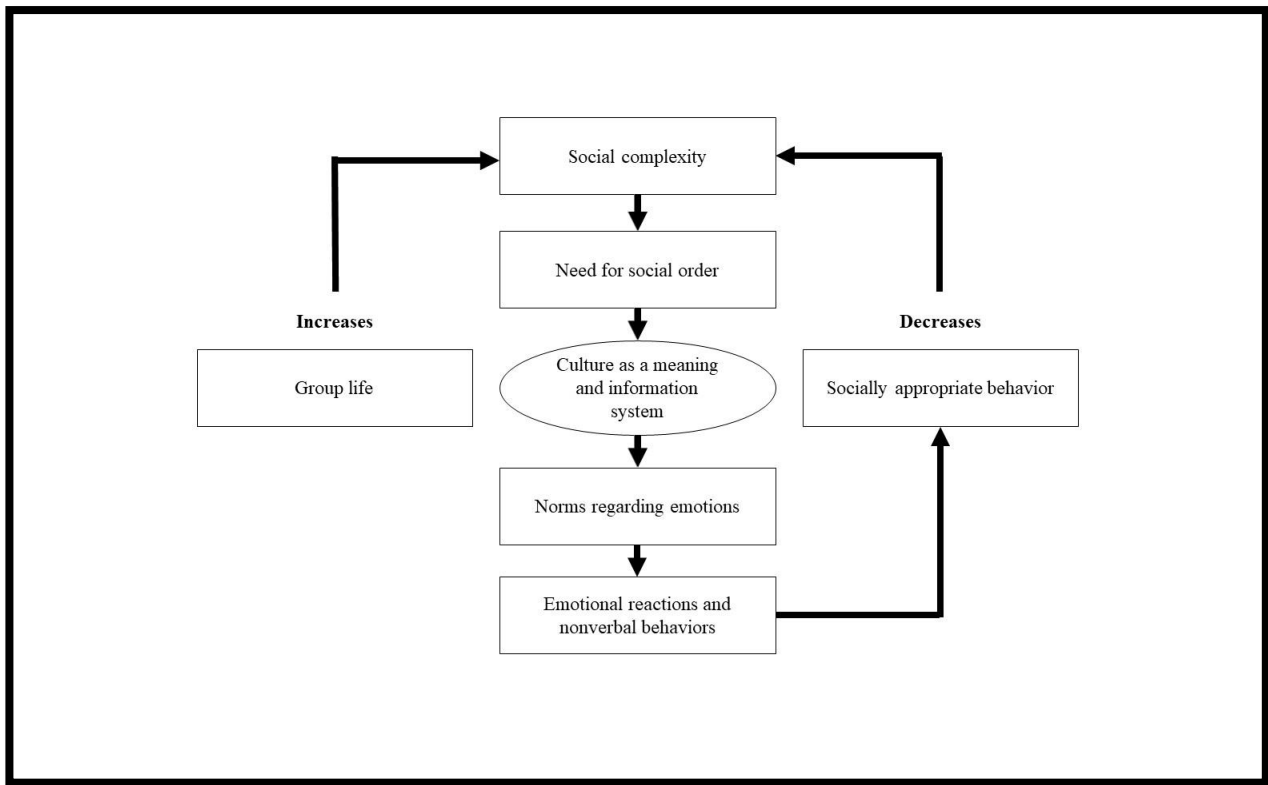
Another important field of study revolves around the concept of "social referencing". This concept was given by Klinnert, Compos and Sorce (1983). This has been

extensively studied and findings demonstrate that emotional expressions are important regulators of social interaction. Many researchers (Sorce, Emde, Compos and Klinnert, 1985; Bradshaw, 1986; Hertenstein and Compos, 2004) have corroborated the fact that facial expressions act as regulators of social interaction.

The third and an important aspect of emotions was the social and cultural dimension. Humans are considered to be social beings. Individuals exist as members of numerous groups. Each group has its distinctive roles, expectations and norms. Moving in and out of the different groups is a regular feature during the day-to-day life and also during different stages of life. Individuals may be playing several roles at a time, say, a parent, a daughter in law, a daughter, an IT professional, a tutor and guide for the child and a spouse.. The different roles demand diverse expectations and hence a complex coping mechanism comes into play to fulfil the needs of survival and contentment. In the words of Matsumoto and Juang (2003), ‘culture’ provided this binding force which was shared by the group members and also transmitted to the protégé. These shared norms helped the group “to meet basic needs of survival, pursue happiness and wellbeing and derive meaning from life.”

Culture was responsible for the transmission of attitudes, values, norms and beliefs (Matsumoto and Hwang, 2013; Matsumoto et al., 2008). According to Tsai, Knutson and Fung (2006), cultural background dictates the desirability of given emotions and were responsible for setting up norms to guide individual behavior and interpersonal relationships. An important dimension in this regard is cultural display rules. As postulated by Friesen (1972), these rules that were learnt in the formative years of life guided the display and control of emotional expressions in accordance with societal norms.

Hence, we may say that the major function of culture was to maintain social order and thereby ensure survival. It is responsible for providing rules and guidelines for appropriate display and management of emotions. In other words, culturally moderated emotions facilitate the harmonious and socially constructive societies working for the common social good.



**Figure 2.1. The role of emotions (influence of culture)**

(Source: <https://nobaproject.com/modules/functions-of-emotions>)

#### ***1.4. Emotions, feelings and mood***

It is an accepted fact that emotions influence decision making and the manner in which we perceive the world. However, there still remains a lot to be explained regarding the reason for having emotions. Researchers continue to explore the causes feelings and how these feelings affect us. At this juncture, it is also important to distinguish between emotions and mood. In common parlance, the two are often used interchangeably. However, psychologists actually treat the two distinctly. According to Beedie et al. (2005), an emotion is normally “quite short-lived, but intense.” Emotions may be attributed to a specific, discernable and ascertainable cause. On the other hand, moods are much unassuming, but persistent. Many a times, the exact cause of a particular mood is difficult to identify.

### ***1.5. Developments in the field of EI/Genesis of EI***

The following paragraphs briefly outline the history, major paradigms, and empirical findings in the field of EI research.

Emotional intelligence, which may be treated as a refinement of social intelligence was a subject of many researches during the early twentieth century. It began with the contributions of Thorndike during the 1920s and intrigued scholars and researchers across the world.

Moss and Hunt (1927), in their work titled “Are you socially intelligent?”, described and defined socially intelligent behaviour. In 1927, Moss et al. developed the Social Intelligence Test.

This was followed with extensive work by Doll who developed the first scale to measure socially intelligent behaviour in young children in 1935. In the same year, she developed the Vineland Social Maturity Scale which was later refined and known as Vineland Adaptive Behavior Scales (ABS) or Vineland ABS in 1984. She is credited to be the first person to stress the importance of adaptive behaviour (social competence or social maturity) in individuals with intellectual disabilities.

In 1939, David Welcher (1939/40), developed a test of cognitive intelligence. He included two subscales of “picture arrangement” and “comprehension”. These two parameters were believed to measure social intelligence. In his later publication (1943), he emphatically argued that the understanding of intelligence would remain incomplete if these factors were not described adequately. In the year 1958, he added a significant annotation to the concept of intelligence. In his words intelligence was the “capacity of an individual to act purposely.”

During the same period, Ruesh (1948) and MacLean (1949) carried out studies on psychosomatic diseases and the visceral brain. The prime focus of their studies was on Alexithymia. Alexithymia is a personal trait or a personality feature which is expressed as the “subclinical inability to identify and describe emotions experienced by one's self or others” (Sifneos, 1973; FeldmanHall et al., 2013). It manifested as dysfunction in emotional awareness in self and in others, social attachment, and interpersonal relationships.



O'Sullivan et al. (1965), used exploratory factor analysis and proposed six factors of cognitive social intelligence. The factors identified by them were based on Guilford's "structure of intellect model." In their work they reported that no related factors which bore any semblance to the abilities involved in understanding the "feelings and intentions" of others were documented. They further clearly stated that their study dealt with only the cognition aspect or understanding and no other abilities which may be broadly believed to come under the ambit of "social intelligence".

In 1979, Greenspan proposed a hierarchical model of social intelligence which consisted of three dimensions namely, social sensitivity, social insight and social communication. He did not propose specific tests for any of these components. He however believed that these could be derived from experiments that were used for gaining insight into social cognition.

As reported by Mehta and Singh (2013), in the year 1985, Payne formally presented the term emotional intelligence in his doctoral dissertation. His work was titled "A study of emotion: developing emotional intelligence; self-integration; relating to fear, pain and desire (theory, structure of reality, problem-solving, contraction/expansion, tuning in/coming out/letting go)."

Later, Payne says in his abstract:

"Evidence is presented that the mass suppression of emotion throughout the civilized world has stifled our growth emotionally, leading us down a path of emotional ignorance."

According to him, many of the social ills were the immediate consequence oblivion regarding the emotions of people. His list included examples such as addiction, depression, illness, religious conflict, child suicide, violence and war.

Scarr (1989) upheld that having cordial relations with others involved extraversion, self-confidence, low anxiety, and social perceptiveness. These attributes were indicators of "social competence." Scarr (1989) further asserted that, although all of these attributes correlate with intelligence, they did not come under the purview of intelligence. He reasoned out as follows: According to him, extraversion was a personality trait and guided one's behaviour in a group or social situation. Hence it may

be treated as a “behavioral preference rather than an ability.” On the other hand, “knowing what another person feels, in contrast, was a mental ability.” Mayer and Salovey (1993), in their definition of EI as a series of mental abilities have pointed out at this distinction and proposed that it qualifies it “as a form of intelligence.”

Cantor and Kilstrom (1987) carried out extensive study in the field of social intelligence and redefined it as a person’s “fund of knowledge about the social world.”

In a study carried out by Salovey and Mayer (1990), titled “Emotional Intelligence” conceptualized emotional intelligence. They also elaborated upon the scope of EI as a “set of skills hypothesized to contribute to the accurate appraisal and expression of emotion in oneself and in others, the effective regulation of emotion in self and others, and the use of feelings to motivate, plan, and achieve in one's life.” Their formal definition was as follows:

“Emotional intelligence is a type of social intelligence that involves the ability to monitor one's own and others' emotions, to discriminate among them, and to use the information to guide one's thinking and actions.”

They distinguished the concepts of EI, social intelligence and general intelligence as follows: “Emotional intelligence, as compared with social intelligence, may therefore be more clearly distinguished from general intelligence as involving the manipulation of emotions and emotional content.” This elaboration clearly brought out the distinction and among EI, SI and general intelligence.

Regarding the importance of emotions in facilitating self-management, they stated “Finally, emotional individuals may place emphasis on higher level processes concerning attention to feelings, clarity, and discriminability of feelings, and beliefs about mood-regulatory strategies” (Mayer & Gaschke, 1988). It was believed that people who experienced feelings clearly, and who were confident about their abilities to regulate them, were more adept in repairing their moods more swiftly and in an amicable manner in the aftermath of failure and other disturbing experiences (Salovey, Mayer, Goldman, Turvey, & Palfai, 1993).

In 1995, Daniel Goleman created a tremendous impact in research and academia with his treatise “Emotional Intelligence: Why It Can Matter More than IQ.” He postulated

that about eighty percent of success and happiness of an individual depended on his /her emotional intelligence.

In their paper published in 1997, Mayer and Salovey defined EI as an ability. They proposed the four branched model of Emotional Intelligence. They also advocated that reflective regulation of emotion would lead to the promotion of emotional and intellectual advancement and thereby the attainment of specific goals.

Davies et al. (1998), suggested interventions to improve EI and thereby social functioning. Their study also provided evidence of the existence of a distinct factor which they called “Emotion Perception”. According to them, this factor perhaps, represented “the ability to monitor another individual's emotions.”

Jenson (1998) indicated that social intelligence was distinct from “g” postulated by Spearman. He preferred to label these abilities as “social competence”, perhaps to preserve the utility of general intelligence.

Mehrabian (2000) developed the BEES (Balanced Emotional Empathy Scale). This was a self-report measure of social cognition. It measured “affective or emotional empathy”. In his work titled Beyond IQ, he tried to identify the most important personality correlates of various elements that determined success in life. He enumerated the factors as emotional success (happiness and satisfaction), relationship success, physical success, work and career related success and financial success.

Newsome et al. (2000), in their study dealing with the assessment of predictive validity of EI, personality and individual differences, noted that both cognitive ability (expressed in terms of self-control and extraversion) were significantly related with academic achievement.

Reuven Bar-On (2005) developed the Bar-on Model of Emotional Social Intelligence. He developed the model and tested it for construct and predictive validity. He also mentioned the shortcomings of the model and raised the idea of conceptualizing a more robust and comprehensive model of ESI. He was convinced that emotional-social intelligence was both teachable and learnable.

Pertides and Furham (2006) gave a conceptual framework of EI as a “constellation of traits and self-perceived abilities.”

Zeidner et al. (2004), in their analysis summarized the developments in the field of EI research pertaining to the workplace. They elaborated upon three aspects namely, conceptualization, assessment, and applications of emotional intelligence. They further laid the foundation of future research. They upheld that the progress depended on greater rigour in conceptualization and measurement and in validation of scales against objective criteria.

With the ongoing research based on the three models of EI namely, ability model, trait model and mixed model, Ahmed (2015) developed a model for understanding EI which he christened as the synergy model. He explained that total intelligence was the sum total of IQ, EQ and an unexplained quotient. The model showed three possible outcomes of EI. He suggested that the most appropriate means to measure and interpret the impact of EI was to “listen, observe and feel” it (i.e. LOF it).

Khraisat et al. (2015), studied the EI of medical students. They concluded that the years of study was the main associated factor. The next influencing factor was gender. They also expressed concern regarding the declining levels of EI during the course of medical training as was evident from their study. They stated that further research was required to be carried out, so that suitable steps could be taken to address the issue.

Gugliando et al. (2015), in their study analyzed the manner in which ratings self and parental of trait EI scale associated with the self and parental ratings of internalizing and externalizing problems. Adolescents and their parents took part in their study. One of the findings of their study was that both parents attributed higher levels of well-being and self-control to their kids in comparison to that the kids ascribed to themselves.

Siegling et al. (2015) in their study relating trait emotional intelligence and personality (Big Five) along with gender, investigated whether the two were statistically different across the genders. They concluded that, models which predicted global TEIQue scores from the personality framework of Big Five were not statistically different across the genders. They further added that neuroticism and extraversion exhibited highest correlation with trait EI. The characteristics of conscientiousness, openness and agreeableness were related, albeit to a lesser degree compared to the earlier two characteristics.

Siegling et al. (2015) summarized eleven measures of ability and trait emotional intelligence. Their study focused on two models which had been extensively researched

by then, namely the ability and the trait models. They compiled three methods of EI based on ability that were designed for assessment of ability EI in the general populations. In case of trait EI, four of the methods were for the general population, whereas four were workplace or occupational oriented measures.

Petrides et al. (2016) summarized the developments in the field of research dealing with trait EI. Their important contribution included “(a) the location of trait EI in personality factor space, (b) the biological underpinnings of the construct, (c) indicative applications in the areas of clinical, health, social, educational, organizational, and developmental psychology, and (d) trait EI training.” They also suggested that differences in trait EI from person to person provided definite means of predicting behavior.

van der Linden et al. (2017) carried out an extensive meta- analysis to explore the interrelation

between GFP (general factor of personality) and EI. They hypothesized that GFP was a “social effectiveness factor” that overlapped in concept with EI. With the help of their study, they concluded that individuals having a high-GFP also had a higher score of trait and ability EI. This supported the belief that the GFP was a “social effectiveness factor”.

Fiori and Vesely-Maillefer (2018) provided a broad framework for gaining an insight about EI by conceptualizing it as an ability. They also approached and reviewed the difficulties and limitations faced in the marking the responses as “correct” in the domain of emotions. Their biggest contribution was the suggestion of a new direction in the study of EI. They conceptualized a well-defined demarcation between the crystallized and fluid constituents of EI. According to them, the crystallized component was based on “knowledge of emotions” while the fluid component dealt with “processing of emotion-information”. Hence, according to them, the EI of an individual could be assessed by the interplay of these two components.

### ***1.6. Emotional Intelligence Models***

Emotional intelligence (EI) has been summarized by Faltas (2017) as “a set of cognitive and non-cognitive competencies, skills and abilities, directly and essentially connected

to the behaviors and actions of everyone”. According to her, it was of concern to people in diverse fields, such as policymakers, public administrators, leaders and managers at all levels of the organization.

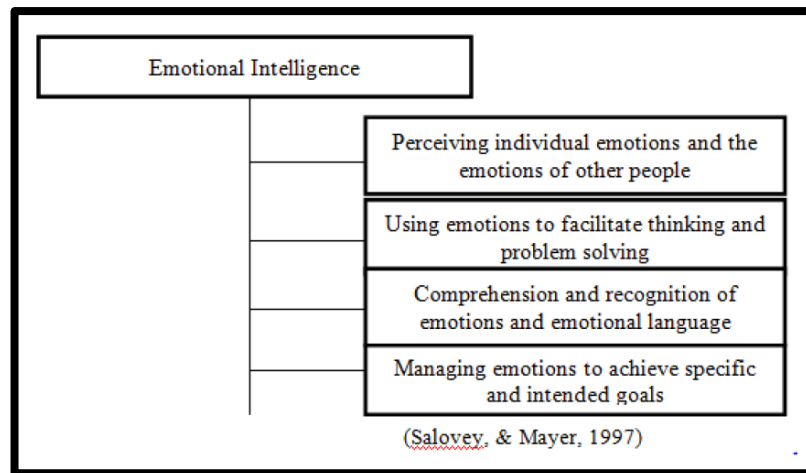
Researchers have been actively engaged in understanding the cognitive and non-cognitive nature of EI. The widely accepted and thoroughly researched models may be divided into three categories:

#### ***1.6.1. The Ability Model***

This model owes its origin to Salovey and Mayer. They proposed that emotional intelligence consisted of critical affective skills or abilities. In the words of Bratton Dodd and Brown (2011), their model was described as consisting of “critical affective skills and consisted of an empirically derived combination of emotion and intelligence.” In 1997, Salovey and Mayer proposed the four distinct domains of emotional abilities. Their model consisted of:

1. Perceiving emotions
2. Understanding emotions
3. Using emotions and
4. Managing emotions

The ability model of EI established a convincing mechanism of the manner in which emotional abilities manifested itself in terms of adaptive behavior of individuals.



**Figure 2.2 Four Branched Model of EI proposed by Salovey and Mayer (1997)**

(Adapted from: Broughton (2017))

### ***1.6.2. The Trait Model***

This model is also popularly referred to as the “emotional self-efficacy model.” It emerged due to vagueness and indistinctiveness of the earlier conceptualization (Zeidner et al., 2003). The objectives of the earlier constructs were for the purpose of development and performance measurement. The aim was to track performance. In case of the trait model, the focus was on individual’s self-perception or the self- rating of emotional abilities.

Petrides and Furnham (2001) proposed the trait EI model. According to them, EI was a “constellation of self-perceived abilities and dispositions located at the lower levels of personality hierarchies.” Hence the presence of unique personality traits suggested or implied emotional intelligence of the individual. This suggested an innate attribution to genetic factors.

### ***1.6.3. The Mixed Model***

This model claimed that EI was a combination of both abilities and traits of an individual. Bar-On (1997) conceptualized the “mixed model theory”.

Daniel Goleman, the American psychologist, who is credited with popularizing EI also proposed the emotional competence framework under the purview of the “mixed

model.” He identified five constructs of EI that he believed were “learned capabilities”, viz. self-awareness and regulation, empathy, motivation, and social skills.

Goleman (1998) paired competence-based constructs with abilities (Bar-On, 1997; Boyatzis & McKee, 2002; Dulewicz et al., 2003). He enunciated that certain personal and social competencies contribute more to achievements at the workplace in comparison to technical skills, cognitive ability and basic personality traits. He postulated that success and happiness could be attributed to certain behavioural patterns and abilities of an individual. According to him, the five learned capabilities mentioned above were the foundations of twelve EI subscales that included that included “emotional self-awareness, emotional self-control, adaptability, achievement orientation, positive outlook, influence, coaching and mentoring, empathy, conflict management teamwork, organizational awareness and inspirational leadership.”

Category	Personal Competencies (Self)	Social Competencies (Other)
<b>Recognition</b>	<b>Self-Awareness</b> (it includes three sub-competencies) <ul style="list-style-type: none"> <li>• Emotional self-awareness</li> <li>• Accurate self-assessment</li> <li>• Self-confidence</li> </ul>	<b>Social Awareness</b> (it includes three sub-competencies) <ul style="list-style-type: none"> <li>• Empathy</li> <li>• Service orientation</li> <li>• Organizational awareness</li> </ul>
<b>Regulation</b>	<b>Self-Management</b> (it includes six sub-competencies) <ul style="list-style-type: none"> <li>• Emotional self-control</li> <li>• Trustworthiness</li> <li>• Conscientiousness</li> <li>• Adaptability</li> <li>• Achievement drive</li> <li>• Initiative</li> </ul>	<b>Relationship Management</b> (it includes eight sub-competencies) <ul style="list-style-type: none"> <li>• Developing others</li> <li>• Influence</li> <li>• Communication</li> <li>• Conflict management</li> <li>• Visionary leadership</li> <li>• Catalyzing change</li> <li>• Building bonds</li> <li>• Teamwork and collaboration</li> </ul>

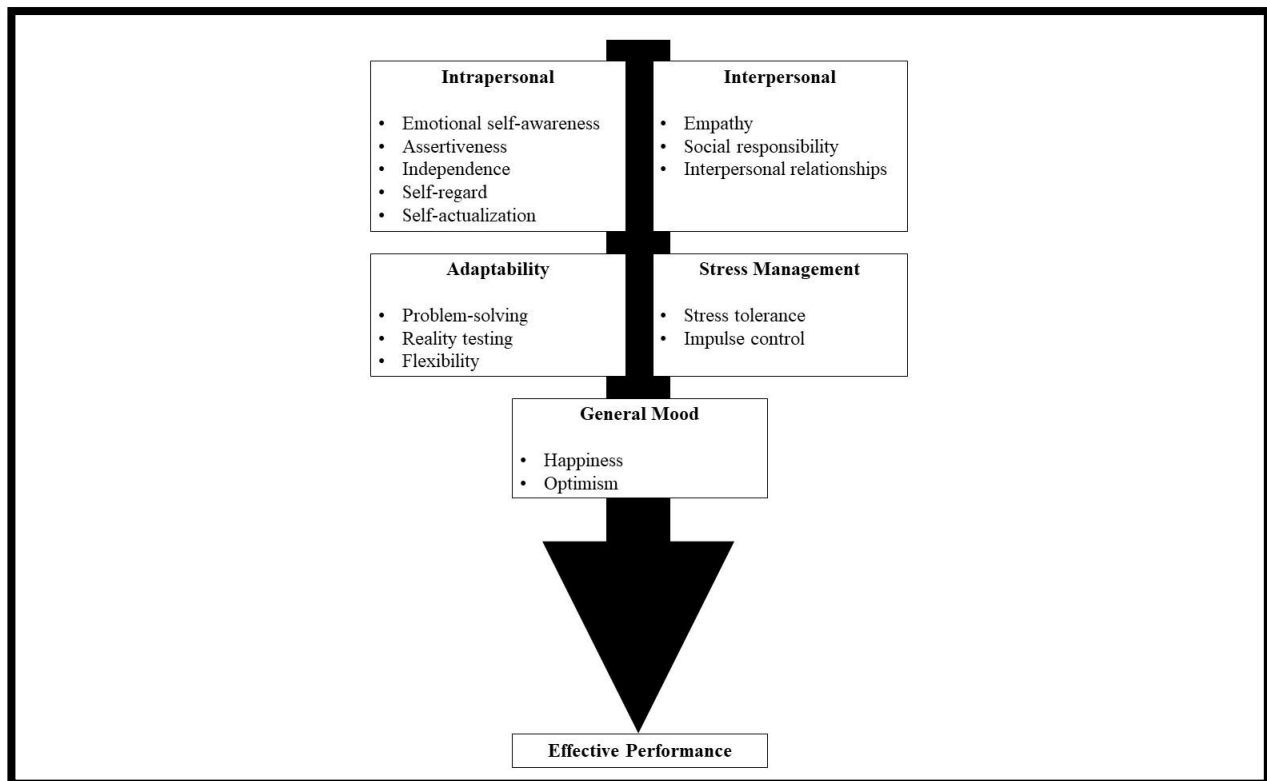
**Figure 2.3. Cherniss & Goleman’s Model of EI at Workplace**  
 (Source: Cherniss & Goleman, 2001, p. 28.)

He worked jointly with Boyatzis and Rhee (2002) and rationalized the mixed model of EI.

In his doctoral thesis that was submitted in 1985, Reuven-Bar-On suggested a numeric or measurable approach to evolve “an EQ analogous to an IQ score.” He is regarded as the first to introduce the concept of EQ which he believed was a measure of “emotional



and social competence.” According to him, ESI was a “multi-factorial array of interrelated emotional and social competencies”. It was responsible for guiding and influencing an individual’s ability “to recognize, understand and manage emotions, to relate with others, to adapt to change and solve problems of a personal and interpersonal nature, and to efficiently cope with daily demands, challenges and pressures (2006).”



**Figure 2.4. EI Model**

(Source: <https://www.pinterest.fr/pin/84512930481953194/>)

He believed that ESI consisted of numerous intrapersonal and interpersonal competencies, skills and facilitators that combined to govern efficacious behaviour (1998, 1997b, 2003). He conceptualized it as a wider construct and preferred to refer to it as “emotional social intelligence.”

It may be highlighted that both the trait approach and the “mixed” models shared the same methods of measurement of EI, namely the self-report measures. In fact, the mixed approach proposed by Goleman (1998) included personality traits such as “trust,

commitment, initiative, and conscientiousness.” On the other hand, the ability approach, which conceptualized EI as a cognitive ability based on the processing of information related to emotions, was assessed with the help of performance tests.

The conclusion drawn is that whether it is represented as a trait or an ability, assessed using self-report or performance tests, the conceptualization of the construct EI is distinct from both IQ and personality. Consequently, it may be utilized for the prediction of various real-life outcomes as put forth by Ciarrochi et al.(2000) and Petrides et al. (2007).

#### ***1.6.4. Recent Developments***

Fiori and Vesely (2018) suggested a new direction in the study of EI. They postulated that EI consisted of two distinct components, namely, a crystallized component and a fluid component. According to them, the former was concerned with “knowledge of emotions” while the latter dealt with “the processing of emotion-information.”

A comprehensive model consisting of a moderated-mediation framework was developed by Seal and Andrews-Brown (2010). Their model explained how the different components of EI may interact and thereby predict behaviour that was considered emotionally intelligent. Their model of EI consisted of (1) EQ, which they considered as “preferred patterns of behavior”, (2) emotional ability, considered as the “potential capacity” of a person, and (3) emotional competence, which represented the “actual behaviours” and had an impact on the performance of the individual. In the model put forth by them, the effect of trait EI on performance outcomes was mediated by emotional competence and moderated by the ability EI.

Maillefer, et al. (2018), in their study proposed a new framework integrating three approaches. Their model, they argued was the best predictor of emotionally intelligent behavior. It was an integration of trait EI, ability EI, and emotion information processing. They empirically tested their model’s ability to predict “adaptive performance” in university students. The interactions among ability EI, trait EI and information processing were incorporated in their model. Multiple regression analysis indicated that the inclusion of all the three EI components along with their could lead to the prediction of performance.

### ***1.7. Scales of EI***

The assessment of EI is based on two major theories. The ability and the trait theories. It may be noted that the distinction between the two theories was first put forth by Petrides and Furnham (2000). They categorized the instruments in accordance to the measurement approaches into ability-EI (also known as performance-based or information-processing EI) and trait-EI ( Petrides & Furnham, 2000). The ability EI was conceptualized as a cognitive ability. The trait EI was conceptualized as a personality trait and measured by means of self -reports.

Mayer et al. (2000a) classified models of EI into two groups: (1) “ability models” , which involved cognitive processing of emotional information and (2) “mixed models” , which considered EI to be partly or wholly a personality-like trait, or a behavioral disposition. The mixed model of EI was popularized by Goleman (1995) and Bar-On (1997) who conceptualized EI as having a much wider domain encompassing a person’s self-regard, independence, problem solving etc. (Bar-On, 1997), motivation, empathy, social skill etc. (Goleman, 1995).

As summarized by Brannick et al. (2009), the ability and trait measures could be distinguished on the basis of the definition of the constructs as well as the method of assessment. They further elaborated that the ability EI conceived of EI as a “capacity” that may range from a given feeling to the realm of reasoning. The respondent may be shown a picture depicting a particular facial expression and asked about the emotion that was being displayed in the picture. Scoring would then be done on the basis of the test takers response. Petrides and Furnham (2000) and Perez et al. (2005), highlighted that the theoretical understanding of emotions and emotional functioning was brought out by the ability measures.

The trait measures included a large assemblage of non-cognitive capabilities related to success, such as self-control, assertiveness, self-esteem, motivation, relationships, social awareness, self-management etc. The respondents were required to rate themselves on statements such as: ‘I am generally able to handle stress.’ higher scores were awarded to greater or more positive self-assessments. Hence behaviors and self-related abilities were assessed with the help of trait EI measures.

According to MacCann (2006), generally, the instruments that followed the ability-based models used a method of measurement that had its basis in the abilities of an individual. It involved questions where knowledge or skill were assessed keeping in mind the best performance.. He added that for the mixed model conceptualization the instruments used were self-report or other report rating scales.

Ashkanasy and Daus (2005) used another method of classifying EI measures in terms of three “streams.” According to them, stream 1 included ability measures based on the model proposed by Mayer and Salovey in 1997. The second stream included self-report measures which had their foundation in the model put forth by Mayer and Salovey in 1990. It may be noted that “empathy”, for example, is included in the 1990 model and not in the revised model of 1997 as “it does not fit an ability framework”(Tett et al., 2005). The third stream included “expanded models of emotional intelligence that encompass components not included in Salovey and Mayer's definition” (p. 443). According to them, the third stream was popularly referred to as the “mixed model of EI” in literature and included an amalgamation of traits, social skills and competencies and overlapped with other personality measures (O'Boyle et al., 2011).

It may be noted that both stream 2 (i.e. self-report) and stream 3 (i.e. self-report mixed) were treated as the “trait” measures as described by Petrides and Furnham in the year 2000. Pérez et al. (2005) argued that the given classification was adequate as the two self-report measures of EI displayed a tendency towards strong correlation.

It was brought out by O'Connor et al. (2019), that in comparison to measures of cognitive ability that had objectivity in terms of right/wrong answers (e.g., mathematical problems), measures to assess emotional abilities were subjective as they relied on the expert judgment or consensus to define correct answers. (Roberts et al., 2001; Maul, 2012). This had its own drawbacks and was often problematic. They further brought out that many of the early measures failed to discriminate between “typical and maximal performance.” Hence some researchers moved away from pure ability-based questions and made use self-report questions (by eliciting responses wherein participants were required to rate behavioral tendencies and/or abilities rather than objectively assessing their abilities. An example of such a scale was developed by Schutte et al. in 1998.

Some of the frequently researched and used instruments are as follows:

1. Mayer-Salovey-Caruso Emotional Intelligence Tests (MSCEIT) (Mayer et al., [2002a,b](#)).

It was based on definition of EI proposed by Mayer and Salovey in 1997. EI was considered as a set of interlinked skills concerning “the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth.”

2. Self-report Emotional Intelligence Test (SREIT) or the Assessing Emotions Scale (Schutte et al., [1998](#))

3. Trait Emotional Intelligence Questionnaire (TEIQue) (Petrides and Furnham, [2001](#))

4. Bar-On Emotional Quotient Inventory (EQ-i) (Bar-On, [1997a,b](#))

5. This included the following two tests:

- i. The Situational Test of Emotional Management (STEM) (MacCann and Roberts, [2008](#))
- ii. The Situational Test of Emotional Understanding (STEU) (MacCann and Roberts, [2008](#))

6. Emotional and Social competence Inventory (ESCI) (Boyatzis and Goleman, [2007](#))

7. The Wong and Law Emotional Intelligence Scale (WLEIS; Wong & Law, 2002).

WLEIS is reported to perform better in predicting variables such as life satisfaction.

8. The Genos Emotional Intelligence Inventory (Palmer et al., 2009)

Another instrument which deserves mention is the EQ map as mentioned by Gowing (2001). It was developed by Orioli and Cooper. They defined EQ as “the ability to sense, understand and effectively apply the power and acumen of emotions as a source of human energy, information, trust, creativity, and influence” (Q-Metrics, 1996/1997, p. 1). They further elaborated upon the use of the term “mapping” and defined as it “a unique, non-judgmental, interactive approach to assessing many areas including emotional intelligence, stress, self-esteem, resiliency, creativity and others (Orioli, Trocki, & Jones, 2000, p. 4).” According to them, the tests provided a numeric score which indicated a person’s skills or knowledge. On the other hand, maps provided a “bird’s eye approach to surveying the landscape, identifying strengths and pinpointing vulnerabilities and targeting specific actions to be taken.” They concurred that the objective of mapping was “personal discovery and self-learning” (Orioli, Trocki, & Jones, 2000, p. 4).

### ***1.8. Role of EI at workplace***

With rapid globalization, increased workplace diversity and unprecedented rate of technology adoption, organizational processes and practices are in a state of constant change. This is automatically transmitted to the employees who are required to constantly keep unlearning and learning in the dynamic environment. Perhaps the greatest challenge faced by the leaders/ managers in such a scenario is to communicate effectively and build cohesive teams. Good leaders/managers should possess the ability

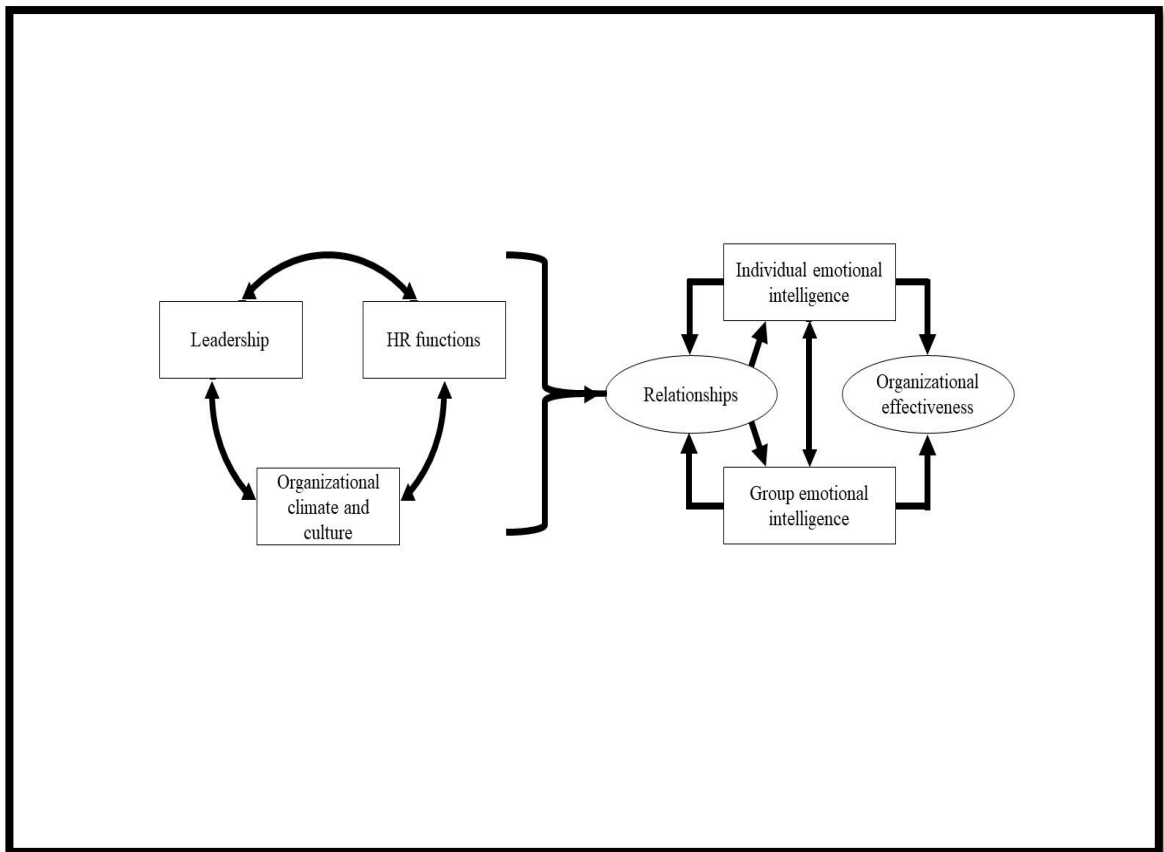
to gauge the general mood and temperament of the employees and intervene accordingly so as to build a congenial environment facilitating higher productivity and the generation of creative solutions. Some contemporary leadership theories emphatically uphold that emotional and social intelligence were even more important for leaders and managers as “cognitive and behavioural complexity and flexibility are important characteristics of competent leaders” (Boal & Whitehead, 1992). From an individual’s perspective, job-related behaviour was a reflection from affective or emotional experiences at the workplace that generated cognition (Weiss & Cropanzano, 1996).

Boyatzis, Goleman and Rhee (2000), explored the theory of performance at the place of work. They designed a measure known as Emotional Competence Inventory which was based on Goleman’s framework of EI. It may be noted that about forty percent of the framework of ECI was taken from Self Assessment Questionnaire (SAQ) developed by Boyatzis and his associates (Boyatzis, 1994; Boyatzis, Cowen & Kolb, 1995).

Cherniss and Goleman (2001) addressed issues relating to emotional intelligence, group emotional intelligence and its impact on group effectiveness in their book titled “Emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations.”

Cherniss (2001) expressed his views that organizations face a challenge of retaining good employees, “particularly those with the skills that are important in the high-tech economy, even during periods of growth and prosperity. He has quoted that in a Gallup Organization study of two million people working in seven hundred companies, it was found that the duration that an employee stayed at the organization and her productivity there was determined by the nature of “her relationship with her immediate supervisor” (Zipkin, 2000).

Organizations need to respond and adapt to the changes. Cherniss (2001) believed that “coping with massive change involves, among other things, the ability to perceive and understand the emotional impact of change on ourselves and others.” According to Bunker (1997), in order to help manage organizational change, leaders must first be aware and able to manage their own feeling of anxiety and uncertainty. Cherniss (2001), has presented the following model of EI and organizational effectiveness.



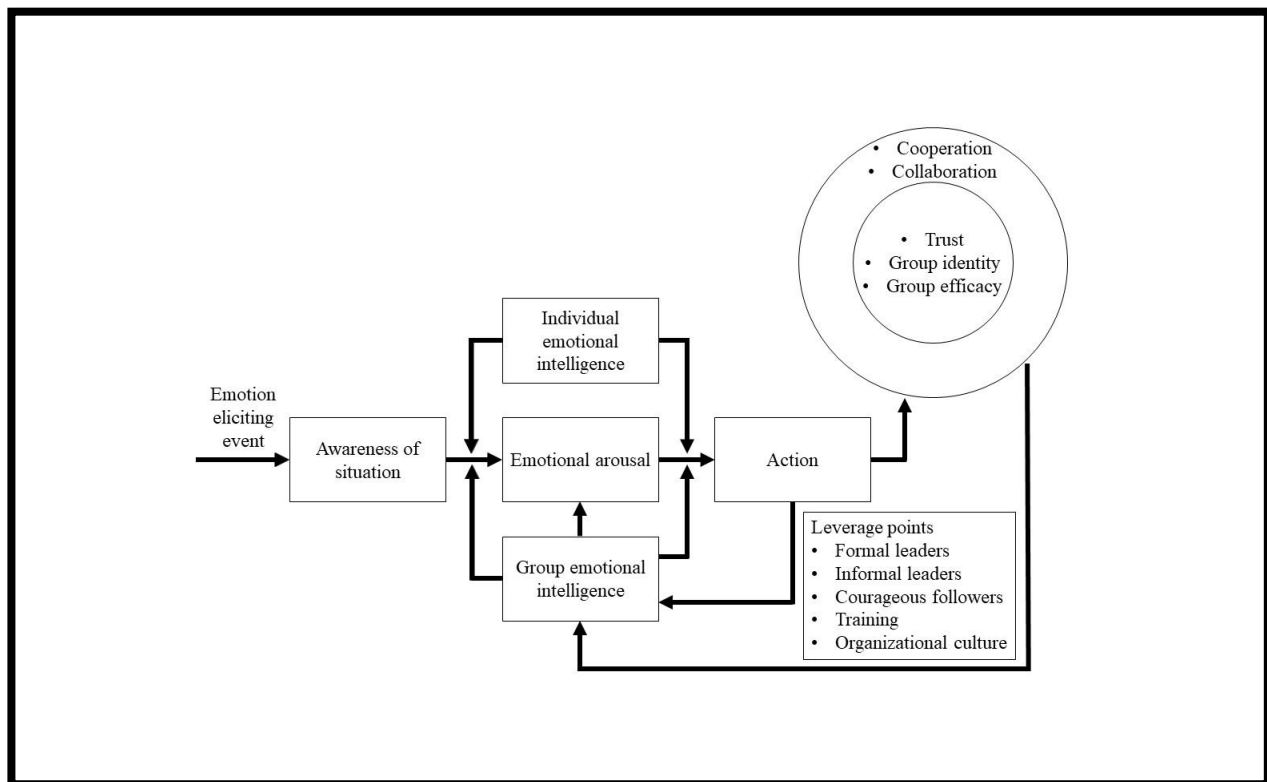
**Figure 2.5. Model of Emotional Intelligence and Organizational Effectiveness**

He used Goleman’s explanation (in Chapter three) of the book, in order to explain the manner in which “EI of organizational leadership influences organizational effectiveness through its impact on organizational climate.” He further stressed that leader who lacked EI would not lead to the development and promotion of EI in others. This would be counterproductive to the organizations. He also cautioned that interventions to enhance the EI of the members would be of limited value as it targeted only the HR functions, that is, only one aspect of the model. Training programmes aimed at it would succeed only if they had the support of the organizational leadership and organizational culture (Chapter twelve).

Another important aspect discussed by Druskat and Waff (in chapter six; Cherniss, 2001), is the relationship between individual and group EI. They have defined group EI as “the ability to develop a set of norms that manage emotional processes so as to cultivate trust, group identity and group efficacy.” They believed that the above



mentioned “collective beliefs” facilitated “the development of group member cooperation and collaboration.” They argued that if there were a few people with high individual EI, it may not be sufficient for team work and group effectiveness. Groups need to be guided by “norms and enduring processes that support” the “awareness and regulation of emotion within the group.” This brings in the role of appropriate “culture and environment in the organization that facilitates and rewards team work.”

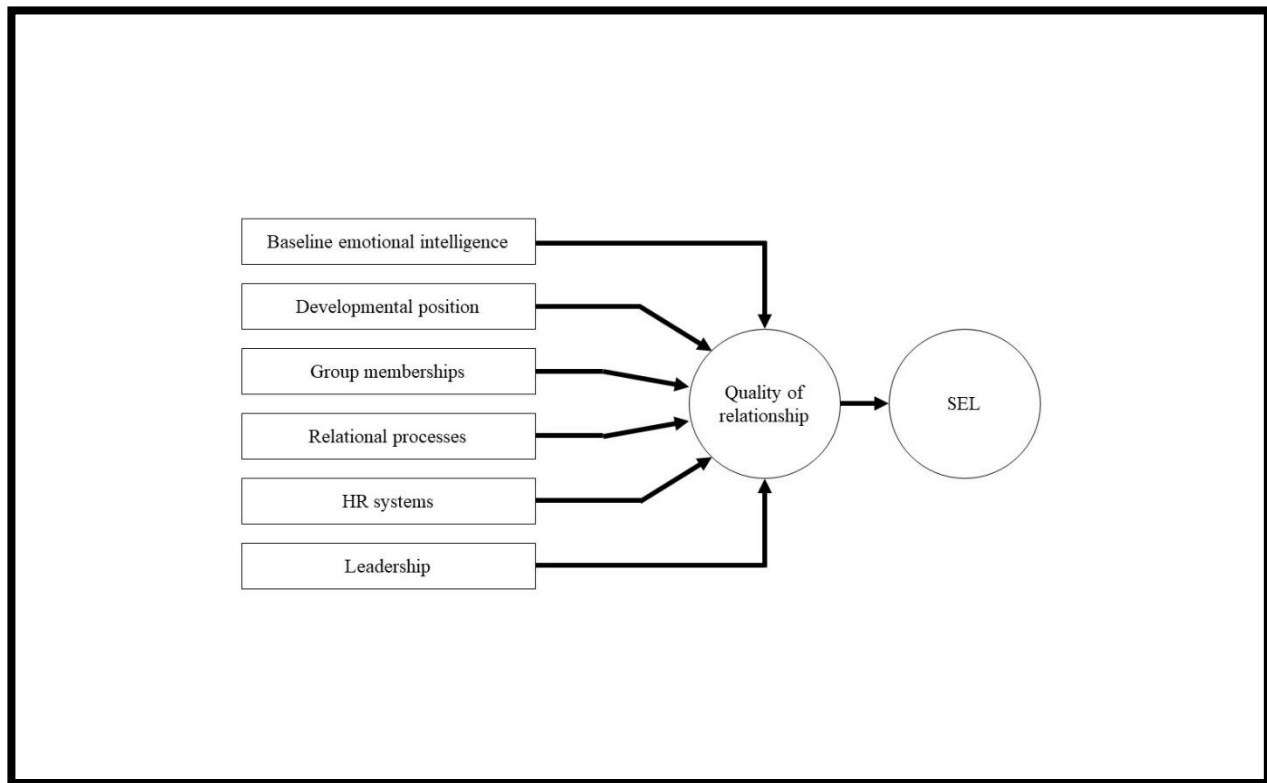


**Figure 2.6. How Group Emotional Intelligence Influences Cooperation and Collaboration.**

In a study carried out by Srivastava and Sinha (2020), the researchers proposed future research exploring the mediating effect of EI on the relationship between leadership and organizational commitment.

Kram and Cherniss (in Chapter eleven, Cherniss, 2001) introduced the concept of social emotional learning. They believed that social emotional learning took place in organizations. Their work was supported by the studies carried out by Fletcher (1994), Miller (1991) and Jordan et al. (1991), who concluded that individuals develop social and emotional competencies

during the process of interaction with others. They conceptualized that growth and learning that took place as a result of interactions was a two-way process. They proposed a relational theory of development. Their model depicted the factors that shaped SEL through relationships. According to Fletcher (1996) and Kram (1996), such an interdependence supported “both task accomplishment and social and emotional learning.”



**Figure 2.7. Factors that shape SEL (Social Emotional Learning) through relationships**

### ***1.9. Studies based on EI at workplace***

Good and reputed organisations are those where feelings of the employees are managed, matured or removed. According to Fineman (1996), feelings were perceived as being irrelevant to job activity but emotions got in the way of effective performance. Khalili (2012) quoted different researchers who have linked emotions with the workplaces by referring to the organizations as “emotional places” (Armstrong, 2000), “emotional arenas” (Fineman, 2000) or “incubators of emotions” (Muchinsky, 2000). Intelligence

was believed to be a key factor determining success and satisfaction at the workplace. Svyantek and Rahim (2002) drew the attention of the behavioural scientists towards emotions as a domain of intelligence. They believed that EI was an “important adaptive mechanism” that helped individuals in dealing with their environment, including their work environment. They based their theory on the findings of Gardener (1999) and Sternberg who had stressed upon the adaptive behaviour of the individuals in his/her environment. Jordan et al. (2003) upheld that cognition was important and that for a considerable time, the dimension of emotion was neglected as a variable in the context of organizational behaviour. They cite Ashforth and Humphrey’s (1995) argument that work life was intrinsically emotional and value based. Ashforth and Humphrey specifically believed that rational organizational behaviour often reflected the extent to which organizational members were in a position to manage their emotions. In fact, this view was consistent with the postulates of neural psychology that human behaviour could not be understood in its entirety without reference to the underlying emotional dimension (Damasio, 1994).

In 1994, Reilly carried out a study on hospital nurses and reported a negative correlation between EI and burnout syndrome. According to the eleventh Revision of the International Classification of Diseases (ICD-11) by the WHO, “burnout syndrome” is classified as an “occupational phenomenon” (WHO,2019).

According to Cooper (1997), individuals possessing high emotional intelligence were believed to have successful careers and more satisfying relationships. He proposed that EQ related traits such as “creating trusting relationships, improving energy and effectiveness in high pressure situations” etc. be integrated into the four Cornerstone Model of EI which focused on “emotional literacy, emotional fitness, emotional depth and emotional alchemy.”

Cherniss et al. (1998) in their study explored whether it was feasible to refine social and emotional behavior of the employees. They believed that as “social and emotional learning” was dissimilar from “cognitive and technical learning”, the usual corporate training programmes may not yield the desired results. They asserted that a different approach should be followed in training and development in this domain.

Weisinger (1998) suggested that EI was related to success at work and played a significant role in determining effective team leadership and team performance.

Abraham (2000) carried out hierarchical regression of EI on JS and organizational commitment. He concluded that more than two times the variance in the criteria could be explained due to EI- job control interaction.

Bar-On et al. (2000) who carried out their study on police officers demonstrated that those officers who had significantly higher scores of EI were less prone to stress and could cope with it better.

Caruso and Wolfe (2001) in their book presented a synoptic view of the research on EI. They also presented the inputs from different clients to bring out the different issues related to workplace behaviours and attitudes.

Nikolaou and Tsaousis (2002) discovered a positive correlation between EI and organizational commitment. They suggested a new role for EI as a determinant of employee loyalty to the organization. Tischler et al. (2002) argued that despite the reluctance of researchers to link subjects such as emotions and spirituality to workplace performance, it was now being accepted that these were significantly related with workplace outcomes. Their study explored the impact of EI and spirituality on workplace effectiveness. Zapf (2002) focused the attention of researchers towards “emotional dissonance”, which was expressed in terms of the frequency of having displayed emotions (usually positive) that were not in consonance with those genuinely felt (neutral or negative). He believed that such situations may be perceived /conceived as stressful (e.g., smiling at an unpleasant remark by a customer). He revealed that a higher frequency of emotional dissonance may eventually lead to a loss of the capability of regulating one’s own emotions, which would imply the loss of a particular internal resource/capability.

Slaski and Cartwright (2002) in a study dealing with retail managers, found that managers who possessed high EI revealed less subjective stress and had better physical and psychological well-being. Similar findings were reported by Gardner and Stough (2003) who found a negative relationship between EI and occupational stress.

In their paper titled “EI in the workplace: A critical review”, Zeidner et al. (2004), critically reviewed the conceptualization of EI and its role in the work environment. Their review article clearly brought out the significant role of EI in the work

environment. They also presented practical guidelines for the growth, enhancement and application of EI at the workplace.

Duran and Extremera (2004), in their research included professionals employed in institutions for people with intellectual disabilities. They concluded that a significant relationship existed between EI and burnout syndrome. They also concurred that EI had a significant impact on personal accomplishment.

Bulik (2005) explored the effects of EI on occupational stress in human service workers in Poland. He concluded that their ability to deal effectively with emotions and emotional information at work helped them to manage occupational stress more effectively. He asserted that this aspect should be harnessed during stress management training.

Khalili (2012) presented a comprehensive review of the research in the field of EI at the workplace. His study included people from different fields of work such as educators, counsellors, business leaders etc.

Humphrey et al. (2015) asserted that organizations should promote effective emotional labour by according employees sufficient autonomy and also focus on positive display rules. They believed that the leaders' emotional display was particularly contagious to hi/her followers. They advocated that leaders should use emotional labour tactics to motivate their followers and role model the right emotional displays. They added that the creation of "positive affective environment" by the leaders would facilitate the performance of emotional labour easier by the followers. They emphatically believed that properly performed and managed emotional labour was immensely beneficial as it would improve employee well-being, customer satisfaction, and the overall organizational effectiveness.

### ***1.10 EI in different domains of work***

Having achieved a firm footing amongst researchers and practitioners, emotional intelligence has been found to bring positive outcomes in different domains of life. Table 3 exhibits some of the domains researched across the world. These represent varied fields such as health care, police and security services, banking and insurance,

hospitality, retail, manufacturing, and academics. The focus of the present study was in academics.

**Table 1. Summary of different domains of work in EI**

<b>Serial Number</b>	<b>Year</b>	<b>Researcher</b>	<b>Variables/contribution</b>	<b>Sample Size &amp; Sampling frame</b>
1	1994	Damasio	emotion, rationality	Presented a review of Descartes work on relation between mind, brain and body
2	1994	Reilly	commitment, work stressors and burnout.	500, hospital nurses, USA
3	1996	Fineman	role of emotions and green organizational transformation	senior managers in six UK supermarkets,
5	1998	Cherniss, Goleman, Emmerling, Cowan and Adler	social and emotional learning was different from cognitive and technical learning	adult workers
6	2000	Muchinsky	workplace was an arena for the manifestation of human emotions, both positive and negative.	Empirical work
7	2002	Nikolaou and Tsaousis	positive correlation between EI and organizational	212, professionals in mental health institutions.

			commitment. Other variable -occupational stress	
8	2002	Slaski and Cartwright	EQ, subjective stress, distress, general health, morale, QWL and management performance	224 retail managers, UK
9	2002	Svyantek and Rahim	EI and behaviour in organizations	Findings from empirical studies
10	2002	Tischler, Biberman, and McKeage,	EI, spirituality, workplace performance or effectiveness	Empirical work
11	2002	Zapf	emotion work (such as automatic emotion wellbeing regulation, surface acting, and deep acting) and wellbeing	Empirical work
12	2003	Gardner and Stough	workplace EI, occupational stress and employee health	Empirical work
13	2004	Duran and Extremera	EI, burnout and engagement	112 staff in services for people with intellectual disabilities. Spain
14	2004	Zeidner, Matthews and Roberts	Different scales of EI	704 participants
15	2004	Parker, Summerfeldt,	Academic achievement	372 students of first-year, full- time at a small

		Hogan, & Majeski,		Ontario university
16	2005	Oginska-Bulik	EI, occupational stress and health outcomes	330 human service workers (physicians, nurses, teachers, probation officers and managers),Poland
17	2009	Cha, Kim, & Cichy	EI & its relationship with JS, organizational commitment, and contextual performance	136 Private Club Staff Members, Michigan, USA
18	2010	Afolabi, Awosola, & Omole	EI and gender on job performance and JS	119 Nigerian police officers
19	2012	Jennifer C.H. Min	assessment of emotional intelligence	Tour guides (Taiwan)
20	2013	Chhabra, M and Chhabra, B.	EI , occupational stress	Border Security Force personnel, India
21	2014	Davar and Singh	job performance	Banking and insurance sector in India
22	2015	Khraisat, Rahim, and Yusoff,	EI assessment	531, Medical students, Malaysia
23	2015	Humphrey, Ashforth and Diefendorff	JS, organizational commitment, job performance, and customer satisfaction.	Empirical study



24	2016	Vishnu NARAYAN Kucheria	EI, occupational stress	60 BPO executives, Jodhpur, India
25	2019	Puliyakkadi, Chalil, Abraham, Raj, & Dayan	EI dimensions & its association with demographic variables	70 doctors of a tertiary care centre, Kerala, India
26	2020	Nagaraj and Ramesh	EI dimensions & its association with demographic variables	102 school teachers of rural Karnataka, India

## 2. Quality of Work Life

Focus on the human's involved in the production process increased in the early twentieth century with the works of F W Taylor when he proposed the theory of Scientific Management. He was a key proponent of the Efficiency Movement which gained momentum across the industrialized nations of the world. Measures were proposed to enhance industrial efficiency and thereby productivity. The Hawthorne Studies conducted during 1920s and 1930s were a milestone in this direction. The focus began to shift towards the needs and aspirations of the humans at work; who were earlier considered a mere input factor among the factors of production (viz. men, machines, methods, money and materials). In the twentieth century, conceptualizations regarding work were labeled as scientific management, human relations, behavioral studies, socio-technical systems theory etc.

The work environment and the working experience in the organization has been an age-old concern; both for the employees and the managers. "Quality of work life" has been defined as the totality of aspects that influence the quality of an individual's working life. From the employee's perspective, a good QWL was one which did not have a detrimental influence on the personal life and well-being of the individual. In addition,

there would be either no or very little inappropriate demands from work. QWL was considered as a sub- component of the broader concept of quality of life.

The phrase “quality of working life”, (QWL) came into being at the first International Conference on QWL in 1972 (Davis & Cherns, 1975).

Beinum (1974) brought out the significance of QWL in terms of “relation between man and his task.” In the words of Boisvert (1977), QWL was set of valuable outcome of work life that affected individuals, organization and the society.

Cherns (1978) postulated that QWL was an outcome of the interplay of the structural components of the organization with the behavioural aspects at the work place (p.39).

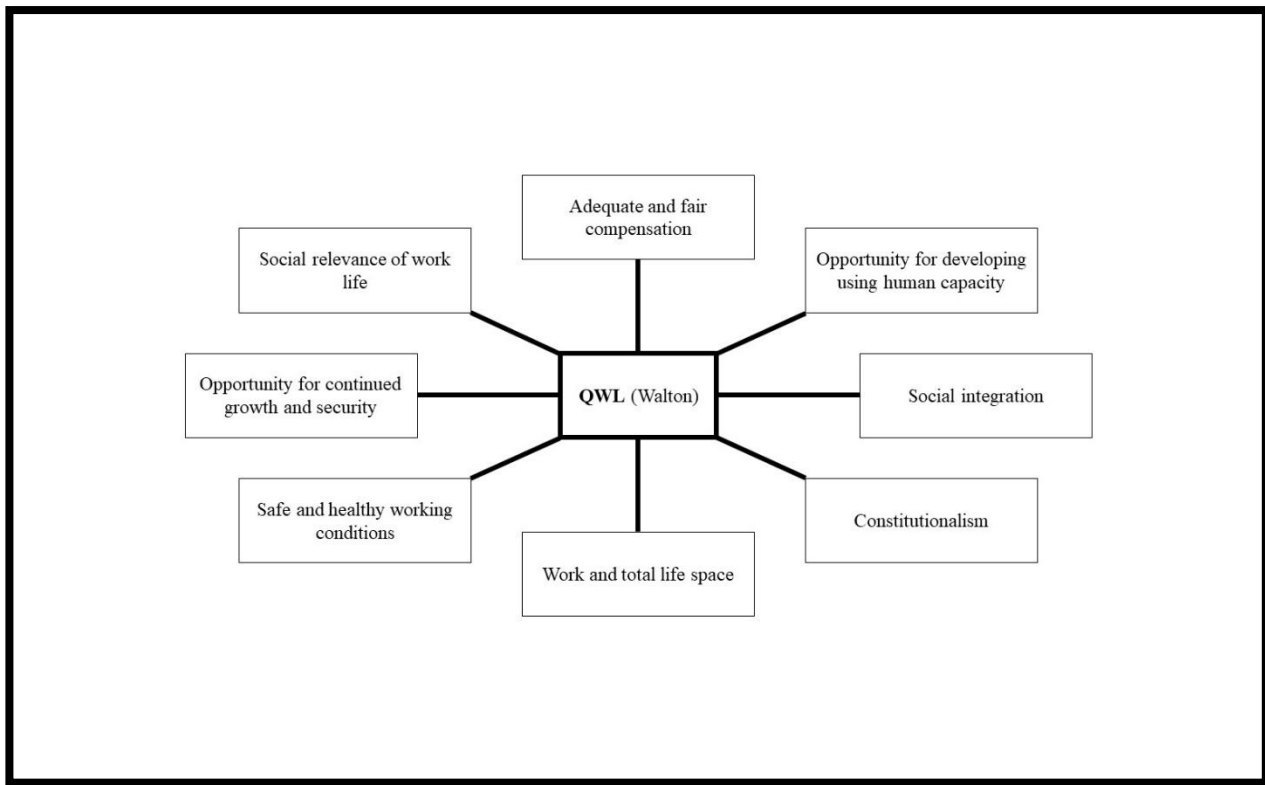
According to Cohan (1979), QWL was “a process of joint decision-making” and the building of “mutual respect between management and employees”.

Cohen and Rosenthal (1980) defined QWL as an “intentionally designed effort to bring about increased labor management cooperation” in order to improve organizational performance and enhance employee satisfaction.

Straw and Heckcher (1984) believed that QWL was “a philosophy” which upheld that the employees were a valuable asset to the organizations and “they should be treated with dignity and respect”.

According to Feldman (1993), QWL was the “quality of relationship between employees and the total working environment”. Lau et al. (2001) expressed QWL as the favourable working environment that ensured satisfaction of the employees by providing them adequate rewards a sense of job security in addition to career growth opportunities.

Walton (1975) proposed eight factors/elements for measuring QWL after extensive research. These factors are depicted in Figure 2.8.



**Figure 2.8. Factors that define Quality of Work Life (Walton)**

Researchers have proposed that QWL included working conditions, equitable compensation, job opportunities, autonomy, personal responsibility, decision making and career development etc. Some of the components of QWL have been suggested such as empowerment by Elden (1986), emancipation according to Alvesson and Wijnjott (1992), total management in the words of James (1992) and quality improvement programs as proposed by Elmuti and Kathawala, (1994). Values continued to be an integral component of QWL in the present times as much as in yesteryears (Hartenstein & Huddleston, 1981; Harris & Moran, 1990).

Knox and Irving (1997) postulated that the practices and policies which were the essentials of the QWL determined the organization environment and organization development. The employees' views regarding the pros and cons of the total work environment and the factors that were desirable or undesirable in the workplace were also included in their study.

Gilgeous, (1998) believed that the quality of life could be defined as an individual's degree of satisfaction with his or her life dimensions compared with his or her

conception of an ideal life. According to him, this evaluation was based on the individual's value system and on the cultural environment where he/she lived.

Hagerty et al. (2001) opined that the QWL should be viewed as an important factor influencing the quality of a person's whole life and rather than just a separate constituent. Sutela (2006) put forth that the QWL should be evaluated keeping in mind four criteria, namely, physical, psychic and social factors at work, health and stress symptoms, labour market conditions, and family background variables.

Hence quality of work life may be understood as the overall work conditions and its impact on employees as well as a key determinant of organizational effectiveness. QWL related activities revolved around participative problem solving, work re- design, compensation and reward systems, quality circles etc.

### ***2.1. Theories of Quality of Work Life***

Nadler and Lawler (1983) discovered that the concept and definition of QWL underwent a progression of change over a period of time. QWL was conceptualized as a '*variable*' during the period 1969-1972. It was viewed as an '*approach*' during 1969-75 and was considered as '*methods*' during 1972-1975. During 1975-1980, it was accepted as a '*movement*'. It was during the period 1979-1982, it was regarded as a broad concept which included all aspects concerned with men at work.

QWL, as a *variable*, signified an individual's response to work or the impact of the work experience on his/her persona. The focus was on individual outcomes such as JS or mental health. It dealt with the impact of the work on the individual.

As an *approach*, QWL focused was again on the individual rather than organizational outcomes. However, importance was accorded to the joint labor- management co-operative projects, with the aim of improving outcomes which were beneficial for both the employees and the organization.

QWL may be viewed as a set of *methods* or approaches that create a conducive work conditions and thereby make it more gratifying. Under this approach, QWL may be regarded as integration of social and technical systems.

QWL as a *movement* may be visualized as a utopian state regarding the aspects of work and the worker's association with the organization. It deserves to be mentioned that ideal concepts related to QWL as a movement were 'participative management' and 'industrial democracy'.

QWL may be viewed as a global concept that covered all organizational development or organizational effectiveness efforts which were designed to achieve higher organizational effectiveness.

Consequently, a utopian state would be when the organizations have well defined procedures and practices to facilitate a conducive work environment and the employees willingly contribute their best for the benefit of the organization.

Nadler and Lawler (1983) summarized the concept of QWL as "a way of thinking about people, work and organization." According to them, it comprised of firstly, concern regarding the impact of work on people as well as on its contribution to the efficiency of the organization and secondly its focus on participative problem-solving and decision-making.

## ***2.2. QWL and link with emotions***

Guest (1979) an eminent behavioral scientist took into account the "feelings" or perceptions of an employee apropos his work while defining QWL. He elaborated that the different dimension of work such as economic rewards, and benefits, security, working conditions, organizational and interpersonal relations, influenced his feelings and had a bearing on the QWL. The element of feelings imparted meaning to the person's life. According to Guest(1979), it was the process by which an organization may attempt to tap the ingenuity of its employees by including them in decisions making at the work place.

It has also been documented that a good QWL is essential for healthy and positive perception of the work environment. It leads to the unlocking of creative potential of the individuals giving them satisfaction and a sense of pride in their work. This brings about increased benefit for the employees as well as the organizations. The reaction of the employees to work and the work environment depends upon their personalities, their expectation from work, their level of needs (in accordance with Maslow's hierarchy),

work ethics, knowledge, skills and abilities. It may also be affected by challenges offered at work, that is whether it is stimulating enough for the employees without being perceived as an excessive burden. In this regard, the formal work arrangements and the processes of the organization play an important part. Hence, we may understand that the productivity and fruitfulness of the work depends both on the individuals' characteristics and abilities as well as the conditions of work. Hence to maximize productivity at the workplace, both these issues need to be addressed.

### ***2.3. Studies based on QWL in academic institutions (schools and higher educational institutions)***

A few published studies analyzing the QWL in the academic institutions were reviewed.

Hackman and Oldham (1980), examined job characteristics such as autonomy, job security and flexibility as being determining factors of QWL. They also addressed issues such as the creation and support mandated for enriched work. Their findings were in consonance with earlier research as these stimulating job features also satisfied an academician's need for engaging in worthwhile and significant work activities.

Parelius (1982) in his study titled, "Review: Equity in Education", stressed the importance of good interpersonal relations between superiors/Head of Departments, teachers and students. According to him, students were a constitutive part of the teaching profession and the university teachers were very contented when they were able to motivate them. On the other hand, he also cautioned that poorly prepared and students having low motivation levels would sap the energies of the teachers.

Winter and Sarros (2002) studied the work environment in the Australian Universities. With the aid of quantitative and qualitative analysis, they reported that the work environment in academia was stimulating when roles were clear, tasks were challenging, and the supervisors exhibited a nurturing leadership style. On the other hand, the work environment was discouraging where there were excessive demands of the designated job, low job feedback and participation, coupled with poor rewards and recognition.

Singh and Kumar (2005) asserted that a friendly and cooperative environment would facilitate work of the employees.

Landa et al. (2006) conducted a study on the relationship between perceived EI and life satisfaction among university teachers. Their sample consisted of 52 teachers. They used the Spanish version of Trait meta-Mood Scale for EI and life satisfaction and work satisfaction. They reported a strong correlation between life satisfaction and TMMS sub-scales and TAS-20 subscales which dealt with difficulty in describing emotions, and externally oriented thought process and work satisfaction.

Smerek and Peterson (2007), examined Herzberg's Theory with an objective of improving JS of the non- academic staff of a University engaged in Research. Along with the theories of motivation, they studied the impact of personal and job characteristics on perceptions of the work environment and JS. The sample size of their study was two thousand seven hundred.

Mentz and Walt (2007) conducted a study in the region of Western Cape Province of South Africa. Their study dealt with the QWL of teachers of multicultural, well-performing schools. Their sample consisted of six hundred and twenty-eight teachers. They found that the teachers were generally satisfied, enjoyed teaching and had warm relationships with their students. However, the teachers had to deal with issues such as discrimination based on race and ethnicity.

In India, Sharma and Jyoti (2009), conducted a research on JS of the teaching staff of HEIs in India. Their study included four universities in North India. They believed that JS was a key determinant of QWL. Jyoti (2010) studied the QWL in HEIs in North India. The objective of her study was to examine the effects of QWL, JS and job commitment on intention to leave the organization.

Mirkamali, and Thani (2011) of Iran, used an adapted form of Walton's scale to determine the QWL among faculty members of two universities (University of Tehran and Sharif University of Technology). They carried out a comparative analysis of the level of QWL of the faculty members.

Ahmadnejad et al. (2012), surveyed the relationship of EI and Working Life Quality with job adjustment of teaching staff in elementary level schools located in Sardasht province.

Kumar and Iyer (2012) carried out a study on the EI and QWL among employees in the Educational Institutions (both schools and colleges) in the city and neighbouring regions of Madurai, Tamilnadu.

Kalantari et al. (2012) conducted a study on the relationship between EI and QWL of physical education teachers in Zanjan. They concluded that EI could help in predicting the QWL ( $R^2 = 0.12$ ,  $\beta = 0.35$ ).

Emadzadeh et al. (2012) carried out a study on the QWL of primary school teachers of Isfahan city. They studied the QWL and its components based on demographic variables such as gender, marital status etc. on a hundred and twenty teachers.

Farahbakhsh (2012) reviewed the role played by EI in increasing QWL among school principals.

Eghtesadi (2013) studied the relationship between EI and QWL with self-efficacy among the employees of Education Department. This study was published in Persian.

According to Samanvitha and Jawahar (2012) EI had an immense influence on the level of JS consequently on work performance on faculty members of Arts and Science Institutes.

Pizolato et al. (2013) carried a longitudinal study on the impact on quality of life in teachers after interventions for the prevention of voice disorders. They concluded that the interventions for enhancing the vocal health improved the quality of life of the teachers.

Abdollahi and Pour-Moazzen (2013) examined the relationship between EI and the employees' QWL at a University of Medical Sciences in Iran. Their study was published in Persian.

Sharma and Jyoti (2013), probed the relationship of QWL of University teachers in North India with their JS, commitment, productivity and intention to leave.

Badawy, Srivastava and Sadek (2014) conducted a comparative analysis between the academicians in the private HEIs of the countries of Egypt and India. Their study included the variables EI, JS and organizational learning capability. They reported that the relationship between EI and JS was non-significant for both the countries. On the



other hand, the relationship between the organizational learning capability and the JS was significant, with regards to both countries.

Singh and Singh (2015) carried out an empirical study among the teachers working in Higher Educational Institutions. They studied the role of QWL on JS, commitment, performance and personal as well as Institutional effectiveness. It also impacted job engagement and work life balance.

Anjum and Swathi (2017), examined the impact of EI on QWL among sixty secondary school teachers in Hyderabad, India. They concluded that there was appositive correlation between the two variables

Bora (2017) carried out an extensive study reviewing the existing literature examining the QWL in the academic sector. His study gave valuable inputs for the present study in terms of identification of the research gap.

A summary of variables chosen, sample sizes and characteristics in different studies pertaining to QWL in academic institutions is presented in Table 4.

**Table 2. Summary of studies relating to QWL in academic institutions**

<b>Serial Number</b>	<b>Year</b>	<b>Researcher</b>	<b>Variables</b>	<b>Sample Size &amp; Sampling frame</b>
1	1980	Hackman and Oldham	Motivation, change, work systems, work redesign. Also, job characteristics such as autonomy, job security and flexibility	-
2	1982	Parelius	Importance of good interpersonal relations between superiors/Head of Departments, teachers and students	Norway
3	2002	Winter and Sarros	Motivation in academic institutions could be enhanced with clarity in roles, challenging tasks and support from leaders.	Australia
4	2005	Singh and Kumar	A friendly and cooperative environment would provide support, comfort, advice and assistance to the employees.	India

5	2006	Landa, López-Zafra, De Antoñana and Pulido	Perceived EI and life satisfaction among university teachers	52 university teachers comprising of 30 men and 22 women. Spain
6	2006	Sharma and Jyoti	JS	120 government and private school teachers. India
7	2007	Smerek and Peterson	Theories of motivation, the impact of personal and job characteristics on perceptions regarding work environment and JS	2700 non-academic staff. USA
8	2007	Mentz and Walt	They found that the teachers were generally satisfied, enjoyed teaching and had warm relationships with their students. However, the teachers had to deal with issues such as discrimination based on race and ethnicity.	628 teachers of rural schools. South Africa
9	2009	Sharma and Jyoti	JS and factors such as job contents, superior's behaviour, co-worker's behaviour, students' behaviour, growth opportunities, pay and	120 University teachers of North India

			promotion pattern etc as well as demographic factors	
10	2010	Jyoti	Effects of QWL, JS and job commitment on intention to leave the organization.	120 University teachers of North India
11	2011	Mirkamali and Thani	QWL	150 Faculty members of two Universities of Iran
12	2012	Kumar and Iyer	EI and QWL	94 (36 men and 58 women). Teaching and non-teaching staff, in schools and colleges
13	2012	Ahmadnejad, Hassani, Sepehrian Azar and Shojaiee,	EI, working life quality, job adjustment	registered and unregistered teachers in elementary school. Iran
14	2012	Emadzadeh, Khorasani and Nematizadeh	QWL assessment	120 (population 862) primary school teachers, Iran
15	2012	Kalantari, Mohammadi Moghani, Taghibigloo and Honari	EI, Working life quality	95. Physical education teachers, Iran

16	2012	Farahbakhsh	EI, QWL	139 school principals (Khorramabad city). Iran
17	2012	Samanvitha, and Jawahar	EI as a predictor of JS	98 Faculty belonging to Arts and Science institutions, Tamilnadu, India
18	2013	Abdollahi and Pour-Moazzen	EI, QWL	University employees. Iran, published in Persian
19	2013	Eghtesadi	EI, QWL, self-efficacy	employees of Education Department. Persian
20	2013	Pizolato, Rehder, de Castro Meneghim, Ambrosano, Mialhe and Pereira	quality of life assessment, post interventions for voice disorders	70 teachers (from 11 public schools), Brazil
21	2014	El Badawy, Srivastava and Sadek,	EI, JS and organizational learning capability	100 academicians from India and 100 from Egypt. Private higher educational institutions in Egypt and India

22	2015	Singh and Singh	QWL, JS , commitment, performance, job engagement, WLB	Review paper
23	2017	Anjum and Swathi	EI, QWL	60 secondary school teachers in Hyderabad, India
24	2017	Bora	QWL, Work Environment, Work- Life Balance, JS	Review paper

It was found that limited work was done in assessing the QWL of employees of HEIs both in India and abroad. Hence, the present study was undertaken to assess the QWL of both the teaching and non-teaching staff of the HEIs. It was believed that the entire academic institution played an important role in building a conducive environment for the new and challenging roles.

### **3. Higher Educational Institutions in India: framework and functioning**

India's education sector faces major challenges and opportunities with approximately 29 per cent of India's population being up to fourteen years of age. The education sector on the whole, was estimated at or US\$ 91.7 billion (or Rs 2,44,824 crore) in FY18 and was targeted to reach US\$ 101.1 billion (or Rs 7,06,587.9 crore) in FY19 (IBEF,2019). According to the same report, India has over 250 million school going students, an exorbitant figure compared to any other country of the world.

India also had the largest networks of higher education institutions in the world. Number of colleges and universities were 39,931 and 993, respectively in 2018-

19. India's higher education segment was expected to increase to US\$ 35.03 billion by 2025.

The higher education system in India had to deal with a number of challenges. Firstly, the number of institutions were much lower and planning for the burgeoning college goers had to be done. Iyer (2019) projects that by 2030, India was expected to have the largest number of people of college-going age – a staggering 14 million. Currently, there were 889 universities that accommodated 28.6 million students. In order to accommodate the newer batches of students, a minimum of 800 new universities and 40,000 new colleges were to be set up by 2030.

The Gross Enrolment Ratio (GER) in higher education stood at 25.8 per cent which was much lower compared to the world's average of 27 per cent. In 2019, UGC had aimed to achieve a GER of 30% by 2020 (PTI,2019).

Another area of concern was the performance of undergraduate (UG) students. With about 30 million students enrolled, only six million completed their graduation in 2017.

Another major concern being the rising aspirations of the middle class which is pushing them to explore the overseas market, the underlying belief being the experiential learning would equip them with better job prospects and an assured future. Though the annual spending is much higher for overseas education, yet the benefits outweigh the costs involved. According to an article in The Statesman (an Indian newspaper) by Iyer (2019), the annual expenditure for studying abroad, from an Indian perspective was double the amount allocated in the Union budget for higher education. The amount was approximately twenty times the amount spent by Indian HEIs on research collectively. The prime reason for the surge in students' preference to international institutions for higher education was the notion that they provided a balance between theoretical and applied knowledge, thereby enhancing the quality of education which in turn would guarantee an assured job.

In order to address these issues, the Central Government disbursed US\$ 1 billion to states for introducing skill development initiatives. The Skill India Mission launched in 2015 aimed at skilling 400 million Indian youth by 2022. In 2016, the Pradhan Mantri YUVA Yojana was introduced by the Ministry of Skill Development and Entrepreneurship at an outlay of US\$ 74.68 million (Rs 521.93 crore) so as to impart training and enhance the employability of the youth.

The government has allowed a hundred percent per cent Foreign Direct Investment in the education sector since 2002. A cumulative FDI worth US\$ 2.47 billion (or Rs 17,262.83 crore) was reported up to March 2019. This segment witnessed 18 merger and acquisition deals during 2017 with an estimated worth of US\$ 49 million (or Rs 342.4 crore). Additionally, this is a viable segment attracting huge investments in terms of private equity and venture capital funding.

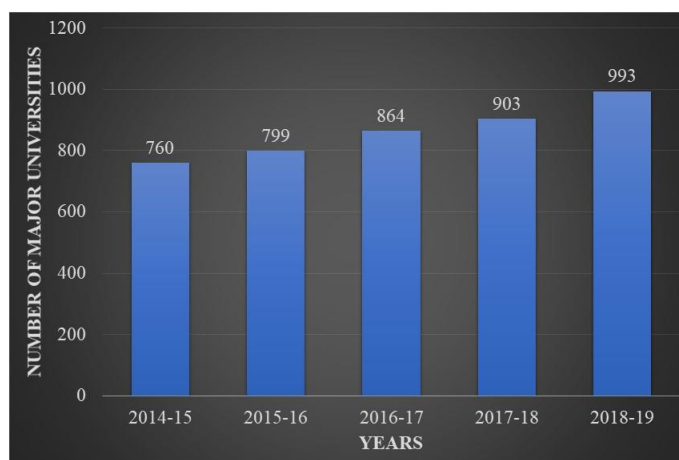
With the enormous thrust to the education sector by the government and the mammoth moral responsibility of grooming the future generations, institutions of learning face myriad challenges. Hence the coping abilities and the overall work environment move hand in hand in providing an enriching experience for the younger generation.

### ***3.1. All India Survey on Higher Education (AISHE) Report***

For the present study, the report of All India Survey of Higher Education (AISHE), 2018-19 was referred. It is a report of the Government of India, published by the Department of Higher Education under the aegis of Ministry of Human Resource Development in 2019. The report is based on the voluntary uploading of data by Higher Education Institutions of the country. The responding institutions were registered with AISHE code in the AISHE portal, namely [www.aishe.gov.in](http://www.aishe.gov.in).

According to the AISHE web portal, there are 993 Universities, 39931 Colleges and 10725 Stand Alone Institutions. The report also discloses that 385 Universities were privately managed.

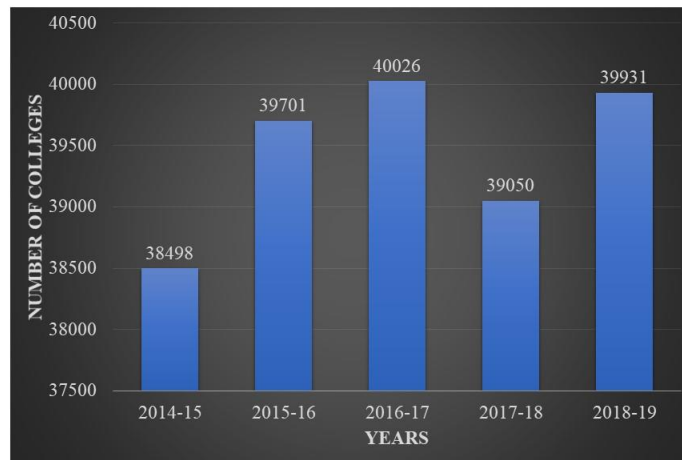




**Figure 2. 9. Number of Major Universities**

**(Source: AISHE,2019)**

The above figure shows that the number of universities has risen over the past five years from 760 (in 2014-15) to 993 (in 2018-19) by about 30.7 percent. A similar trend is observed in the case of Colleges (i.e. 38498 in 2014-15 to 39,931 in 2018-19) by approximately 3.7%. It may be noted that a sudden dip in the number of colleges in 2017-18 was due to the non-registration of certain institutes even after getting the AISHE code (such institutions were not considered during the preparation of the report)



**Figure 2.10. Number of Colleges**

**(Source: AISHE,2019)**

**Table 3. Number of Universities by Type**

**(Source: AISHE,2019)**

Type of University	Number of Universities
Central University	46
Central Open University	1
Institution of National Importance	127
State Public University	371
Institution Under State Legislature Act	5
State Open University	14
State Private University	304
State Private Open University	1
Deemed University-Government	34
Deemed University-Government Aided	10
Deemed University-Private	80
<b>Grand total</b>	<b>993</b>

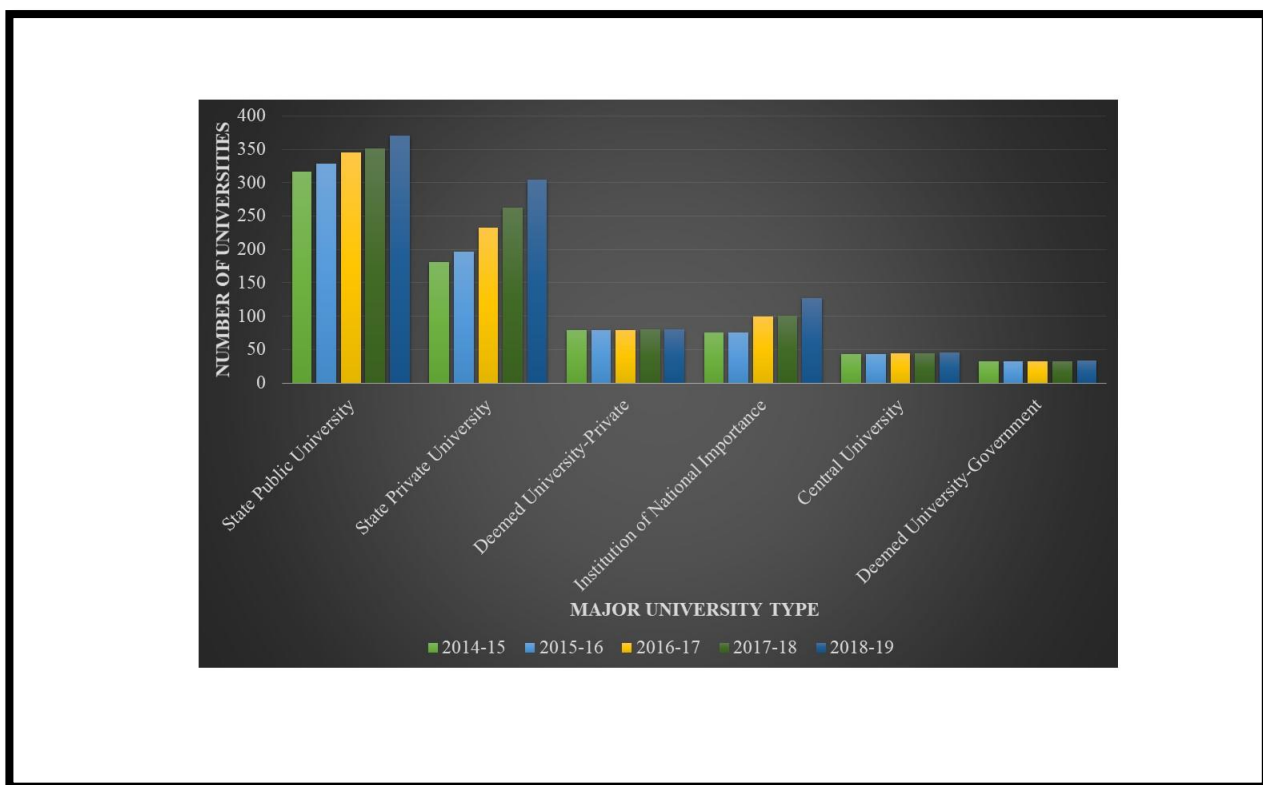
Table 1 gives a summary of the number of Universities by type as per the latest report of AISHE. Table 2 shows that the number of Universities categorized on the basis of types has also witnessed an increase.

**Table 4. Number of Major Universities by Type during  
2014-2019**

**(Source: AISHE,2019)**

Major University Type	Number of University				
	2014-15	2015-16	2016-17	2017-18	2018-19
State Public University	316	329	345	351	371
State Private University	181	197	233	262	304
Deemed University-Private	79	79	79	80	80
Institute of National Importance	75	75	100	101	127
Central University	43	43	44	45	46
Deemed University-Government	32	32	33	33	34

Figure 2.11 encapsulates the data represented in the Table 2.



**Figure 2.11. Number of Major Universities by Type during 2014-2019**

**(Source: AISHE,2019)**

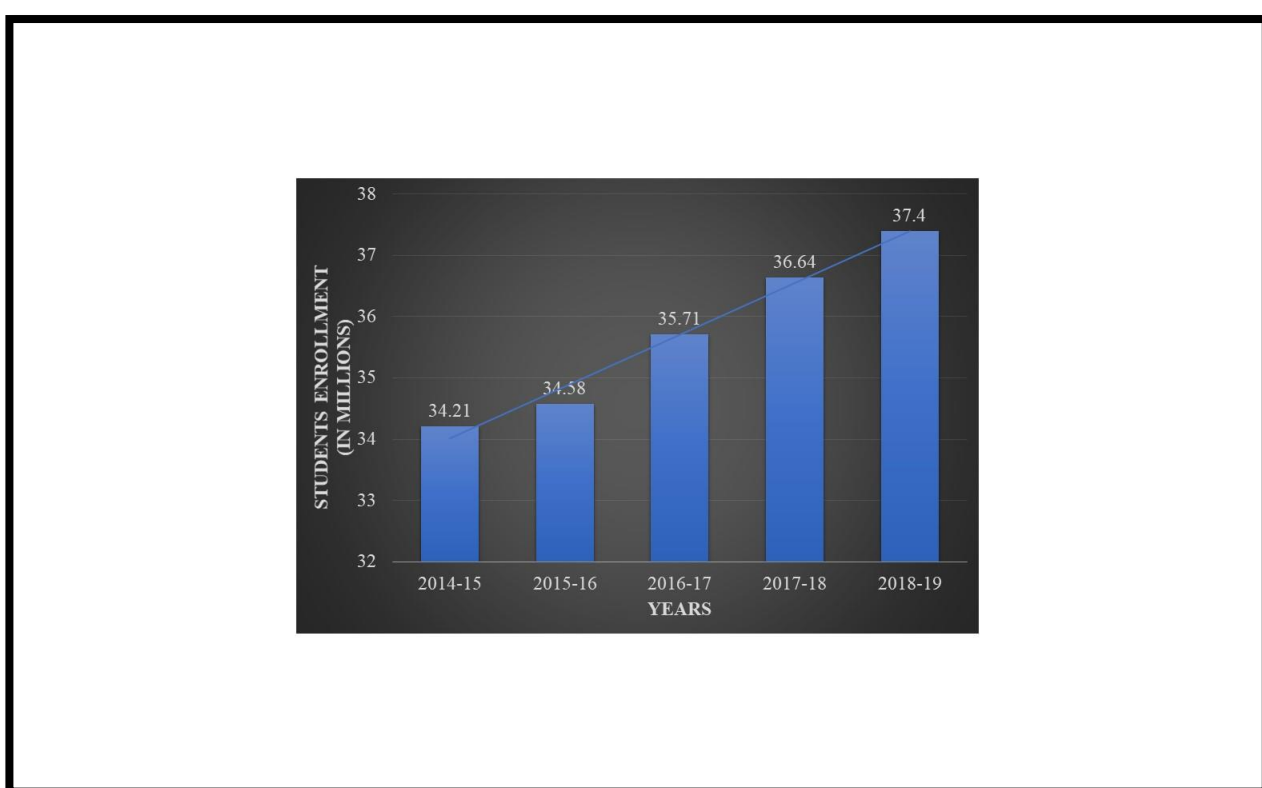
According to subject wise categorization of the Universities, there were 500 General, 126 Technical, 70 Agriculture and Allied, 58 Medical, 22 Law, 13 Sanskrit and 10 Language Universities, while the remaining 83 Universities are of other categories.(AISHE,2018).

Regarding the Colleges, majority of the Colleges (78%), were privately managed, of which 64.3% were private unaided and 13.5% were Private aided. The Government Colleges constituted the remaining 22.2%. There were wide variations among the states with respect to the number of private colleges (AISHE,2019).

Another important highlight of the report was the college density, i.e. the number of colleges per lakh of the eligible population (i.e. population in the age group of 18-23 years). This figure stood at seven in Bihar to fifty-one in the states of Karnataka and Telangana, compared to an all India average of twenty-eight (AISHE,2018).

The report also mentioned that the total enrolment in Higher Education had been 37.4 million with 19.2 million boys and 18.2 million girls (who made up 48.6% of the total enrolment). The report also made an interesting disclosure that though more than 78% of the colleges were in the Private sector, both aided and unaided considered together, they catered only to 66.4% of the total enrolment (AISHE,2019).

The enrolment has risen phenomenally from 3,42,11,673 in 2014-15 to 3,73,99,388 in 2017-18, which represented that the overall growth was 9.3%.The growth in enrolment is shown in the figure below:

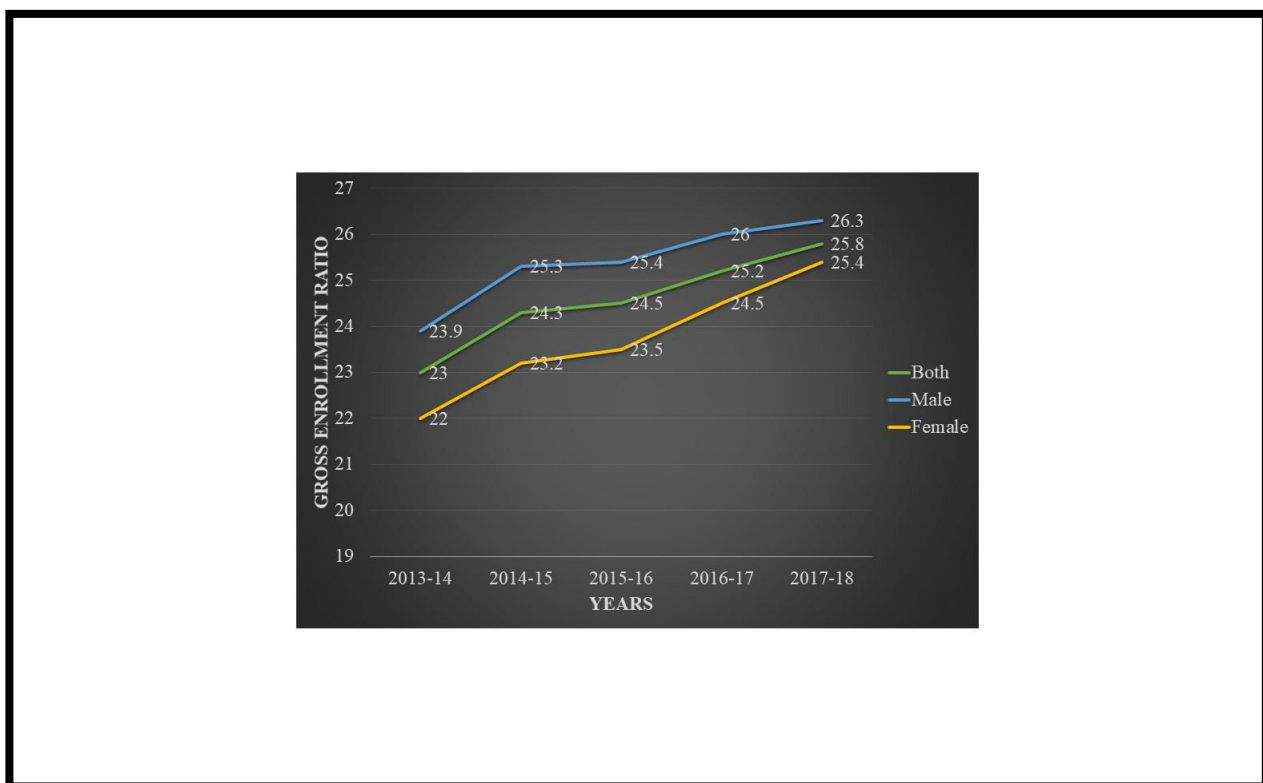


**Figure 2.12. Students' Enrollment**

**(Source: AISHE,2019)**

The GER (i.e. Gross Enrolment Ratio) in higher education, stood at 26.3 percent during 2018-19. GER for the male population was 26.3 percent while for the females, it was 25.4 percent. GER had risen from 24.3 percent in 2014-15. The report also stated that the increase in GER was higher for the female students in comparison to the male

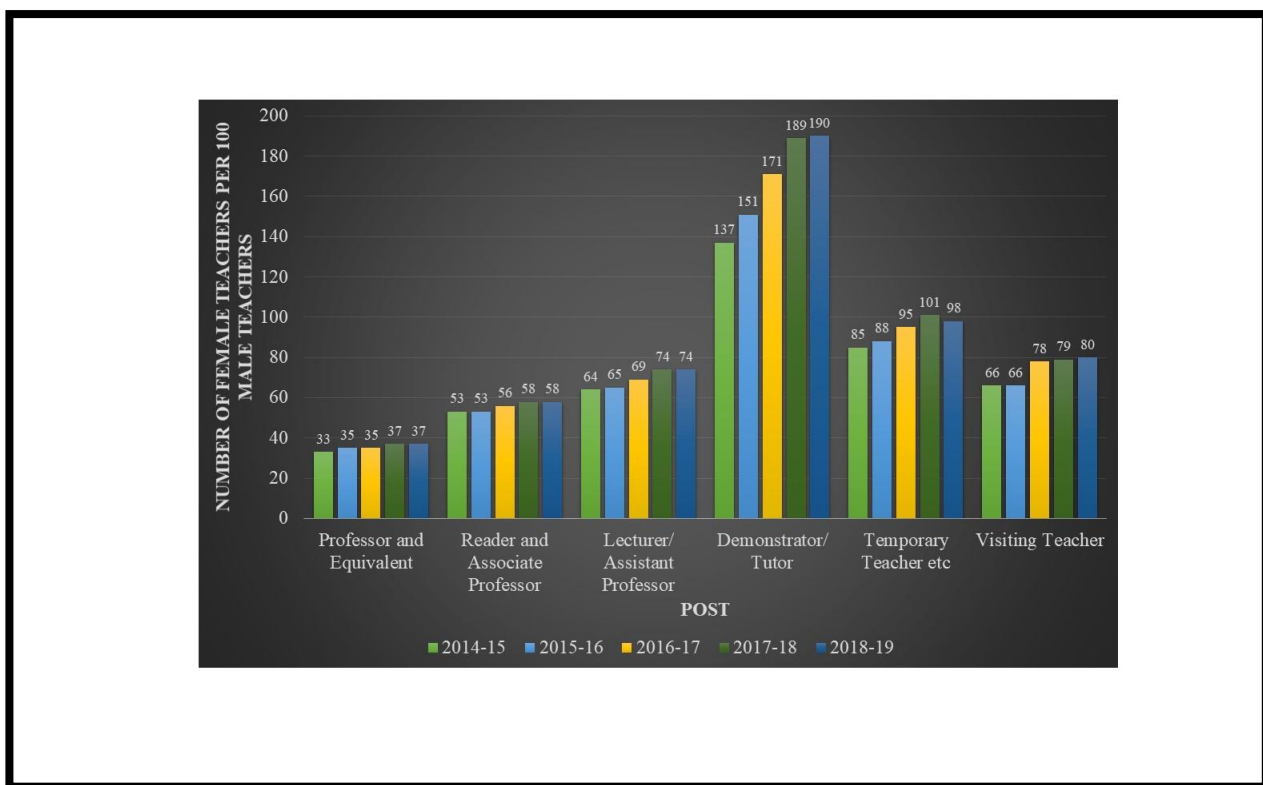
students. This trend is depicted in the figure below for the duration 2013-2018(AISHE, 2018).



**Figure 2.13. Gross Enrollment Ratio (Gender wise and Combined, 2013-18)**

**(Source: AISHE,2018)**

Regarding the number of teachers, the figures reported were 14,16,299 which was 12,47,453 in 2010-11. The gender wise break up was 57.8% male teaching staff and 42.2% female teaching staff. At the pan India level, the ratio of female teachers to male teachers was 73:100. The representation of female teachers had risen consistently over the years for all the levels.



**Figure 2.14. Post -wise, Number of Female Teachers per 100 Male Teachers**

**(Source: AISHE,2019)**

Among the non-teaching staff, Group A and Group B constituted 15.4% and 17% respectively. The share of Group C was highest at 39.3%, while Group D contributed to 28.3% of the share. The ratio of female to male non-teaching staff stood at 49:100.

Another important metric, i.e. Pupil Teacher Ratio (PTR) in the Universities and Colleges stood at 29. This took into consideration, all types of institutions, namely, colleges, universities and stand-alone Institutions.

### **3.2. National Education Policy, 2020**

The New Education Policy approved by the Cabinet was a step in revamping the educational system in the country to align it with the aim of inclusive and sustainable



development of the country. The prime objective of the policy was to make “India a global knowledge superpower”. This was to be achieved by developing knowledge, skills, values, and dispositions that supported responsible commitment to human rights, sustainable development and living, and global well-being.

It stressed that by 2040, all HEIs shall aim to become multidisciplinary institutions. Each of them would strive to accommodate at least three thousand students. It laid down that, by 2030, there should be at least one large multidisciplinary institution in or in the proximity of every district.

It simplified the present complex nomenclature of HEIs in the country such as ‘deemed to be university’, ‘affiliating university’ etc and recommended that all shall be replaced simply by ‘university’. A common term, ‘affiliated colleges’ would be gradually phased out in the next fifteen years.

Universities would mean a multidisciplinary institution that offered undergraduate and graduate programmes. They were required to be home to high quality teaching, research, and community engagement. Institutions would be categorized in a continuum from Research-intensive Universities to teaching-intensive Universities. It would encourage the proliferation of a wide spectrum of institutions, placing equal emphasis on teaching and research.

With an aim to provide holistic learning, even engineering institutions, such as IITs, will move towards multidisciplinary education offering courses in arts and humanities. Students with arts and humanities background would be motivated to explore the world of science.

This would be facilitated with the establishment and strengthening of departments in Languages, Literature, Music, Philosophy, Indology, Art, Dance, Theatre, Education, Mathematics, Statistics, Pure and Applied Sciences, Sociology, Economics, Sports, Translation and Interpretation, etc. at all HEIs.

It aimed to increase the GER in higher education including vocational education from 26.3% to 50% by 2035. Emphasis on vocational training and skill development was evident from the impetus given in this domain. Vocational education would be

integrated into all school and HEIs in a step by step manner. The aim was to expose at least fifty percent of learners to vocational education through the school and higher education system.

HEIs shall move towards a continuous and comprehensive evaluation system. This would ensure that adequate learning was taking place

According to an article published in Hindustan times, India would be promoted as a global study destination providing high quality education at an economical cost (HT, 2020). In order to facilitate this, an International Students Office would be set up at each institution hosting foreign students. In addition, setting up of offshore campuses of Indian universities would be facilitated and selected universities from among the world's top-ranking universities would be encouraged to set up their campuses in India.

Hence with the increased focus of the government and policy makers to provide quality education to the burgeoning youth, with the thrust towards cultivating skills for employability the nation is geared up to face the challenges of the new world order. The institutions of higher education must be well equipped with both the hard and soft infrastructure to provide the right environment for nurturing the future of the nation. Hence, they have an enormous responsibility. The future generations will hold them in high regard if they are able to provide the right proportions of knowledge and skills in making just and dynamic leaders of the future. It may be also mentioned that the role of the teacher has always been recognized since time immemorial for the achievements of the multifaceted students. Socrates and Aristotle are the much-revered philosophers and guides. Chanakya, the guru of Chandragupta Maurya from Ancient India is considered to be the guiding light responsible for building a strong Maurya kingdom. Hence the faculty and staff must realize their moral responsibility to unleash the potential of the youth in making them good and capable adults.

#### **4. Summary**

EI has been found to play a key role in determining happiness and success in personal and professional lives of individuals. It has been found to influence behaviour, ability

to focus, decision making ability, and relationships in the personal and professional domain. People scoring high on EI have been found to be more assertive, are more social and have a higher sense of achievement. It has also been found that a higher EI is associated with many positive outcomes. The dynamic workplace offers multiple challenges. It requires the highly skilled employees to work as effective team members bringing in creative solutions to tasks assigned. They are also required to keep pace with the advancements in technology while maintaining balance between their personal and professional lives. The role of the HEIs is of major importance as it grooms the adults to shoulder the responsibilities with ease and élan. According to the AISHE, 2018-19 report, majority of the colleges were privately managed (about 78 percent).

Hence the role of the educators and the supporting staff is of immense importance. A proper match between their EI and the workplace conditions is essential so as to ensure their efficiency and productivity at work in privately managed higher education institutions. Only when these two factors are taken into account simultaneously can we expect to achieve the desired results of grooming mature, self-sufficient, law abiding and compassionate adults.

## **5. Research Gap**

The literature reviewed provided a piecemeal account of different aspects related to personal and job-related dimensions in the HEIs in India. With no comprehensive work done in the area of assessment of EI and QWL of the employees working in the private institutions of higher education in India, the present study was undertaken. The study was restricted to institutions located in the NCR of India. The study attempts to bring out the status of EI and QWL of the employees. The study was undertaken to clearly bring out the relationship between the different elements of EI and QWL. It examined the association between the EI and QWL of the employees. It also attempted to investigate whether the EI of the employees had an impact on their QWL.

## **6. Theories that support the study**

### ***6.1 Social Exchange Theory (SET)***

SET upholds that in a social exchange process, the customers make pragmatic decisions to engage based on the perceived benefits and costs (Blau, 1964; Harrigan et al., 2017). Researchers uphold that in a continuing association between two parties, the exchange could be social, economic and an amalgamation of economic as well as social, the benefits and costs of each included. (Harrigan et al., 2017).

When an employee is engaged in work in an organizational set-up, this exchange process comes into play. The employees become the internal customer of the organization. There is a mutual give and take between the two. Economic benefits accrue to the employees in terms of salaries and allowances provided and to the organization in terms of increased market share and brand recognition.

## ***6.2 Customer Engagement Theory (CET)***

This theory emerges from social sciences from disciplines such as sociology, psychology, organizational behaviour and political science (Brodie, et al., 2011). It is expressed in terms of intensity of involvement and personal bonding with a provider or brand (Vivek et al., 2012). Calder et al. (2016) purported that CE in some contexts had a distinct emotional, cognitive and/or behavioural component. This was of particular significance during the development of a metric for a specific context. They argued that a single scale would be too generic to capture the extent of engagement in a multitude of contexts.

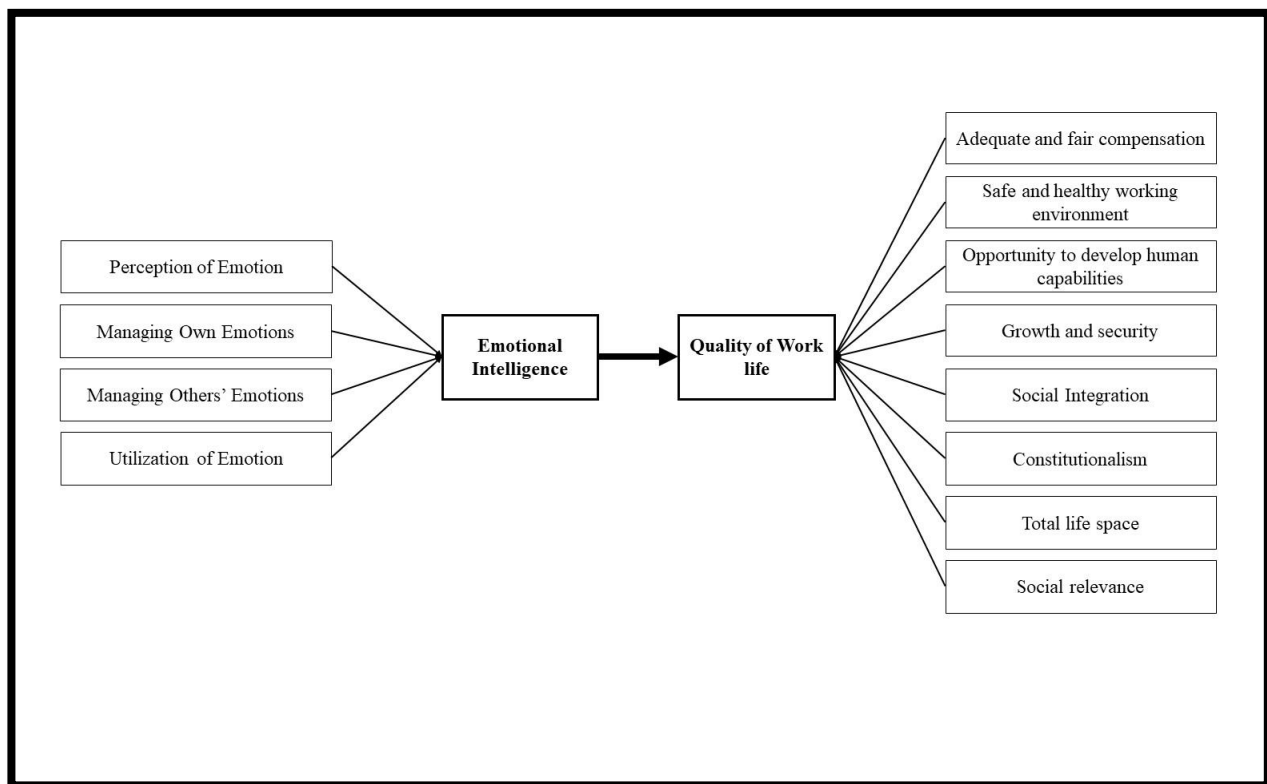
Johnston (2018) in his paper titled “Toward a theory of social engagement” discussed concepts such as engaged organizations and engaged societies. Such institutions were responsive to the requirements of the people who were the members of the different organizations and the society at large. He, along with other authors have suggested that engagement was a “dynamic multidimensional relational concept featuring psychological and behavioural attributes of connection, interaction, participation, and involvement.” According to them, the purpose of engagement is to achieve a particular outcome or response.

When the organization considers its employees as its internal customers, it has to design its systems and procedures that align with this philosophy. This then translates into the long-term strategy of fulfilling the requirements of both the external and internal (i.e.

the employees) customers. When there is a strong customer engagement, the organization is bound to achieve a competitive edge.

## 7. Conceptual Framework

The present study was undertaken to get an insight regarding the emotional intelligence and QWL of employees of the HEIs working in the private domain in India. The following conceptual framework was developed for the study:



**Figure 2.15. Conceptual framework for the Study**

The two main variables of the study were Emotional Intelligence and Quality of Work Life. Perception of emotions, managing own emotions, managing others' emotions and utilization of emotions constituted the EI of an individual. The scores of each of these sub domains were computed and their impact on QWL was studied. In addition, the consolidated score of EI, taking into consideration all the four sub domains were also

computed. The impact of this consolidated score of EI on QWL was also studied. The scores of each of the eight sub domains of QWL were computed and consolidated to obtain scores of QWL. These scores of QWL were used in the study.

## Chapter 3

### Objectives and Research Hypotheses

#### Research Question

Based on the research gap, it was deemed necessary to examine and probe the following:

Is there a relationship between EI and QWL among the employees of HEIs of the private sector in the NCR; and if it is there, then what is the magnitude of impact of EI on QWL?

#### Research Objectives

Since the issue is of vital importance as it concerns the future of the nation and the task is mammoth the following objectives were crystallized for the study:

In order to seek answers to the above research questions, the following objectives were crystallized for the study:

1. To find out the magnitude and direction of relationship between EI and QWL.
2. To find out the magnitude and direction of relationship between the different sub-domains of EI and QWL.
  - a. To find out the magnitude and direction of relationship between **Perception of Emotion** and QWL
  - b. To find out the magnitude and direction of relationship between **Managing Own Emotions** and QWL
  - c. To find out the magnitude and direction of relationship between **Managing Others' Emotions** and QWL
  - d. To find out the magnitude and direction of relationship between **Utilization of Emotion** and QWL

- 3.To find out whether EI and QWL are independent.
- 4.To analyze the impact of EI on QWL.
5. To find out what combination of sub-domains of EI had the maximum impact on QWL
6. To analyze the impact of different sub-domains of EI on QWL.
  - a. To analyze the impact of **Perception of Emotion** on QWL.
  - b. To analyze the impact of **Managing Own Emotions** on QWL
  - c. To analyze the impact of **Managing Others' Emotions** on QWL
  - d. To analyze the impact of **Utilization of Emotion** on QWL

### **Hypotheses of the Study**

The objectives of the research led to the formulation of the following four hypotheses:

**H<sub>01</sub>:** EI and QWL are independent

**H<sub>02</sub>:** There is no significant impact of EI on QWL

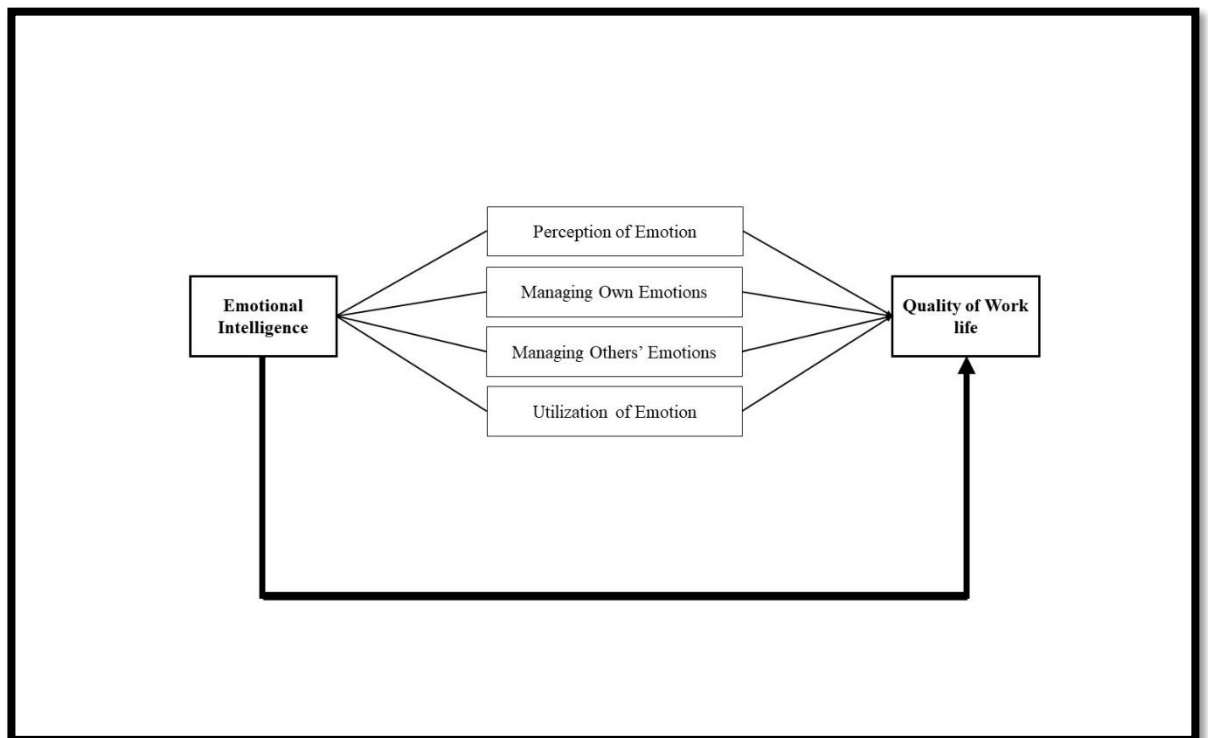
**H<sub>03</sub>:** There is no significant impact of different sub-domains of EI (combined) on QWL

**H<sub>04</sub>:** There is no significant impact of different sub-domains of EI (individually) on QWL



Objectives 1 and 4 were to be tested with the hypothesis **H<sub>02</sub>**. Objectives 2 and 6 were to be tested with the hypothesis **H<sub>04</sub>**. Objectives 3 was to be tested with the hypothesis **H<sub>01</sub>** and Objectives 5 was to be tested with the hypothesis **H<sub>03</sub>**.

The conceptual model developed for the study was depicted in Figure 3.1



**Figure 3.1. Conceptual framework depicting the impact of EI and its sub-domains on QWL**

## **Chapter 4**

### **RESEARCH METHODOLOGY**

With the extensive review of literature carried out it was found that there was no study carried out in the past to assess the relationship between emotional intelligence and quality of work life specifically in the private sector higher education institutions. A need was there to find out the emotional intelligence level of the faculty and the staff of the higher educational institutions who were entrusted with the massive responsibility of shaping the future of the nation. It was also hypothesized that a good quality of work life would provide a motivating ecosystem to the faculties and staff of the HEIs. The benefits of such a work environment would be transferred to the recipients of knowledge, namely the students. A congenial environment of growth and would promote a healthy development of students who were the future of the nation. The students would be groomed to deal adequately with normal social relations and would be well equipped to lead satisfying and fulfilling lives. By possessing an analytical mind and emotionally balanced personality, they may perform better in all spheres of life. Such individuals would help in nation building and thereby lead the country with pride and justice for all. In order to bridge the gap in the world of research and academia, and to obtain a deeper insight into the functioning of the higher educational institutions of the country, the National Capital Region that functioned in the private domain were chosen for the study. The private institutions were about seventy-eight percent of the total number of higher educational institutions in the country. Hence these institutions which were situated in the NCR constituted the sampling frame. The employees of the higher educational institutions were identified as the sampling units. The details of the research plan are discussed in the following paragraphs.

#### **1. Rational of the topic chosen**

There has been an increasing pressure on the private sector in the face of growing competition. The educational institutions are an integral part of such a competitive

ecosystem. its employees are under constant pressure to deliver results. Often employees of the organizations, both the teaching and the non-teaching staff are required to work for long hours which leads to increased stress levels. The ever-increasing demands of the private institutions often places the employees in difficult situations where in the emotional well-being of the employees is challenged. If such conditions prevailed for a long duration of time, it may hamper the proper grooming of the students. In the words of Dr. Richard Kadison, Chief of Mental Health, Harvard University,

“It is clear that academic success goes hand in hand with emotional and physical well-being. College is a fresh start for many students, but dysfunctional coping styles can cripple their efforts. Even students who “get by” or succeed academically can be at risk if unhealthy behavioral patterns follow them after college. Promoting emotional health in students is an investment in the future. It should be part of the mission of all colleges and universities.”

He has clearly emphasized the need of focussing on the emotional development of the students so as to make them well equipped both mentally and physically with the requisite amount of resilience and patience. An emotionally secure environment to promote healthy mental development of students which would go hand in hand with the enrichment of their knowledge and skills at the college and university is a sine qua non to achieve this aim.

The organisations are also aware of the socio technical requirements and hence try to introduce measures to improve the QWL of the employees. By doing so, higher levels of employee productivity are ensured. Educational Institutions also require that they have capable teachers and employees, and they try to retain skilled workers and employees in the organizations. In addition, there is higher employee engagement and commitment and thereby lower turnover. From the organisation’s perspective, several studies have indicated that there is a significant impact of QWL on organisational commitment and organisational citizenship behaviour. Along with the issues of retention, professional advances in the field of scientific enquiry are dependent on the emotional abilities along with the intellectual abilities.

Alvin Toffler (1981), the famous futurologist concurs that in the future, the society will become a knowledge-based society which would be combining creativity and imagination based on emotions.

Hence there is a need to study the relationship between EI of the employees and the QWL of the employees of the HEIs. According to AISHE, 2018-19 Report, more than 78% of the colleges were in the Private sector (AISHE,2019). Hence it was found imperative to begin the enquiry from the higher educational institutions in the private domain.

### **1. Rational of the scale chosen**

The ability model of EI is proposed by Salovey and Mayer in 1990 is the most researched and supported measure. It used a four branched approach to measure ability dimensions of EI which were classified as “perceiving emotions, understanding emotions, managing emotions and using emotions.” Nicola Schutte and her associates developed a measure known as The Assessing Emotions Scale, based on the model proposed by Salovey and Mayer in 1990. It is commonly cited as the Emotional Intelligence Scale, the Self-Report Emotional Intelligence Test, or the Schutte Emotional Intelligence Scale. It is the most widely used measure of EI. According to them, the sub-scales of EI were

- (i) Perception of emotions,
- (ii) Managing own emotions,
- (iii) Managing others’ emotions and
- (iv) Utilization of emotions.

The responses on this scale were solicited on a five-point Likert Scale. The scoring was done as follows: 1 for strongly disagree, 2 for somewhat disagree, 3 for neither agree nor disagree, 4 for agree and 5 for strongly agree. According to an article published by John Malouf, an associate of Nicola Schutte, their paper introducing their proposed scale reported over one thousand and seven hundred citations (Malouf, 2014).

The Assessing Emotions Scale was developed in English by Schutte et al. (1998). Most of the studies which have utilized it have used the English version. However, some studies have used translations of the scale in different languages. The translations include a Hebrew version used by Carmeli (2003), a Turkish version used by Yurtsever (2003), a Polish version used by Oginska-Bulik (2005) and a Swedish version used by Sjöberg et al. (2005).

This scale was adapted for the present study. The adapted scale had the following number of items in the four subscales; five for perception of emotions, managing own emotions and managing others' emotions and four for utilization of emotions. The adapted scale was tested for internal consistency or reliability.

For the measurement of QWL, the scale developed by Walton (1973) was used. His proposed a scale consisted of eight sub-scales as follows:

- (i) Adequate and fair compensation (AS),
- (ii) Safe and healthy working environment (WC),
- (iii) Opportunity to develop human capabilities (YC),
- (iv) Growth and security (OW),
- (v) Social integration (SI),
- (vi) Constitutionalism (C),
- (vii) Total life space (SL) and
- (viii) Social relevance (SR).

This scale has been most widely used in research and academia in diverse work environments. It has been adapted to suit the specific work environments. For the purpose of the present study, it was adapted taking into consideration those factors that were applicable to educational institutions. The adapted scale had three items in each of the eight subscales. The adapted scale was tested for internal consistency. The responses to each item were sought on a five-point Likert Scale. The scoring pattern was as follows: 1 for very dissatisfied, 2 for dissatisfied, 3 for neither satisfied nor dissatisfied, 4 satisfied and 5 very satisfied.

## 2. Measurement Tool

Questionnaire divided into three parts

**Part A: Demographic profile.** The demographic profile consisted of the age, gender, designation, years of service in the current institution, total work experience and marital status. The responses were sought on a 5-point Likert scale for Part B and C of the questionnaire.

**Part B:** Adapted from “Assessing Emotions Scale” developed by Schutte et al. (1998). The adapted scale consisted of 19 items. The four subscales of EI, abbreviated as PE, MOE, MOthE and UE had 5, 5, 5 and 4 items respectively.

**Part C:** Adapted from “Quality of Work Life Evaluation Scale” developed by Walton, R.E. (1979). The adapted scale consisted of 24 items. Each of the eight subscales of QWL, abbreviated as AS, WC, YC, OW, SI, C, SL and SR had 3 items each.

The questionnaire was compiled and discussed with the supervisors and experts in the field of Human Resource Management and Statistical analysis. Changes suggested by the supervisors and the experts were incorporated.

Pretesting of the instrument was done to ascertain whether there was clarity in the language and it could be easily understood by sharing the questionnaire with a neutral group of participants. They were also provided with an evaluation sheet which covered issues such as clarity, legibility and relevance. It was found that it could be easily understood by them and took a maximum of 10-12 minutes to fill the questionnaire.

## 3. Validity and Reliability of the Questionnaire

Validity refers to the degree to which an instrument measures what it is designed to measure (Polit and Hungler, 1999). Validity of the research instrument had been established by the developers of the respective scales. However, since we were working with the adapted scale, it was necessary to check for its validity. Content and face validity were established by discussing with experts in the field of Human Resource Management and Psychology. The panel were requested to review the content of the

items in each of the instruments and determine whether they were within the linguistic capabilities and understanding of the employees. The suggestions of the panel were incorporated. After the modifications, the research instrument was resubmitted to the panel. Once they unanimously approved it, it was used for the study. Thereafter, validity of the instruments was checked with the help of item-scale correlations. Once the validity of both the instruments was established, it was checked for reliability.

“Reliability refers to the degree of consistency with which the instrument measures what it is supposed to measuring. The instrument is reliable if there are no errors of measurement and the true score component is at its maximum” (Polit and Hungler, 1999). This was done with the help of pilot testing of the questionnaire with the help of 50 respondents. In the words of Perry (2001), “pilot studies were important as they provided the researchers with a test of feasibility of conducting a large-scale study, including ease of getting participants, clarity of the instruments, and the discovery of any impediments to the research that might not have been anticipated during the planning stage.”

For the present study, a pilot study was deemed necessary as an adapted scale was being used. Hard copies of the questionnaire were distributed to the respondents covering the different profiles of the respondents (designation, gender and age). Data were collected and the validity and reliability were tested. Validity was tested with the help of item-scale correlations and reliability test was accomplished with the help of Cronbach alpha test. All the items of the EI and QWL scale reflected significant correlations at 1% level. Regarding reliability, the EI scale yielded a Cronbach alpha value of 0.804 and the QWL scale yielded a value of 0.904. Hence the data reflected a high degree of consistency.

#### **4. Research design**

The research design is descriptive that is it aims to provide a comprehensive and detailed explanation of the concept of EI and QWL. It describes the level of EI and QWL of the employees of the higher educational institutions running in the private mode in the NCR.

## **5.Type of Research**

- It is inferential research, and is concerned with drawing inferences from the findings of the research
- It is conclusive research based on both parametric and non-parametric tests.
- The findings of the study are based on correlation analysis, simple and multiple regression analysis and Chi square test of independence.
- The findings and recommendations of this research are definite
- This research has specific objectives, clear cut data requirements and adequate sample drawn with the help of probability sampling method
- The hypotheses of the study are tested with the help of suitable test statistics, 't' test and ANOVA.

## **6. Sampling design**

The sampling design may be discussed under the following four heads

### **6.1 *Sampling method***

Convenience sampling was used for the present study. It is a special case of non-probability sampling.

### **6.2 *Sample description***

The employees of the higher educational institutions were the respondents from whom the responses of the study were collected. They consisted of the teaching and administrative staff.

### **6.3 *Sample size***

The proposed sample size was between 550 to 650. The questionnaire consisted of ten questions that captured the demographic profile, nineteen questions for EI and twenty-four questions for QWL. As per thumb rule, the number of responses should be greater than 10 times the number of questions. According to Israel (1992), for a population size of more than 1,00,000 and a precision level of 5% at a level of confidence of 95%, the adequate sample size is 400. Keeping both the criteria in mind, data were collected.



#### **6. 4 Sampling frame**

Sampling frame comprised of the private institutions of higher education in the NCR of India. It included Delhi, Gurugram, Noida and Faridabad

#### **7. Data collection**

Primary data were collected with the help of questionnaires. For data collection, the method used was the questionnaire. The tool used was the scale developed by Schutte et al. (1998) and the scale developed by Walton (1973). Data were collected with the help of structured questionnaire. Data were collected in two stages. The first was done with the help of hard copies of the questionnaire for the pilot testing. After testing the instruments for reliability and incorporating changes as suggested by the experts the questionnaire was transferred to the Google forms This constituted the second stage of data collection. This was done to facilitate data collection amidst lock down imposed due to Covid-19. In addition, the internet facilitated the spread of the questionnaire and helped in data collection

#### **8.Statistical tests**

As stated earlier, the study was taken to examine the level of EI and QWL of the employees of the private higher educational institutions in the National Capital Region. Data were collected and organized in order to carry out analysis in the light of study objectives and hypotheses.

In the first stage of data analysis, various statistical measures such as percentage distribution, range, mean, and standard deviation were used to categorize and describe the different variables of the study. In the second stage of data analysis, Pearson's correlations were employed to compute inter-correlation of the research measures.

The next stage involved the Chi square test of independence between the scores of EI and QWL. This non parametric test of association was carried out to assess the relationship between EI and QWL for the selected sample by classifying each of the variables into three categories.

The final stage of analysis involved assessing the impact of EI on QWL. This analysis was intended to determine the variables or sub-domains of EI that had a significant impact on QWL.

The Statistical Package for Social Sciences (SPSS) 20.0 was used to analyse the data. Throughout the study, a level of significance of five percent ( $\alpha = 0.05$ ) was used to reject or accept the null hypotheses. The results of analysis were reported in accordance with the objectives of the study.

## **Operational Definitions of the Terms**

### **Emotional Intelligence**

EI was measured with the help of the scale proposed by Schutte et al. (1998) and adapted for the present study. The responses were collected on a five point Likert Scale. The average of the scores obtained were computed for each sub-domains of EI, namely PE, MOE, MOthE and UE. This was followed by the computation of the composite score of EI which took all the four sub scales into consideration. This composite score of EI was used against the composite score of QWL to analyse the Personian correlation coefficient. This was also used in the linear regression analysis with EI taken as the independent variable and QWL taken as the dependent variable.

EI was further classified as high, moderate and low (i.e. on a nominal scale) to facilitate the Chi square test of independence. This was done in accordance with guide lines stipulated by Likert (1932), whereby resulting total score of a variable may be interpreted normatively, with reference to some comparison group or absolutely, with reference to some pre-defined theoretical or empirical chosen cut-off scores.

#### ***High EI***

Respondents having a composite score in the range of 3.67 to 5 were considered as having a high EI.

#### ***Moderate EI***

Respondents having a composite score in the range of 2.34 to 3.66 were considered as having a high EI.

### ***Low EI***

Respondents having a composite score in the range 1 to 2.33 were considered as having a low EI.

### **Quality of Work life**

QWL was assessed with the help of scale developed by Walton (1973) and adapted for the present study. The responses were collected on a five-point Likert Scale. The average scores were computed for each of the eight elements of QWL. Then a composite score which was the average of these averages was computed to represent the QWL. This composite score was used to compute the correlation coefficient and carry out the regression analysis.

QWL was further classified as good, average and poor (i.e. on a nominal scale) to facilitate the Chi square test of independence.

### ***Good QWL***

Respondents having a composite score in the range of 3.67 to 5 were considered as having a good QWL.

### ***Average QWL***

Respondents having a composite score in the range of 2.34 to 3.66 were considered as having an average QWL.

### ***Poor QWL***

Respondents having a composite score in the range 1 to 2.33 were considered as having a poor QWL.

## **Chapter 5**

### **ANALYSIS AND DISCUSSION**

Data were collected through with the help of the questionnaire designed for the study. The employees of the private higher education institutions located in the National Capital Region of India were administered the questionnaire with the help of Google Forms. Their responses were analyzed using SPSS 20. The characteristics of the respondents were summarized. Different statistical tests (both parametric and non-parametric) were performed as per the objectives outlined for the study. The analysis of data was presented in tabular form and discussed in the following sections.

Prior to the analysis, the validity and reliability of the instrument was tested. The validity was tested by finding the inter-item correlations. The computed correlations were found to be greater than the critical value of correlation at a df of 616 obtained from the “t” tables for a two tailed test at a 5% level of significance. Hence it was concluded that all the items selected for the study were valid. The SPSS outputs for this test were presented in Appendix B (1) and Appendix B (2).

Then, the reliability of each subscale of EI and QWL was tested. This was followed by testing the reliability of the composite scale of EI and QWL. The SPSS outputs of these tests were presented in Appendix C and Appendix D.

Cronbach alpha values for the subscales of EI were as follows:

- (v) Perception of emotions (PE) - 0.800
- (vi) Managing own emotions (MOE) - 0.781
- (vii) Managing others’ emotions (MOthE) - 0.703 and
- (viii) Utilization of emotions (UE) - 0.723

Cronbach alpha values for the subscales of QWL were as follows:

- (ix) Adequate and fair compensation (AS) – 0.781
- (x) Safe and healthy working environment (WC) – 0.717

- (xi) Opportunity to develop human capabilities (YC) – 0.784
- (xii) Growth and security (OW)– 0.710
- (xiii) Social integration (SI) – 0.701
- (xiv) Constitutionalism (C) – 0.858
- (xv) Total life space (SL) – 0.803 and
- (xvi) Social relevance (SR) – 0.771

In the next stage, reliability of the composite scales of EI and QWL were tested. The EI scale had a Cronbach alpha value of 0.806 and the QWL scale had a Cronbach alpha value of 0.898.(Appendix D)

According to George and Mallery (2003, p. 231), a Cronbach alpha value of more than 0.9 was excellent more than .8 was good, more than 0.7 was acceptable, more than 0.6 was questionable. All the values in our study were between 0.7 and 0.9. Hence the reliability of the instruments and their subscales was well established.

## **5.1 CHARACTERISTICS OF THE RESPONDENTS**

Data were collected from 618 employees. The information regarding the general demographic characteristics of the respondents in terms of age, gender, profile in the institution, income level in rupees, years of service in the current institution, total work experience, and marital status was analyzed. The following tables and graphs give an insight about the sample of the study.

There were 441 females and 177 males. The females constituted 71.4 % of the total respondents. Since simple random sampling was carried out, the percentage of the female employees were in majority.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	441	71.4	71.4	71.4
	Male	177	28.6	28.6	100.0
	Total	618	100.0	100.0	

**Figure 5.1 Gender of Respondents**

The administrative staff constituted about 20% of the total respondents. The teaching staff were about 80% of the total sample. The teaching staff were categorized as Assistant Professor, Associate Professor and Professor. They constituted 62.1 %, 11.7 % and 6.3% respectively of the total employees.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Administrative Staff	123	19.9	19.9	19.9
	Assistant Professor	384	62.1	62.1	82.0
	Associate Professor	72	11.7	11.7	93.7
	Professor	39	6.3	6.3	100.0
	Total	618	100.0	100.0	

**Figure 5.2 Designation of Respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30 years	129	20.9	20.9	20.9
	31-40 years	276	44.7	44.7	65.5
	41-50 years	174	28.2	28.2	93.7
	51-60 years	18	2.9	2.9	96.6
	61-70 years	21	3.4	3.4	100.0
	Total	618	100.0	100.0	

**Figure 5.3 Age of Respondents**

Majority of the respondents were in the age bracket of 31-40 years. About 21% belonged to the age group of 21-30 years, while 28.2% were in the group of 41-50 years.

Another variable of interest was the number of years of service in the present institution. The following table highlights the details irrespective of age, gender and designation of the employees.

Number of years	Frequency (number of respondents)	Percentage of respondents (%)
Less than 5	306	49.5
6-10	204	33
11-15	75	12.1
16-20	27	4.4
21-25	3	0.5
26-30	3	0.5

**Figure 5.5 Number of Years of Service in the Present Institution**

The number of years of service was assumed to play a significant role in helping an individual understand the dynamics at the work place. Greater amount of work

experience makes an individual adept in handling difficult coworkers and tasks. This may be assumed to be less stressful and bring greater satisfaction from work. Studies have also established that the emotional intelligence of an individual increases as he/she grows older. In order to test these hypotheses in the context of the employees of HEIs in the private domain, the data regarding the total work experience was collected. Figure 5.6 encapsulates this information.

<b>Number of years</b>	<b>Frequency (number of respondents)</b>	<b>Percentage of respondents (%)</b>
Less than 5	102	16.5
6-10	159	25.7
11-15	174	28.2
16-20	111	18.0
21-25	39	6.3
26-30	9	1.5
More than 30	24	3.9

**Figure 5.6 Total Number of Years of Service**

According to the data collected, maximum number of employees had a work experience of 11-15 years. 88.4 percent of the faculties and staff had up to twenty years of total work experience. The remaining were in the senior bracket in terms of years of service.



<b>Highest qualification</b>	<b>Frequency (number of respondents)</b>	<b>Percentage of respondents (%)</b>
Graduate	51	8.3
Post Graduate	321	51.9
Master of Philosophy	33	5.3
Doctor of Philosophy	210	34.0
Post Doctorate	3	0.5

**Figure 5.7 Highest qualification of the respondents**

Majority of the respondents had completed their post-graduation and received higher educational qualifications. Only about 8.3% were graduates. It was assumed that these graduates may be a part of the administrative staff of the HEIs.

<b>Monthly Salaries (Rs)</b>	<b>Frequency (number of respondents)</b>	<b>Percentage of respondents (%)</b>
Less than 40,000	114	18.4
41,000 – 60,000	264	42.7
61,000 – 80,000	132	21.4
81,000 – 1,00,000	54	8.7
More than 1,00,000	54	8.7

**Figure 5.8 Salary in Rupees per month of the respondents**

Maximum number of employees (42.7%) were in the monthly salary bracket of Rs 41,000 to Rs 60, 000. 8.7 % received salaries more than rupees one lakh per month, while 18.4% received less than rupees forty thousand per month.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Divorced	9	1.5	1.5	1.5
	Married	483	78.2	78.2	79.6
	Unmarried	123	19.9	19.9	99.5
	Widow/Widower	3	.5	.5	100.0
	Total	618	100.0	100.0	

**Figure 5.9 Marital Status of the respondents**

Majority of the employees were married and had to balance both work and home. With this information, it was assumed to assess the coping abilities of the individuals. With ever increasing work- load at the work place, plus obligations and responsibilities at home, the emotional intelligence of the individual was assumed to play an important role. With complexities in personal life, the quality of work life would also be affected.

## **5.2 DESCRIPTIVES OF EI AND QWL**

The mean value of EI was 4.1138 and the standard deviation was 0.46313. The maximum and minimum scores of EI were 5 and 2.21 respectively. The mean value of QWL was 3.308 and the standard deviation was 0.61399. The maximum and minimum values of QWL were 4.92 and 1.33 respectively. Both EI and QWL had slightly negatively skewed data (-0.682 and -0.280). The value of kurtosis for two variables was 1.089 and -0.175 respectively. The P-P plots and Q-Q plots of the two variables revealed that the data were normally distributed. This was in consonance with the acceptable range of the indices between -2 and +2 as proposed by Trochim and Donnelly (2006), Field (2000 & 2009), George and Mallery (2010) and Gravetter and Wallnau (2014).

Descriptive Statistics										
	N	Minimum	Maximum	Mean		Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
EI	618	2.21	5.00	4.1138	.01863	.46313	-.682	.098	1.089	.196
QWL	618	1.33	4.92	3.3088	.02470	.61399	-.280	.098	-.175	.196
Valid N (listwise)	618									

**Figure 5.10 Descriptive Statistics of EI and QWL**

### 5.3 CORRELATION ANALYSIS

Correlation analysis was carried out to assess the magnitude and direction of relationship between emotional intelligence and quality of work life of the employees. The Pearson product-moment correlation coefficient was computed considering the following two cases:

- 1) Correlation between EI and QWL
- 2) Correlation between sub-domains of EI and QWL

The composite value of EI was computed taking into consideration the four sub domains namely, perception of emotions, managing own emotions, managing others' emotions and utilization of emotions. The average values of these four sub scales were computed to arrive at the composite score of EI. This value was in the range of 1 to 5, where 1 denoted the lowest EI and a score of 5 denoted the highest EI.

In order to maintain uniformity in the measurement, a composite score of QWL was computed in a similar manner, taking into account all the eight sub domains namely, adequate and fair compensation, safe and healthy working environment, opportunity to develop human capabilities, growth and security, social integration, constitutionalism, total life space and social relevance. The composite score of QWL was in the range of 1 to 5, where 1 denoted the lowest QWL and a score of 5 denoted the highest QWL.

### Stage I

The composite scores of EI and QWL were on the interval scale. Hence, the Pearson product-moment correlation coefficient was computed to assess the relationship between the EI and QWL.

Correlations			
		EI	QWL
EI	Pearson Correlation	1	.338**
	Sig. (2-tailed)		.000
	N	618	618
QWL	Pearson Correlation	.338**	1
	Sig. (2-tailed)	.000	
	N	618	618

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

**Figure 5.11 Correlation between EI and QWL**

The correlation coefficient was 0.338, which was found to be significant at 1% level of significance as per the output obtained by SPSS ( $p < .001$ ). The output has been shown in Figure 5.11. It may be noted that a 1% level of significance is more stringent compared to a 5% level of significance. Since the correlation coefficient is significant at 1%, it is bound to be significant at 5% level of significance. The value obtained signifies a low positive correlation between EI and QWL.

Horn et al. (2004) summarized the following aspects related to occupational well-being as follows: “1) affective, as the emotional well-being, the lack of emotional exhaustion and affective commitment; 2) professionals, such as autonomy, aspiration and professional competence; 3) social, such as the lack of depersonalization; 4) cognitive, as the ability to focus, and; 5) psychosomatic, as the absence of complaints in this regard.” We have cited the work of Horn et al. as it gives us an insight about an employee’s well-being in his/ her place of work. Numerous researchers have addressed the issue of job satisfaction and have shown that it created a positive attitude towards work. Studies have demonstrated that job satisfaction was considered to be a means of affective relationship and was believed to be related to organizational commitment, the self-realization and the relationship in the workplace (Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Siqueira & Gomide, 2004).

In the context of the employees of the HEIs in the private domain, a low but positive correlation was observed between EI and QWL.

### **Summary**

1. The correlation was found to be significant ( $p < .001$ ).
2. Hence there was sufficient evidence to reject the null hypothesis (that there was no correlation).
3. The correlation coefficient ( $r$ ) between EI and QWL was 0.338
4. The degree of correlation was low.
5. The nature (or direction) of correlation was positive.

### **Stage II**

The second stage of correlation analysis involved the determination of magnitude and direction of correlation between the composite scale of QWL and the subscales of EI. This was done to assess which aspect of the emotional intelligence of the employee contributed to his/her success and satisfaction at work. The results of the analysis were presented in in Figure 4.12a and Figure 4.12b.

		Correlations			
		QWL	PEcompA	MOEcompB	MOthEcompC
Pearson Correlation	QWL	1.000	.180	.347	.317
	PEcompA	.180	1.000	.532	.500
	MOEcompB	.347	.532	1.000	.627
	MOthEcompC	.317	.500	.627	1.000
	UEcompD	.234	.442	.479	.516
Sig. (1-tailed)	QWL	.	.000	.000	.000
	PEcompA	.000	.	.000	.000
	MOEcompB	.000	.000	.	.000
	MOthEcompC	.000	.000	.000	.
	UEcompD	.000	.000	.000	.000
N	QWL	618	618	618	618
	PEcompA	618	618	618	618
	MOEcompB	618	618	618	618
	MOthEcompC	618	618	618	618
	UEcompD	618	618	618	618

**Figure 5.12(a) Correlation between sub-domains of EI and QWL**

		Correlations
		UEcompD
Pearson Correlation	QWL	.234
	PEcompA	.442
	MOEcompB	.479
	MOthEcompC	.516
	UEcompD	1.000
Sig. (1-tailed)	QWL	.000
	PEcompA	.000
	MOEcompB	.000
	MOthEcompC	.000
	UEcompD	.
N	QWL	618
	PEcompA	618
	MOEcompB	618
	MOthEcompC	618
	UEcompD	618

**Figure 5.12(b) Correlation between sub-domains of EI and QWL**

The correlations between all the sub-scales of EI and QWL were found to be significant. The highest correlation ( $r = 0.347$ ) was observed between ‘managing own emotions’ and QWL. This was followed by a correlation coefficient of 0.317 between ‘managing others’ emotions’ and QWL. This meant that if an individual was able to manage his/her emotions at the workplace, then he/she would have a better QWL. To some extent the management of others’ emotions was also a desired skill at the work-place. The lowest value ( $r = 0.180$ ) was obtained for ‘perception of emotions’ and QWL. This probably meant that by merely perceiving emotions and not utilizing and/managing it effectively, one may not be assured of good quality of outcomes at the professional front.

### **Summary**

#### **A) Correlation between Perception of emotions (PE) and QWL**

1. The correlation was found to be significant ( $p < .001$ ).
2. Hence there was sufficient evidence to reject the null hypothesis (that there was no correlation).

3. The correlation coefficient between Perception of emotions (PE) and QWL was 0.180
4. The degree of correlation was very low.
5. The nature (or direction) of correlation was positive.

#### **B) Correlation between Managing own emotions (MOE) and QWL**

1. The correlation was found to be significant ( $p < .001$ ).
2. Hence there was sufficient evidence to reject the null hypothesis (that there was no correlation).
3. The correlation coefficient between Managing own emotions (MOE) and QWL was 0.347
4. The degree of correlation was low.
5. The nature (or direction) of correlation was positive.

#### **C) Correlation between Managing others' emotions (MothE) and QWL**

1. The correlation was found to be significant ( $p < .001$ ).
2. Hence there was sufficient evidence to reject the null hypothesis (that there was no correlation).
3. The correlation coefficient between Managing others' emotions (MothE) and QWL was 0.317
4. The degree of correlation was low.
5. The nature (or direction) of correlation was positive.



#### **D) Correlation between Utilization of emotions (UE) and QWL**

1. The correlation was found to be significant ( $p < .001$ ).
2. Hence there was sufficient evidence to reject the null hypothesis (that there was no correlation).
3. The correlation coefficient between Utilization of emotions (UE) and QWL was 0.234.
4. The degree of correlation was low.
5. The nature (or direction) of correlation was positive.

### **5.4 CHI SQUARE TEST OF INDEPENDENCE**

In order to carry out the test of independence between EI and QWL, the scores obtained on the interval scale were classified into different categories. The EI scores were classified as “low”, “moderate” and “high”, while the QWL scores were classified as “poor”, “average” and “good”.

According to the classification, 0.5% of the total respondents reported to have low EI (i.e. scores in the range 1-2.33), 12.8% had moderate EI (between 2.34 and 3.66) and the remaining 86.7% had high EI (i.e. (between 3.67 and 5.00)).

The classification also depicted that majority of the respondents (about sixty percent) believed that their quality of work life was average. About seven percent were highly dissatisfied and reported a poor QWL. A good QWL was reported by approximately thirty four percent of the total respondents.

		Quality of Work Life			Percentage (%) of Total
		Poor	Average	Good	
	Low	3	0	0	0.5

<b>Emotional Intelligence</b>	Moderate	12	61	6	12.8
	High	27	306	203	86.7
Percentage (%) of Total		6.8	59.4	33.8	100

**Figure 5.13 Chi Square test of independence between EI and QWL**

The null hypothesis of the test was that the two variables were independent. The test revealed that the p value was less than 0.001. This meant that there was sufficient evidence to reject the null hypothesis. Thus, it could be inferred that the two variables were not independent. However, 3 cells (33%) had expected count less than 5. Hence, the assumption of Chi -square test had been violated (i.e. less than 20 percent of cells may have count less than 5).

This was resolved by merging the rows having low and moderate EI. Then the Chi square test was again administered. The test revealed that there was sufficient evidence to support the rejection of the null hypothesis ( $X^2(2, N = 618) = 41.607, p < .001$ ). The results of the analysis are presented in 5.14(c). Hence, we could now conclude that emotional intelligence and quality of work life were not independent.

EI_LandM_High * QWL_Poor_Average_Good Crosstabulation						
			QWL_Poor_Average_Good			Total
			1.00	2.00	3.00	
EI_LandM_High	4.00	Count	15	61	6	82
		Expected Count	5.6	48.7	27.7	82.0
		% within EI_LandM_High	18.3%	74.4%	7.3%	100.0%
		% within QWL_Poor_Average_Good	35.7%	16.6%	2.9%	13.3%
		% of Total	2.4%	9.9%	1.0%	13.3%
	5.00	Count	27	306	203	536
		Expected Count	36.4	318.3	181.3	536.0
		% within EI_LandM_High	5.0%	57.1%	37.9%	100.0%
		% within QWL_Poor_Average_Good	64.3%	83.4%	97.1%	86.7%
		% of Total	4.4%	49.5%	32.8%	86.7%
Total	Count		42	367	209	618
	Expected Count		42.0	367.0	209.0	618.0
	% within EI_LandM_High		6.8%	59.4%	33.8%	100.0%
	% within QWL_Poor_Average_Good		100.0%	100.0%	100.0%	100.0%
	% of Total		6.8%	59.4%	33.8%	100.0%

**Figure 5.14(a) Chi Square test of independence between EI (low & moderate merged) and QWL (SPSS Output)**

		Quality of Work Life			Percentage (%) of Total
		Poor	Average	Good	
<b>Emotional Intelligence</b>	Low & Moderate	15(18.3%)	61(74.4%)	6(7.3%)	13.3
	High	27(5%)	306(57.1%)	203(37.9%)	86.7
Percentage (%) of Total		6.8	59.4	33.8	100

**Figure 5.14(b) Chi Square test of independence between EI (low & moderate merged) and QWL (Summary)**

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	41.607 <sup>a</sup>	2	.000
Likelihood Ratio	44.491	2	.000
Linear-by-Linear Association	40.912	1	.000
N of Valid Cases	618		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.57.

**Figure 5.14(c) Results of Chi Square test of independence between EI (low & moderate merged) and QWL**

The purpose of this test was to give a better insight regarding the levels of EI and QWL of the employees. It facilitated further analysis to examine the nature of dependence or relationship between EI and QWL. A categorization into the three levels could help in the operationalization of these two factors in the organizations. It would help the HR departments to design and implement suitable interventions for enhancing the EI of the employees.

## Summary

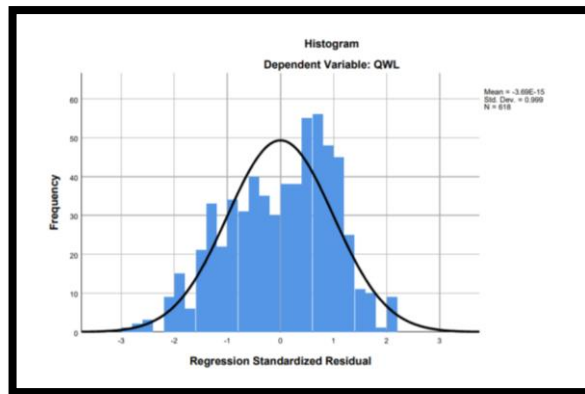
1. 86.7 % respondents claimed to have high EI.
2. 13.3% respondents claimed to have low or moderate EI.
3. 59.4% respondents had average QWL.
4. 33.8% respondents had good QWL.
5. 6.8% respondents had poor QWL.
6. The Chi square test of independence yielded the result,  $X^2 (2, N = 618) = 41.607, p < .001$
7. Hence there was sufficient evidence to reject the null hypothesis.
8. The inference drawn was that EI and QWL were associated.

## 5.5 REGRESSION ANALYSIS

Regression analysis was carried out in three stages. The first stage involved a simple linear regression analysis involving one independent variable (EI) and the dependent variable (QWL). The second stage involved a multiple regression analysis involving four independent variables, namely the sub-domains of EI and the dependent variable (QWL). The third and final stage involved the simple linear regression between the dependent variable QWL and the different independent variables, namely, “perception of emotion” or PE, “managing own emotions” or MOE, “managing others’ emotions” or MOthE and “utilization of emotions” or UE.

### Stage I

Prior to carrying out the analysis, the assumptions of the regression analysis were tested. The first assumption regarding distribution of residuals was ascertained. The distribution was found to be Normal, as depicted in Figure 5.15 (a). Hence the first assumption was found to hold true.



**Figure 5.15 (a) Regression Standardized Residuals**

The next assumption stated that there was no autocorrelation. The Durbin Watson Test measured the autocorrelation in the residuals from regression analysis. It may be noted that autocorrelation leads to underestimation of the standard error and one may be led to think that the predictors are significant which may not be the case. Its value lies in the range of 0 to 4. A value from 0 to less than 2 indicate positive autocorrelation and values from 2 to 4 indicate negative autocorrelation. In the words of Field (2009), values lower 1 or higher than 3 were a definite cause for concern. The present analysis yielded a Durbin Watson's statistic of 1.848. This was depicted in Figure 5.15 (b).

Model Summary <sup>b</sup>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
1	.338 <sup>a</sup>	.114	.113	.57840	R Square Change	F Change
					.114	79.263

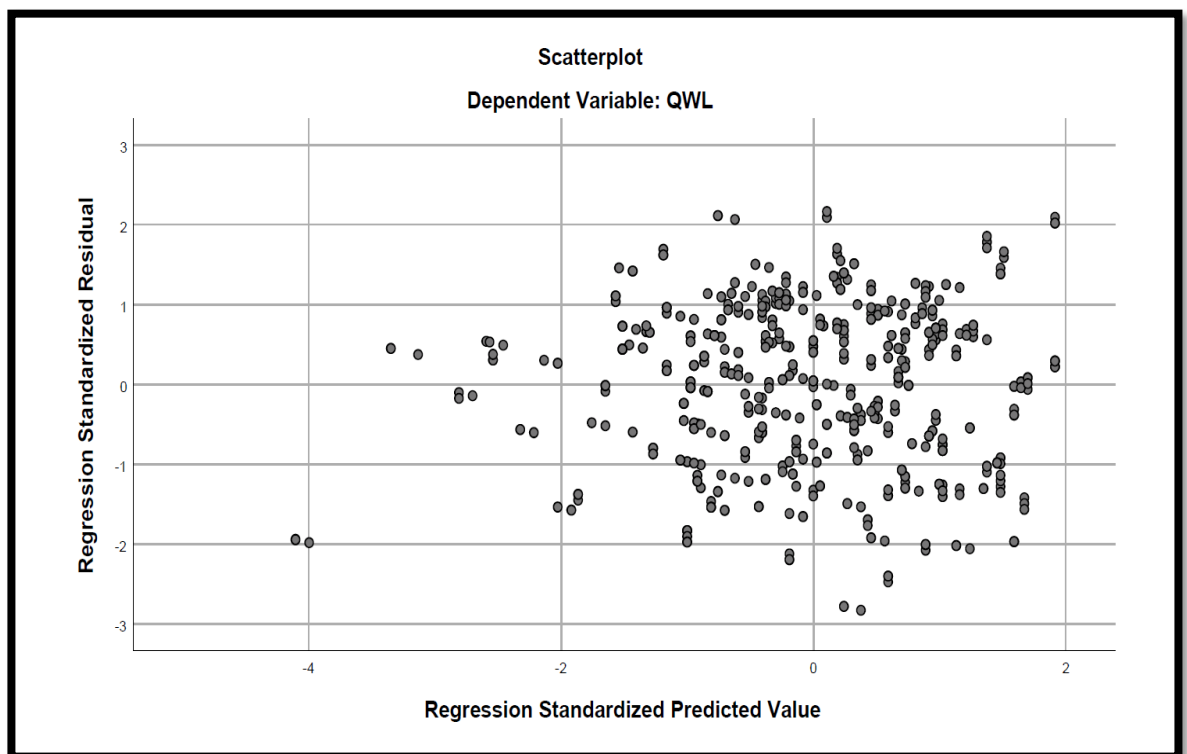
  

Model Summary <sup>b</sup>				
Change Statistics				
Model	df1	df2	Sig. F Change	Durbin-Watson
1	1	616	.000	1.848

a. Predictors: (Constant), EI  
b. Dependent Variable: QWL

**Figure 5.15 (b) Model summary of QWL depending on EI**

The data were then checked for Homoscedasticity. This meant that the variances of the residuals (or error terms) were constant for any value of the independent variable (in this case EI). This was tested with the help of scatterplots. The SPSS out has been depicted in Figure 5.15 (c). The output shows that the data conforms to the requirements of homoscedasticity.



**Figure 5.15 (c) Standardized predicted values and residuals in regression model of QWL depending on EI**

After the data was found to fulfil all the assumptions, regression analysis was carried out. The regression output of QWL depending on EI has been shown in Figure 5.16 (a) and Figure 5.16 (b).

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.518	1	26.518	79.263	.000 <sup>b</sup>
	Residual	206.083	616	.335		
	Total	232.600	617			

a. Dependent Variable: QWL

b. Predictors: (Constant), EI

**Figure 5.16(a) ANOVA of Regression model of QWL depending on EI**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.467	.208		7.048	.000
	EI	.448	.050	.338	8.903	.000

**Figure 5.16(b) Coefficients of Regression model of QWL depending on EI**

The impact of the predictor variable was statistically significant,  $F(1,616) = 79.263$ ,  $p < .001$ . An adjusted  $R^2$  value of 0.113 indicated that only 11.3% of the total variation in QWL of an individual could be attributed to his/ her EI. This meant that the QWL of an employee could be predicted to very small extent considering that the EI of the employee was known. The unstandardized coefficients were significant at 5% level of significance (as depicted in Figure 5.16b).

The model as per the analysis was as follows:

$$\text{QWL} = 1.467 + 0.448\text{EI}$$



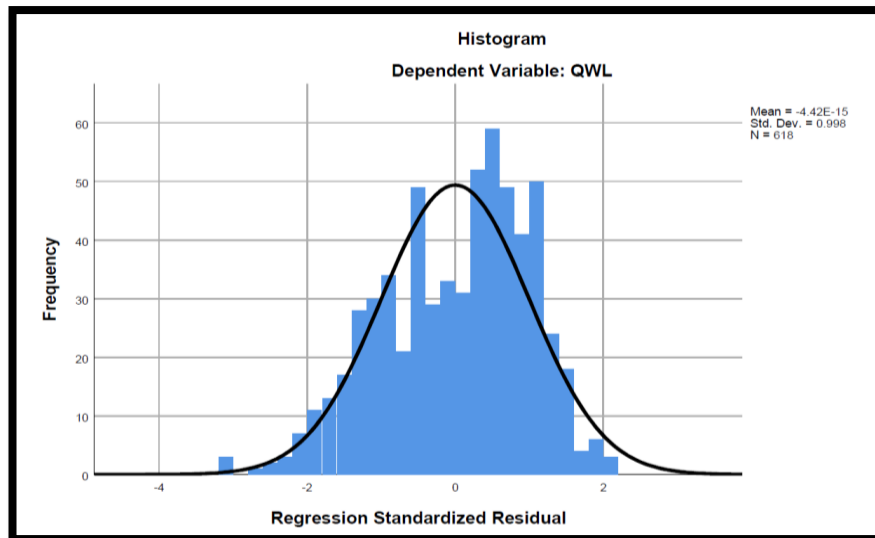
## Summary

1. The ' $t$ ' value for the constant was 7.048 and  $p < .001$ .
2. The ' $t$ ' value for the independent variable (EI) was 8.903 and  $p < .001$ .
3. The impact of the predictor variable was statistically significant,  $F(1,616) = 79.263, p < .001$ .
4. Hence EI was a significant predictor of QWL.
5. The standardized coefficient ( $\beta$ ) for the model was 0.338
6. The Adjusted  $R^2$  value for the model was 0.113

## Stage II

The next of analysis was carried to find out which among the four subscales of emotional intelligence had the strongest influence on QWL. The analysis was carried out to find out whether there were some components of the EI of the employees that could explain or predict the QWL of the employees. Correlation analysis that was carried out gave an indication that the two subscales 'managing own emotions' and 'managing others' emotions' showed the highest correlations with QWL. The task ahead was to examine whether the model predicting the QWL on the basis of EI (having a coefficient of determination of 0.113) could be improved by dropping a few subscales of EI. In order to accomplish this task, multiple regression analysis was carried out with QWL as the dependent variable and the subscales of EI as the independent variables.

Prior to the regression analysis, the assumptions of regression analysis were tested. The different assumptions of multiple regression were Normality, absence of multicollinearity, independence (or absence of autocorrelation) and homoscedasticity. Each of these assumptions were tested and the outputs were displayed in first assumption was that of Normality. The output was displayed in Figure 5.17(a). The normality check was also carried out using the P-P plot and the data were found to conform to the requirements of normality.



**Figure 5.17(a) Regression Standardized Residuals**

The next assumption was the absence of multicollinearity. VIF or variance inflation factor indicated multi-collinearity in the data. As VIF increases, the regression results tend to be less reliable. According to Glen (2015), a VIF above 10 indicated high correlation and was cause for concern. The present study yielded a VIF 1.648. Hence there was absence multicollinearity in the data. This has been depicted in Figure 5.17(b).

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	MOEcompB	1.000	1.000
2	(Constant)		
	MOEcompB	.607	1.648
	M0thEcompC	.607	1.648

a. Dependent Variable: QWL

**Figure 5.17(b) Regression output depicting VIF and Tolerance**

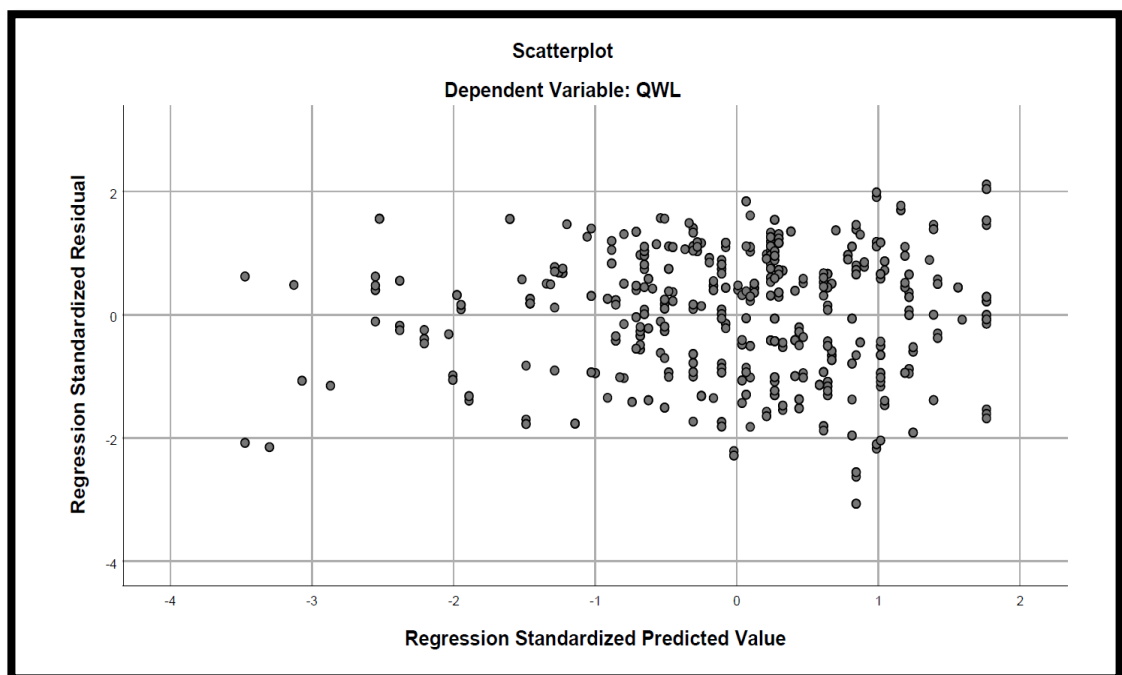
The next test was carried out to ascertain whether there was evidence of autocorrelation. The SPSS out has been depicted in Figure 4.16 c, which indicated Durbin Watson's d of 1.871. Hence there was evidence of negligible autocorrelation that was well within the acceptable range.

Change Statistics				
Model	df1	df2	Sig. F Change	Durbin-Watson
1	1	616	.000	
2	1	615	.001	1.871

a. Predictors: (Constant), MOEcompB  
b. Predictors: (Constant), MOEcompB, MOthEcompC  
c. Dependent Variable: QWL

**Figure 5.17(c) Regression output of QWL depending on subscales of EI**

The last assumption was that of Homoscedasticity. This meant that the variances of the residuals (or error terms) were constant across the regression line. This was tested with the help of scatterplots. The SPSS out has been shown in Figure 5.17(d). The output shows that the data conforms to the requirements of homoscedasticity.



**Figure 5.17(d) Standardized predicted values and residuals in regression model of QWL**

**depending on sub domains of EI**

Once, the data were found to fulfil all the assumptions of the linear multiple regression model, the model summary was prepared. The descriptive statistics were presented in Figure 5.18 and the ANOVA table in Figure 5.19.

Descriptive Statistics			
	Mean	Std. Deviation	N
QWL	3.3088	.61399	618
PEcompA	4.0294	.62729	618
MOEcompB	4.0026	.65481	618
MOthEcompC	4.1204	.51481	618
UEcompD	4.3022	.52007	618

**Figure 5.18 Descriptive statistics of QWL and sub domains of EI**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.014	1	28.014	84.350	.000 <sup>b</sup>
	Residual	204.586	616	.332		
	Total	232.600	617			
2	Regression	31.825	2	15.913	48.743	.000 <sup>c</sup>
	Residual	200.775	615	.326		
	Total	232.600	617			

a. Dependent Variable: QWL

b. Predictors: (Constant), MOEcompB

c. Predictors: (Constant), MOEcompB, MOthEcompC

**Figure 5.19 ANOVA of Regression model of QWL depending on sub domains of EI**

The ANOVA table (Figure 5.19) showed that both models were significant at 5% level of significance. The first had ‘managing own emotion’ as the predictor or independent variable (Model 1). The analysis of the first model may be summarized as  $F(1,616) = 84.350$ ,  $p < .001$ . Hence, the impact of the predictor variable was statistically significant. This yielded a regression model having  $R^2$  of 0.119. The second model (Model 2), had two predictor variables that were significant, namely ‘managing others’ emotions’ and ‘managing own emotions. The analysis of the second model may be summarized as  $F(2,615) = 48.743$ ,  $p < .001$ . Hence, the impact of the two predictor variables was statistically significant.

Model 2 had a  $R^2$  of 0.134 and was a slight improvement over the earlier two models (the first being the **simple regression model** of EI as a predictor of QWL and the second being the **multiple regression model** having ‘managing own emotion’ as the predictor of QWL.

Model Summary <sup>c</sup>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	.347 <sup>a</sup>	.120	.119	.57630	.120	84.350
2	.370 <sup>b</sup>	.137	.134	.57137	.016	11.673

**Figure 5.20 (a) Model Summary of QWL depending on sub-domains of EI**

Coefficients <sup>a</sup>						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.006	.144		13.962	.000
	MOEcompB	.325	.035	.347	9.184	.000
2	(Constant)	1.586	.188		8.419	.000
	MOEcompB	.229	.045	.244	5.072	.000
	MOthEcompC	.196	.057	.164	3.417	.001

**Figure 5. 20 (b) Coefficients of QWL depending on sub domains of EI**

Hence, the model which has two independent variables, namely ‘managing others’ emotions’ and ‘managing own emotions’, may be stated as follows:

$$\text{QWL} = 1.586 + 0.229\text{MOE} + 0.196\text{MOthE}$$

### Summary

1. The ‘*t*’ value for the constant for Model1 (which has MOE as the predictor of QWL) was 13.962 and  $p < .001$ .
2. The ‘*t*’ value for the predictor variable (MOE) was 9.184 and  $p < .001$ .
3. The impact of the predictor variable was statistically significant,  $F(1,616) = 84.350$ ,  $p < .001$ .
4. Hence MOE was a significant predictor of QWL.
5. The standardized coefficient ( $\beta$ ) for the model was 0.347
6. The Adjusted  $R^2$  value for the model was 0.119
7. The ‘*t*’ value for the constant for Model 2 (which has MOE and MOthE as the predictors of QWL) was 8.419 and  $p < .001$ .

8. The 't' value for the predictor variable MOE and MothE was 5.072 and 3.417 respectively and  $p < .001$ .
9. The impact of the predictor variables was statistically significant,  $F(2,615) = 48.743$ ,  $p < .001$ .
10. Hence, a combination of MOE and MothE were a significant predictor of QWL.
11. The standardized coefficients  $\beta_1$  and  $\beta_2$  for the model were 0.244 and 0.164 respectively
12. The Adjusted  $R^2$  value for the model was 0.134
13. Hence, the multiple regression model having two predictor variables, MOE and MothE is a better model compared to the model having only one predictor variable, MOE.

### **Stage III**

The third and final stage of the analysis involved finding out the impact of the different subscales of EI on QWL.

#### ***(1) Impact of Perception of emotion (PE) on QWL***

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.377	1	7.377	20.177	.000 <sup>b</sup>
	Residual	225.223	616	.366		
	Total	232.600	617			
a. Dependent Variable: QWL						
b. Predictors: (Constant), PEcompA						
Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	2.606	.158		16.454	.000
	PEcompA	.174	.039	.178	4.492	.000

**Figure 5.21 (a) Results of Regression analysis of QWL depending on Perception of emotion (PE)**

The analysis revealed a significant impact of PE on QWL ( $t = 16.454$  for the constant and  $t = 4.492$  for the independent variable PE). The analysis of the model may be summarized as  $F(1,616) = 20.177$ ,  $p < .001$ . The results of analysis are presented in Figure 5.21(a).



Model Summary <sup>b</sup>							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.178 <sup>a</sup>	.032	.030	.60467	.032	20.177	1

Model Summary <sup>b</sup>			
Model	df2	Sig. F Change	Durbin-Watson
1	616	.000	1.911

a. Predictors: (Constant), PEcompA

b. Dependent Variable: QWL

**Figure 5. 21(b) Model Summary of Regression analysis of QWL depending on Perception of emotion (PE)**

The model summary is presented in Figure 5. 21(b). Hence, the model may be stated as follows:

$$\text{QWL} = 2.606 + 0.174\text{PE}$$

This is a very weak model as the value of  $R^2$  is 0.030. Hence, we may conclude that though PE is a significant predictor of QWL, it is a very weak predictor.

### Summary

1. The ' $t$ ' value for the constant was 16.454 and  $p < .001$ .
2. The ' $t$ ' value for the independent variable PE was 4.492 and  $p < .001$ .
3. The impact of the predictor variable was statistically significant,  $F(1,616) = 20.177$ ,  $p < .001$ .
4. Hence PE was a significant predictor of QWL.
5. The standardized coefficient ( $\beta$ ) for the model was 0.178
6. The Adjusted  $R^2$  value for the model was 0.030

**(2) Impact of Managing own emotion (MOE) on QWL**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.014	1	28.014	84.350	.000 <sup>b</sup>
	Residual	204.586	616	.332		
	Total	232.600	617			

a. Dependent Variable: QWL  
b. Predictors: (Constant), MOEcompB

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.006	.144		13.962	.000
	MOEcompB	.325	.035	.347	9.184	.000

**Figure 5.22(a) Results of Regression analysis of QWL depending on Managing own emotion (MOE)**

The analysis revealed a significant impact of MOE on QWL ( $t = 13.962$  for the constant and  $t = 9.184$  for the independent variable MOE). The analysis of the model may be summarized as  $F(1, 616) = 84.350$ ,  $p < .001$ . The results of analysis are presented in Figure 5.22(a).

Model Summary <sup>b</sup>							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
1	.347 <sup>a</sup>	.120	.119	.57630	R Square Change	F Change	df1
					.120	84.350	1

Model Summary <sup>b</sup>			
Model	df2	Sig. F Change	Durbin-Watson
1	616	.000	1.885

a. Predictors: (Constant), MOEcompB

b. Dependent Variable: QWL

**Figure 5.22(b) Model Summary of Regression analysis of QWL depending on Managing own emotion (MOE)**

The model summary is presented in Figure 5.22(b). Hence, the model may be stated as follows:

$$\text{QWL} = 2.006 + 0.325\text{MOE}$$

This is a very weak model as the value of  $R^2$  is 0.119. Hence, we may conclude that though MOE is a significant predictor of QWL, it is a weak predictor. It may be noted that it is a stronger predictor in comparison to PE.

### Summary

1. The ' $t$ ' value for the constant was 13.962 and  $p < .001$ .
2. The ' $t$ ' value for the independent variable MOE was 9.184 and  $p < .001$ .
3. The impact of the predictor variable was statistically significant,  $F(1, 616) = 84.350$ ,  $p < .001$ .
4. Hence MOE was a significant predictor of QWL.
5. The standardized coefficient ( $\beta$ ) for the model was 0.347
6. The Adjusted  $R^2$  value for the model was 0.119

**(3) Impact of Managing own emotion (MOfhE) on QWL**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.426	1	23.426	68.988	.000 <sup>b</sup>
	Residual	209.174	616	.340		
	Total	232.600	617			

a. Dependent Variable: QWL  
b. Predictors: (Constant), MOfhEcompC

Coefficients <sup>a</sup>					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	1.749	.189		9.244
	MOfhEcompC	.378	.046	.317	8.306

**Figure 5.23(a) Results of Regression analysis of QWL depending on Managing others' emotion (MOfhE)**

The analysis revealed a significant impact of MOfhE on QWL ( $t = 9.244$  for the constant and  $t = 8.306$  for the independent variable MOfhE). The analysis of the model may be summarized as  $F(1,616) = 68.988, p < .001$ . The results of analysis are presented in Figure 5.23(a).

Model Summary <sup>b</sup>							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
1	.317 <sup>a</sup>	.101	.099	.58272	R Square Change	F Change	df1
					.101	68.988	1

Model Summary <sup>b</sup>			
Model	df2	Sig. F Change	Durbin-Watson
1	616	.000	1.891

a. Predictors: (Constant), MOthEcompC

b. Dependent Variable: QWL

**Figure 5.23(b) Model Summary of Regression analysis of QWL depending on Managing others' emotion (MOthE)**

The model summary is presented in Figure 5.23(b). Hence, the model may be stated as follows:

$$\text{QWL} = 1.749 + 0.378\text{MOthE}$$

This is a very weak model as the value of  $R^2$  is 0.099. Hence, we may conclude that though MOthE is a significant predictor of QWL, it is a weak predictor. It may be noted that it is a stronger predictor in comparison to PE but a weaker predictor in comparison to MOE. Hence the analysis this far yields the strength of the predictors in the following order:

$$\text{MOE} > \text{MoThE} > \text{PE}$$

## Summary

1. The ' $t$ ' value for the constant was 9.244 and  $p < .001$ .
2. The ' $t$ ' value for the independent variable (MOthE) was 8.306 and  $p < .001$ .
3. The impact of the predictor variable was statistically significant,  $F(1,616) = 68.988$ ,  $p < .001$ .
4. Hence, MOthE was a significant predictor of QWL.
5. The standardized coefficient ( $\beta$ ) for the model was 0.317
6. The Adjusted  $R^2$  value for the model was 0.099

### (4) Impact of Utilization of emotions (UE) on QWL

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.737	1	12.737	35.686	.000 <sup>b</sup>
	Residual	219.863	616	.357		
	Total	232.600	617			

a. Dependent Variable: QWL  
b. Predictors: (Constant), UEcompD

Coefficients <sup>a</sup>					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	2.120	.200		.000
	UEcompD	.276	.046	.234	.000

**Figure 5.24(a) Results of Regression analysis of QWL depending Utilization of emotions (UE)**

Model Summary <sup>b</sup>							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
1	.234 <sup>a</sup>	.055	.053	.59743	R Square Change	F Change	df1
					.055	35.686	1

Model Summary <sup>b</sup>			
Model	df2	Sig. F Change	Durbin-Watson
1	616	.000	1.869

a. Predictors: (Constant), UEcompD

b. Dependent Variable: QWL

**Figure 5.24(b) Model Summary of Regression analysis of QWL depending on Utilization of emotions (UE)**

The analysis revealed a significant impact of UE on QWL ( $t = 10.579$  for the constant and  $t = 5.974$  for the independent variable UE). The analysis of the model may be summarized as  $F(1, 616) = 35.686, p < .001$ . The model summary is presented in Figure 5.24(b). Hence, the model may be stated as follows:

$$\text{QWL} = 2.120 + 0.276\text{UE}$$

## Summary

1. The ' $t$ ' value for the constant was 10.579 and  $p < .001$ .
2. The ' $t$ ' value for the independent variable UE was 5.974 and  $p < .001$ .
3. The impact of the predictor variable was statistically significant,  $F(1,616) = 35.686, p < .001$ .
4. Hence UE was a significant predictor of QWL.
5. The standardized coefficient ( $\beta$ ) for the model was 0.234
6. The Adjusted  $R^2$  value for the model was 0.053

This is a very weak model as the value of  $R^2$  is 0.053. Hence, we may conclude that though UE is a significant predictor of QWL, it is a weak predictor. The analysis thus far yields the strength of the predictors in the following order in terms of standardized coefficient  $\beta$ :

$$\text{MOE (0.347)} > \text{MothE (0.317)} > \text{UE (0.234)} > \text{PE (0.178)}$$

Hence, we may conclude that each of the sub-domains of EI were also significant but weak predictors of EI.

Now comparing the results of simple regression (impact of combined score of EI) and multiple regression (impact of individual sub scales of EI) on QWL. Simple regression yielded an adjusted  $R^2$  value of 0.113, while multiple regression had a  $R^2$  of 0.134. The second model had two predictor variables that were significant, namely 'managing others' emotions' and 'managing own emotions.' Hence, we may infer that 'managing others' emotions' and 'managing own emotions' played a significant part in predicting the QWL of the employees.



## **Chapter 6**

### **FINDINGS**

**The findings of the study were as follows:**

**A) Demographic Information**

1. Females constituted 71.4 % and males constituted 28.6 % of the total respondents.
2. The teaching staff were about 80% of the total sample, while the administrative staff constituted about 20%.
3. The teaching staff, who were categorized as Assistant Professor, Associate Professor and Professor, constituted 62.1 %, 11.7 % and 6.3% respectively of the total employees.
4. Majority of the respondents were in the age group of 31-40 years (44.7%). About 21% belonged to the age bracket of 21-30 years, while 28.2% were in the group of 41-50 years.
5. Majority of the respondents (49.5 %) had served for less than 5 years in the present organization.
6. Majority of the respondents (28.2 %) had a total work experience of 11-15 years in different organizations. This was followed by another 25.7 % who had served for 6-10 years. This accounted for about 53.9 % of the total respondents who had a total work experience of about 6-15 years.
7. 51.9 % of the respondents had Post Graduation as their highest qualification and 34.0 % had Doctor of Philosophy as their highest qualification.
8. Majority of the respondents (42.7 %) had monthly salaries in the range of Rs 41,000 – 60,000. This was followed by 21.4% of the respondents who had monthly salaries in the range of Rs 61,000 – 80,000. 18.4 % earned less than Rs 40,000 per month, while 8.7 % had monthly emoluments exceeding Rs 1,00,000.
9. Majority of the employees were married (78.2 %). 19.9% were unmarried, 1.5% were divorced and the remaining 0.5% had lost their spouses.

***B) Descriptive statistics of EI and QWL***

1. The mean value of EI was 4.1138 and the standard deviation was 0.46313.
2. The maximum and minimum scores of EI were 5 and 2.21 respectively.
3. Coefficient of Skewness for EI was -0.682. This implies slightly negatively skewed data of EI.
4. Kurtosis for EI was 1.089. Hence, the distribution was platykurtic.
5. However, both these indices lay between -2 and +2 and as proposed by Trochim and Donnelly (2006), Field (2000 & 2009), George and Mallery (2010) and Gravetter and Wallnau (2014), we could assume that the conditions for normality were met. This was further supported by the P-P and Q-Q plots obtained.
6. The mean value of QWL was 3.308 and the standard deviation was 0.61399.
7. The maximum and minimum values of QWL were 4.92 and 1.33 respectively.
8. Coefficient of Skewness for QWL was -0.280. This implies slightly negatively skewed data of EI.
9. Kurtosis for QWL was -0.175. Hence, the distribution was platykurtic.
10. However, both these indices lay between -2 and +2 and as mentioned in point number '5', we could assume that the conditions for normality were met. This was further supported by the P-P and Q-Q plots obtained.

***C) Correlation Analysis***

**Stage I- Correlation between EI and QWL**

2. The correlation was found to be significant ( $p < .001$ ).
3. Hence there was sufficient evidence to reject the null hypothesis
4. The correlation coefficient ( $r$ ) between EI and QWL was 0.338
5. The degree of correlation was low.
6. The nature (or direction) of correlation was positive.

## **Stage II- Correlation between sub-domains of EI and QWL**

### **a) Correlation between Perception of emotions (PE) and QWL**

6. The correlation was found to be significant ( $p < .001$ ).
7. Hence there was sufficient evidence to reject the null hypothesis.
8. The correlation coefficient ( $r$ ) between Perception of emotions (PE) and QWL was 0.180.
9. The degree of correlation was very low.
10. The nature (or direction) of correlation was positive.

### **b) Correlation between Managing own emotions (MOE) and QWL**

1. The correlation was found to be significant ( $p < .001$ ).
2. Hence there was sufficient evidence to reject the null hypothesis.
3. The correlation coefficient ( $r$ ) between Managing own emotions (MOE) and QWL was 0.347.
4. The degree of correlation was low.
5. The nature (or direction) of correlation was positive.

### **c) Correlation between Managing others' emotions (MOthE) and QWL**

1. The correlation was found to be significant ( $p < .001$ ).
2. Hence there was sufficient evidence to reject the null hypothesis.
3. The correlation coefficient ( $r$ ) between Managing others' emotions (MOthE) and QWL was 0.317.
4. The degree of correlation was low.
5. The nature (or direction) of correlation was positive.

**d) Correlation between Utilization of emotions (UE) and QWL**

1. The correlation was found to be significant ( $p < .001$ ).
2. Hence there was sufficient evidence to reject the null hypothesis (that there was no correlation).
3. The correlation coefficient ( $r$ ) between Utilization of emotions (UE) and QWL was 0.234.
4. The degree of correlation was low.
5. The nature (or direction) of correlation was positive.

***D) Chi Square test of Independence***

9. 86.7 % respondents claimed to have high EI.
10. 13.3% respondents claimed to have low or moderate EI.
11. 59.4% respondents had average QWL.
12. 33.8% respondents had good QWL.
13. 6.8% respondents had poor QWL.
14. The Chi square test of independence was found to be significant ( $p < .001$ ).
15. Hence there was sufficient evidence to reject the null hypothesis.
16. The inference drawn was that EI and QWL were associated.

***E) Regression Analysis***

**Stage I** - Simple linear regression analysis involving one independent variable (EI) and the dependent variable (QWL).

7. The ' $t$ ' value for the constant was 7.048 and  $p < .001$ .
8. The ' $t$ ' value for the independent variable (EI) was 8.903 and  $p < .001$ .
9. Hence EI was a significant predictor of QWL.

10. The standardized coefficient ( $\beta$ ) for the model was 0.338
11. The Adjusted  $R^2$  value for the model was 0.113

**Stage II** - Multiple regression analysis involving four independent variables, namely the subscales of EI and the dependent variable (QWL).

14. The ' $t$ ' value for the constant for Model1 (which has MOE as the predictor of QWL) was 13.962 and  $p < .001$ .
- 2.The ' $t$ ' value for the predictor variable (MOE) was 9.184 and  $p < .001$ .
- 3.Hence MOE was a significant predictor of QWL.
- 4.The standardized coefficient ( $\beta$ ) for the model was 0.347
- 5.The Adjusted  $R^2$  value for the model was 0.119
12. The ' $t$ ' value for the constant for Model 2 (which has MOE and MothE as the predictors of QWL) was 8.419 and  $p < .001$ .
13. The ' $t$ ' value for the predictor variable MOE and MothE was 5.072 and 3.417 respectively and  $p < .001$ .
- 8.Hence, a combination of MOE and MothE were significant predictors of QWL.
- 9.The standardized coefficients  $\beta_1$  and  $\beta_2$  for the model were 0.244 and 0.164 respectively
- 10.The Adjusted  $R^2$  value for the model was 0.134
- 11.Hence, the multiple regression model having two predictor variables, MOE and MOthE is a better model compared to the model having only one predictor variable, MOE.

**Stage III** - Simple linear regression between the dependent variable QWL and the different independent variables, namely, "perception of emotion", "managing own emotions", "managing others' emotions" and "utilization of emotions".

***(4) Impact of Perception of emotion (PE) on QWL***

- 1.The ' $t$ ' value for the constant was 16.454 and  $p < .001$ .
- 2.The ' $t$ ' value for the independent variable PE was 4.492 and  $p < .001$ .
- 3.Hence PE was a significant predictor of QWL.
- 4.The standardized coefficient ( $\beta$ ) for the model was 0.178
- 5.The Adjusted  $R^2$  value for the model was 0.030

***(5) Impact of Managing own emotion (MOE) on QWL***

- 1.The ' $t$ ' value for the constant was 13.962 and  $p < .001$ .
- 2.The ' $t$ ' value for the independent variable MOE was 9.184 and  $p < .001$ .
- 3.Hence MOE was a significant predictor of QWL.
- 4.The standardized coefficient ( $\beta$ ) for the model was 0.347
- 5.The Adjusted  $R^2$  value for the model was 0.119

***(6) Impact of Managing own emotion (MOthE) on QWL***

- 1.The ' $t$ ' value for the constant was 9.244 and  $p < .001$ .
- 2.The ' $t$ ' value for the independent variable (MOthE) was 8.306 and  $p < .001$ .
- 3.Hence MOthE was a significant predictor of QWL.
- 4.The standardized coefficient ( $\beta$ ) for the model was 0.317
- 5.The Adjusted  $R^2$  value for the model was 0.099

***(4) Impact of Utilization of emotions (UE) on QWL***

- 1.The ' $t$ ' value for the constant was 10.579 and  $p < .001$ .

2. The ' $t$ ' value for the independent variable UE was 5.974 and  $p < .001$ .
3. Hence UE was a significant predictor of QWL.
4. The standardized coefficient ( $\beta$ ) for the model was 0.234
5. The Adjusted  $R^2$  value for the model was 0.053

## **Chapter 7**

### **CONCLUSIONS**

**It was to be reiterated that the population for the study, were the employees working in the HEIs of the private sector in the NCR. With reference to the research question and research objectives, the present study, highlighted the following:**

**Objective 1: To find out the magnitude and direction of relationship between EI and QWL.**

**The conclusion drawn on the basis of Correlation Analysis was:**

- 1.The correlation between EI and QWL was significant.
- 2.The correlation coefficient between EI and QWL was 0.338
- 3.The degree of correlation was low and its nature (or direction) was positive.

**Objective 2: To find out the magnitude and direction of relationship between the different sub-domains of EI and QWL.**

**The conclusions drawn on the basis of Correlation Analysis were:**

- 1.The correlation between the different sub-domains of EI and QWL were significant.
2. The nature (or direction) was positive in each case.
- 3.The correlation coefficient between Perception of emotions (PE) and QWL was 0.180.

The degree of correlation was very low.



4.The correlation coefficient between Managing own emotions (MOE) and QWL was 0.347. The degree of correlation was low.

5. The correlation coefficient between Managing others' emotions (MOthE) and QWL was 0.317. The degree of correlation was low.

6. The correlation coefficient between Utilization of emotions (UE) and QWL was 0.234. The degree of correlation was low.

**Objective 3: To find out whether EI and QWL are independent.**

**The conclusion drawn on the basis of Chi Square test of Independence was:**

There was sufficient evidence to accept that EI and QWL were associated.

**Objective 4: To analyse the impact of EI on QWL.**

**The conclusion drawn on the basis of Simple linear regression analysis involving one independent variable (EI) and the dependent variable (QWL) was:**

1.EI was a significant predictor of QWL.

2.The Adjusted  $R^2$  value for the model was 0.113

**Objective 5: To find out what combination of sub-domains of EI had the maximum impact on QWL**

**The conclusion drawn on the basis of Multiple regression analysis involving four independent variables, namely the sub-domains of EI and the dependent variable (QWL) were:**

1.MOE (Managing Own Emotions) was a significant predictor of QWL.

2.The Adjusted  $R^2$  value for the model was 0.119

3.A combination of MOE (Managing Own Emotions) and MOthE (Managing Others' Emotions) were a significant predictor of QWL.

4.The Adjusted  $R^2$  value for the model was 0.134

5.Hence, the multiple regression model having two predictor variables, MOE and MOthE was a better model compared to the model having only one predictor variable, MOE.

**Objective 6: To analyse the impact of different sub-domains of EI on QWL.**

**The conclusions drawn on the basis of Simple linear regression analysis involving one independent variable (sub-domains of EI, taken one at a time) and the dependent variable (QWL) were:**

1.Perception of Emotion (PE) was a significant predictor of QWL. The Adjusted  $R^2$ value for the model was 0.113

2.Managing Own Emotions (MOE) was a significant predictor of QWL. The Adjusted  $R^2$  value for the model was 0.119

3.Managing Others' Emotions (MOthE) was a significant predictor of QWL. The Adjusted  $R^2$  value for the model was 0.099.

4.Utilization of Emotion (UE) was a significant predictor of QWL. The Adjusted  $R^2$ value for the model was 0.053

5.In terms of the standardized coefficient  $\beta$ , the strength of the predictors were in the following order:

**MOE (0.347) > MOthE (0.317) > UE (0.234) > PE (0.178)**

## **Summary**

Hence, we may conclude that there was weak positive correlation between EI and QWL among the employees working in the HEIs of the private sector in the NCR. Employees having a higher EI were believed to have a better QWL. It may be stated that the two attributes were not independent of each other. EI did have a significant impact on the QWL. Considering the different sub-domains of EI, 'Managing Own Emotions' had the greatest influence on the QWL of the employees. Analysis revealed that 11.9% of the QWL could be explained on the basis of 'Managing Own Emotions'. A combination of MOE (Managing Own Emotions) and MothE (Managing Others' Emotions) were a significant predictor of QWL and could explain 13.4% of the variation in QWL.

## **Chapter 8**

### **SUGGESTIONS & RECOMMENDATIONS**

#### **SUGGESTIONS**

The following are suggested on the basis of the present study:

**1. To include more variables which have an impact on QWL**

The present study indicates that the overall influence of EI on QWL was only 11.3%. It was also inferred that a combination of “managing own emotions” and “managing others’ emotions” could explain 13.4% of the variation in QWL. Hence there were probably other factors which had a cumulative effect of greater than 85% on the QWL. One such variable may be the leadership style. Future researchers may include other independent variables in their study. This would help the policy makers/management design suitable interventions to enhance the QWL and thereby ensure better organizational outcomes (such as higher productivity, efficiency, organizational commitment and engagement, and lower turnover and absenteeism).

**2. To increase the sampling frame**

The present study is focused on the private HEIs of the National Capital Region of India. A clearer picture regarding the impact of EI on QWL may be obtained when the private HEIs of other regions were also included in the study.

**3. To study the influence of demographic factors**

The present study takes into account a holistic view of the impact of EI on QWL. Future researchers may also examine this impact on the basis of gender, designation and other demographic factors. This would facilitate the design and implementation of specific interventions suited to the particular profile of the recipient.

#### **RECOMMENDATIONS**

Policy makers should plan interventions to enhance the EI of the employees. This may be facilitated with the help of suitable development programmes with special emphasis on management or regulation of emotions. This may lead to a better QWL and thereby ensure higher levels of job satisfaction, motivation, creativity and productivity at work. The Institutions may benefit in terms of lower turnover, absenteeism and training and development costs. Higher levels of EI of the employees may also help in increased trust and better ways of dealing with the youth (students) to make them knowledgeable, skilled and compassionate adults.