

## *Introduction*

---

# **CHAPTER I**

## **INTRODUCTION**

The relationship between occupational stress, job satisfaction, and organizational commitment has been a frequently studied topic in the past century (Barrick, Mount & Judge, 2001). Workplace stress is a growing phenomenon in the current economy, whereas employees face overwork, job insecurity and lower level of job satisfaction. Workplace stress has negative impact on the health and wellbeing of the employees as well as it affects workplace productivity and profits. There are many stressors which create stress among the Information Technology (IT) employees. Undefined work descriptions and timings make the job very hard, despite of lucrative salaries and environmental conditions. This study aims at studying the relationship between occupational stress, job satisfaction, and organizational commitment.

### **BACKGROUND**

Occupational stress, job satisfaction, and organizational commitment have longer been concerns for IT employees. In today's world, stress has become a worldwide phenomenon, which is virtually there, in some form, in every workplace. In today's work life, IT employees are generally working for longer hours, as the rising levels of responsibilities require them to exert themselves even more strenuously to meet rising expectations about work performance. Omolara, (2008) described that stress as the adverse psychological and physical reactions that occur in an individual as a result of their being unable to cope with the demands being made on them.

Information technology sector plays an important role in Indian economy and has transformed India's image from slow moving bureaucratic economy to a land of innovative entrepreneurs. The work environment in this sector is multidimensional because of the diverse functions these organizations perform. Globalization had a profound impact in shaping the Indian IT industry with India capturing a sizeable chunk of the global market for technology sourcing and business services. Over the years, the growth drivers for this sector have been the verticals of manufacturing, telecommunication, insurance, banking, and, of late, the fledgling retail revolution.

As the new scenario unfolds, it is getting clear that the future growth of IT and ITES will be fuelled by the verticals of climate change, mobile applications, healthcare, energy efficiency and sustainable energy. In the broadest sense, information technology refers to both the hardware and software that are used to store, retrieve, and manipulate information

In the last two decades, the Indian IT/ITES industry has contributed significantly to Indian economic growth in terms of GDP, foreign exchange earnings and employment generation. The industry has been the trigger for many "firsts" and has contributed not only to unleashing the hitherto untapped entrepreneurial potential of the middle class Indian but also taking Indian excellence to the global market.

India has been known for its huge talent pool and has proved to be one of the most significant destinations for global companies to outsource their back office operations. Due to country's additional edge in knowledge based services, India has emerged as a favorite destination for outsourcing of knowledge processes too. Over a period of time, the industry has touched everyone from market researchers to accountants to medical professionals. Now BPOs have also started high end consulting jobs.

Nevertheless, despite the fact that the IT sector is a rapidly growing sector, it is facing numerous challenges both internally and externally. Externally, IT firms have to deal with criticism and occasional hostility for a number of reasons including their inability to manage or deliver according to expectations, and sometimes they face lack of credibility because of their foreign and domestic affiliations or exclusive groupings. The negative media publicity about IT employees and the unfortunate functioning of some opportunistic elements sometimes further aggravate the negative public impressions (Khan, 2005).

On the other hand, internally, the IT, particularly the smaller grassroots level organizations, are facing problems relating to inadequacies in the areas of management, capacity building, human resource development, institutional strengthening and sustainability. Thus, all these challenges and expectations create a high stress environment not only for the organization as a whole but the individual IT workers as well, who are expected to show loyalty in face of all challenges. However, it is important

to understand employees personality and promoting job satisfaction is vital for a healthy corporate. This can be achieved by developing a comprehensive organizational strategy that should address stress reduction elements by investigating the overall function of the organization including its climate and values, its provision of social support and rewards and the relationship of its workers with the organization.

Job satisfaction is widely illustrated in the human resources management as a key factor in the relationship between occupational stress and organizational commitment. The level of satisfaction strongly influences the retention level of workforce and affects employees work performance. Keeping in view the phenomenon of job satisfaction and occupational stress the IT employees find that they are expected to show a high level of commitment to the mission, objectives of organizations and its activities. The traditional image of an IT worker is that of an individual sitting in his/her cubicle for hours without break. The levels of job satisfaction, occupational stress and organizational commitment are influenced by the ways in which the organizational structure is established through social support, organizational policies and relationships at work. Somehow, these factors seem perhaps the most neglected ones in IT sector. This may be one of the main reasons for high degree indecision. Forgetfulness, negative thinking, loss of confidence and a lack of concentration are all classic symptoms in the IT sector of Coimbatore.

Previous researches have established that call centre agents are more stressed, and less satisfied than other workers in a traditional office environment (Lynn Holdsworth, 2003). Occupational stress is positively related to turnover and absenteeism and tension (Van de Ven, 2002). From the literature, it also seems that the phenomenon of occupational stress directly affects employees lives and work performance.

However a clear gap exists in the availability of empirical data to understand the relationship between job satisfaction, occupational stress and organizational commitment among IT employees. The absence of such knowledge may seriously affect IT managers' ability to develop appropriate strategies towards promotion of job satisfaction, in IT sector, which is a major contribution to employment in India. The present study enables to examine the relationship between job satisfaction, Occupational stress and organizational commitment.

# **THEORETICAL FRAMEWORK OF JOB SATISFACTION, OCCUPATIONAL STRESS AND ORGANIZATIONAL COMMITMENT**

## **1.1 JOB SATISFACTION**

Job satisfaction has been defined as the feelings of a person about his or her job (Balzer, et al., 1997). Job satisfaction is the degree to which an individual feels positively or negatively about various aspects of the job (Schermerhorn, J.R. 1996). It describes the comfortable zone of an individual is with his or her job. According to Loscocco, K.A and Roschelle, A.R (1991), the assumption of the definition is that people can balance their specific satisfactions and dissatisfactions to arrive at a general degree of satisfaction with their job.

Job satisfaction is “a pleasurable or positive emotional state” that is “a function of the perceived relationship between what one wants from a job and what one perceives it is offering” (Locke, 1976). The job characteristics model (Hackman & Oldham, 1980) proposes that critical psychological states such as experienced meaningfulness, feelings of responsibility, and knowledge of work results influence job satisfaction. Although Thomas and Velthouse (1990) and Conger and Kanungo (1988) did not explicitly include job satisfaction in their models of empowerment, Thomas and Tymon (1994) argued that empowerment is more likely to manifest at higher levels of job satisfaction.

Empirical support varies regarding the relationships between the individual empowerment dimensions and job satisfaction. Most available evidence is related to additive effects and is in the form of simple correlations. First, there seems to be strong evidence of a positive association between meaning and job satisfaction (Hackman & Oldham, 1980; Spreitzer et al., 1997). According to Herzberg (1966), an important determinant of job satisfaction is personal meaning. Kanter (1983) suggests that perceived meaningfulness results in greater commitment and concentration of energy. Job satisfaction results from fulfillment of desired work values (Locke, 1976). Lack of meaning in the workplace has been linked to apathy and job dissatisfaction (Thomas & Velthouse, 1990).

Second, researchers have suggested that choice is a psychological need and that meeting this need results in job satisfaction (Conger & Kanungo, 1988; Greenberger, Strausser, Cummings, & Dunham, 1989; Parker, 1993). Studies by Liden, Wayne,

Sparrowe, and Bradway (1993), and also by Thomas and Tymon (1994) show that higher levels of personal control are related to job satisfaction. These results are consistent with Spector's (1986) seminal review, in which he presented evidence for a positive association between job autonomy and job satisfaction.

Third, with regard to the impact–satisfaction relationship, strong and consistent evidence is yet to emerge. Ashforth (1989, 1990) suggested that perceived lack of opportunity to have an impact on the organization might be related to job satisfaction, and Thomas and Tymon (1994) reported a positive relationship between impact and job satisfaction, but Spreitzer et al.'s (1997) study did not support the hypothesized effect of perceived impact on satisfaction. Generally, job satisfaction and life satisfaction are closely related and job satisfaction can be measured by finding out the gap between what a person experiences in actual condition and what he thinks should be there.

Job satisfaction is commonly known as how pleased a person is with his or her work, and can be defined as the way people feel about their jobs and job aspects. (Spector, 1997). The subject has been a popular research area since the 1930s when the industrial companies realized that job satisfaction was to some degree positively correlated with productivity (Vroom, 1967). As a result, today one can observe many different approaches and definitions on the subject. One should be concerned with job satisfaction for several reasons (Spector, 1997). Firstly, job satisfaction can to some extent reflect how employees are treated with regards to respect and fairness. Secondly, job satisfaction can be an indicator of an employee's psychological and emotional health. Thirdly, it can affect the behaviour of the employee, and thus the organizational functions and productivity. Moreover, job satisfaction can be a reflection of the organizational performance, where differences between groups can lead to future problems within the company. There is an argument on whether job satisfaction is a product of the determinants that lie in the job itself, if they reside in the worker's cognitive mind, or if satisfaction is a result of an interaction between the employee's psychological mind and the work environments (Locke, 1969; Spector, 1997).

Organizational commitment is shown as a correlating variable to job satisfaction. Needs- and process theories are the two most commonly used concepts to describe job

satisfaction, even though they are traditionally applied to describe motivation. Oldham and Hackman (1980) indicated that job satisfaction was a result of inner motivation, as it could be an indicator of an employee's psychological health. Thus job satisfaction is connected to motivational theory. Due to the similarity of motivation and job satisfaction, it is not uncommon to use the definitions synonymously even though they are different terminologies. The earliest theories on job satisfaction were based on determinants of a person's needs. To become fully satisfied, Maslow (1954) pointed out five crucial needs: physiological, safety, belongingness and love, esteem, self-actualization and self-transcendence needs. Another job satisfaction theory based on human needs, developed by Herzberg, was called the two-factor (Herzberg, 1968). He identified six satisfaction factors and seven dissatisfaction factors that were independent of each other in his primary research in the late 1950s. The most acknowledged process theories are Adams' equity theory and Vroom's expectancy theory. Adams (1963) believed that people were concerned about how fair their performance was rewarded in comparison with similar groups or individuals with the same job. If the other individual or group received a better salary but did not increase the input in the job, the person would experience a disparity in regards to effort. The person would then act in accordance with the imbalance, for example reduce the work effort and productivity due to job dissatisfaction.

Victor H. Vroom (1967) suggested that job satisfaction is an individual's affective orientation towards work roles that he or she is presently occupying. The level of valence or a person's expected utility, drives the job satisfaction of an employee. If the person has positive attitudes towards the job, the person will feel satisfied; however, if the person has negative attitudes towards the job, the person will be dissatisfied. Vroom identified several factors that drive job satisfaction, such as supervision, the work group, job content, wages, promotional opportunities and work hours. Since the mid-1980s, researches have emphasized dispositional approaches where personality traits measure job satisfaction. Studies on positive and negative affectivity and self-evaluations have been used to explain dispositional sources of job satisfaction (Judge & Larsen, 2001). Staw and Ross' (1985) study on job satisfaction concluded that prior job satisfaction is a stronger predictor of current job satisfaction than changes in pay or status. There are limited studies on how non-work related factors affect the level of job satisfaction of the employees.

Life satisfaction is strongly correlated with job satisfaction, which makes sense, as work is a significant part of a person's life. Spillover effects between work and life experiences for the employees will always exist, and it is therefore important that the company takes the external job satisfaction indicators into account, as these cannot be influenced (Judge & Klinger, 2008). An example of this is the study of Georgellis et al. (2012) where they discovered that marriage and children impact the employees' level of job satisfaction. To summarize the different theories, job satisfaction is a wide field of study, and the results vary tremendously due to different viewpoints on the theme. However most of the authors agree on the main determinants of job satisfaction. There will always be a degree of uncertainty regarding the measurement of job satisfaction, as the level of job satisfaction will differ between individuals depending on age, country of origin, gender and education level.

## **1.2 OCCUPATIONAL STRESS**

Stress is what we feel when we have to respond to a demand on our energy. Stress is a natural part of life, and occurs whenever there are significant changes in our lives, whether positive or negative. It is generally believed that some stress is okay (sometimes referred to as "challenge" or "positive" stress) but when stress occurs in amounts that individuals cannot cope with, both mental and physical changes may occur.

We are all different in the events that we perceive as stressors and the coping abilities at our disposal. However, there are a number of situations which are generally identified as being stressful, including financial worries, overload work, unemployment, relationships, parenting, balancing work and family, caring, health problems, losses, Christmas, competitiveness, peer pressure, exams, and not having enough time.

Stress is a normal, adaptive response to stressors in our environment. Our bodies are designed with a set of automatic responses to deal with stress. This system is very effective for the short term "fight or flight" responses we need when faced with immediate danger. The problem is that, physiologically, our bodies have the same reaction to all types of stressors. Experiencing stress for long periods of time, such as lower level but constant stressors at work, activates this system. For many people, every day stressors keep this response activated, so that it does not have a chance to "turn off."



This reaction is called the “Generalized Stress Response” and it consists of the physiological responses such as increased blood pressure· increased metabolism (e.g., faster heartbeat, faster respiration), decrease in protein synthesis, intestinal movement (digestion), immune and allergic response systems, increased cholesterol and fatty acids in blood for energy production systems, localized inflammation (redness, swelling, heat and pain), faster blood clotting, increased production of blood sugar for energy, increased stomach acids.

Job stress may happen because of workers interaction and working conditions. It may differ on workers characteristics and working conditions. Individual characteristic differences such as personality and skills can be very important in the prediction of certain job conditions will result in stress. In other words, what is stressful for one may not be the stressful for another person. The preventive strategies that focus on workers may help them to do with job conditions.

### **Working conditions**

Since the significance of individual opinion differences cannot be ignored, but scientific evidences suggests that certain working conditions are stressful to most of the people. Such evidence argues that greater emphasis on working conditions is one of the key source of job stress. Surveys about working conditions and risk factors for job stress were conducted in the states of European Union in 1990, 1995 and 2000. Results showed that time trend suggesting an increase in work intensity. During 1990, the percentage of workers reporting that they worked at high speeds at least one quarter of their working time was 48%, which has increased to 54%in 1995 and to 56% in 2000. Similarly 50%of the workers reported they work against tight deadlines at least one fourth of their working time in 1990, which has increased to 56% in 1995 and 60% in 2000. However, no change was noted in the period 1995-2000 in the percentage of workers reporting sufficient time to complete tasks.

### **Workload**

In an occupational setting, dealing with workload can be stressful and serve as a stressor for employees. There are three aspects of workload that can be stressful. Quantitative workload or overload: Having more work to do than can be accomplished

comfortably. Qualitative workload: Having undertaken difficult task. Under load: Having work that fails to use a worker's skills and abilities. Workload has been linked to a number of strains, including anxiety, physiological reactions such as cortisol, fatigue, backache, headache, and gastrointestinal problems.

Workload as a work demand is a major component of the demand-control model of stress. This model suggests that jobs with high demands can be stressful, especially when the individual has low control over the job. In other words control serves as a buffer or protective factor when demands or workload is high. This model was expanded into the demand-control-support model that suggests that the combination of high control and high social support at work buffers the effects of high demands. As a work demand, workload is also relevant to the job demands-resources model of stress that suggests that jobs are stressful when demands (e.g., workload) exceed the individual's resources to deal with them.

### **Long working hours**

A study shows that Americans and japan people work for long hours. It shows that more that 26% of men and more than 11% of women worked 50 hours per week during 2000. These figures shows that a substantial increase over the previous three decades, especially women. According to the labor department there is a rise in increased amount of hours in the work place by employed women, an increase in extended work(>40 hours) by men, and also a substantial increase in combined working hours among the working couples, particularly with young children.

### **Work place Status**

The person's status in the workplace can also affect levels of stress. In a workplace stress affect employees of all the level; from those who have very little influence to make decisions (may be low level employees) and those who make major decisions for the company(may be middle level or Top level management people). However, less powerful employees are more likely to suffer stress than powerful workers.

## **Economic factors**

Economic factors that employees face during 21<sup>st</sup> century as been linked with increased stress levels. Researchers have pointed that communication and information technology sector have made companies more efficient and productive ever before. This boon in productivity however, has caused higher expectations and greater competition, putting more stress on the employee (Primm, 2005). Economic factors may lead to workplace stress such as pressure from investors, who can quickly withdraw their money from company stocks, lack of trade and professional unions in the workplace, inter-company rivalries caused by the efforts of companies to compete globally and the willingness of companies to swiftly lay off workers to cope with changing business environments.

The World Health Organization has declared occupational stress to be a worldwide epidemic. Certainly the impact of an increasingly pressurized work environment is evident throughout every industry. One recent analysis noted that 20% of payroll of a typical company goes toward dealing with stress-related problems (Riga, 2006), and Americans identify work as their most significant source of stress because of heavy workloads, uncertain job expectations, and long hours (American Psychological Association, 2007). Extensive research over the years has focused on identifying stressors (e.g., Colligan& Higgins, 2006), coping mechanisms (e.g., Nelson & Sutton, 1990), and ways that both individual employees and organizations can effectively manage stress (e.g., Kram& Hall, 1989). In spite of all these remedies to combat occupational stress remain elusive.

## **1.3 ORGANIZATIONAL COMMITMENT**

Organizational commitment can be defined as “an effective response or attitude resulting from an evaluation of the work situation which links or attaches the individual to the organization” (Mottaz, 1988, p. 468). There is widespread agreement in the literature that organizational commitment is based on attitude (Solinger, van Olffen, & Roe, 2008), however, it can also be based on individual behavior (Becker, 1960).

Meyer and Allen (1991) interpret organizational commitment as a psychological state that consists of three factors called the three-component model (TCM). The TCM

ties together three psychological states that describe the employee's relationship to the organization, and they are decisive outcomes when the employee is deciding whether to stay or leave the organization (Meyer et al., 2002; Solinger, van Olffen, & Roe, 2008). All the components vary in strength over time, depending on the work situation.

The first component, affective commitment, refers to the employee's emotional connection and involvement with the organization (Meyer & Allen, 1991). The factors of organizational commitment explained by Porter et al. (1974) refer to the characteristics of affective commitment. If the employee has a strong affective commitment, he or she will stay in the organization because he or she wants to. Personal characteristics and work experiences are the factors of affective commitment. The former consists mainly of demographic features, and the latter is measured by factors such as job challenge, organizational support, role clarity, transformational leadership, empowerment, and job importance (Allen & Meyer, 1990).

The second component called continuance commitment, relates to the awareness of costs associated with quitting the firm (Meyer & Allen, 1991). If the variable is strong, the employee will stay in the organization because he or she needs to. Continuance commitment is based on personal characteristics, other job alternatives and investments that are measured by factors such as transferable skills, formal education, self-investment and pensions (Allen & Meyer, 1990). The third component, normative commitment, replicates a feeling of responsibility to continue employment (Meyer & Allen, 1991). If the component is strong, the employee feels that he or she should remain in the firm. The factors of normative commitment are personal characteristics, socialization experiences and organizational investments.

The Tri Component Model is considered to be the leading model of organizational commitment, but several researchers have criticized it, as it is not consistent with empirical findings. Solinger et al. (2008) do not agree with the interpretation of organizational commitment in the model as they claim that it is more of a predictor of turnover in an organization than serving as a model of organizational commitment. Furthermore, it is argued that normative commitment has been found to correlate strongly with affective commitment, and that there is uncertainty of the validity of continuance

commitment. Also, Meyer et al. (2002) found antecedents that correlated with affective and continuance commitments, while no antecedents were found to correlate specifically with normative commitment. Therefore, authors have suggested that the first component, affective commitment, should be used to analyze organizational commitment as it correlates the strongest with the underlying factors of organizational commitment, and has the strongest validity of the three components (Ko, Price, & 16 Mueller, 1997).

Organizational commitment is also defined as a concept of exchange, also known as the reward-value model (Mottaz, 1988). Just as employers are concerned with the employees' loyalty and contribution to the company, Eisenberger et al. (1986) found evidence that employees are concerned with how the company values their contributions and look after their well-being through a reward system. A person with certain needs, desires and skills (work values) joins an organization where he or she can use his or her abilities and satisfy one's basic needs (work rewards) that the employer provides for (Kalleberg, 1977). Rewards can be directly associated with the job itself, for example through work challenges, work responsibilities, and supportive co-workers (Katz & Van Maanen, 1977). However, if an organization fails to meet a person's expectations, one must expect that the job performance and the organizational commitment of the employee will weaken, and that the employee absenteeism will rise.

A considerable amount of the research performed on organizational commitment involves antecedents, and they are classified as either individual or organizational characteristics (Mottaz, 1988). The former consists of demographic variables such as age, education, gender, religion and personality factors. The latter is related to work experiences such as task characteristics, pay and social environment. The results of the studies that have examined the influence of the determinants on organizational commitment have been inconclusive. The reason for the research inconsistency is that the studies emphasize different variables or characteristics, and it is therefore difficult to compare the studies on organizational commitment (Mottaz, 1988). Some suggest that both individual and organizational characteristics have significant impacts on a person's organizational commitment. Others suggest that only the individual or the organizational characteristic is significant. For example, Mottaz (1988) suggests that demographic

characteristics cannot be accounted for, even though they are positively correlated with organizational commitment, because they do not explain why a person is committed.

#### **1.4 ORGANIZATIONAL COMMITMENT AND JOB SATISFACTION:**

Jobsatisfaction and organizational commitment plays the vital determinants of turnover behaviors, and correlate negatively with turnover (Mathieu &Zajac, 1990; Spector, 1997; Meyer et al., 2002; Porter et al., 1974). High turnover rates are costly and can reduce a company's profitability, as new employees will require training resources and are less productive after recruitment. Also, turnover can result in losing valuable knowledge to the competitors.

Furthermore, employers are interested in understanding on-the-job behavior that can affect the productivity of the company's services. On-the-job behavior consists of factors such as attendance, job performance and organizational citizenship behavior (Meyer et al., 2002). Absenteeism is withdrawal behavior that is highly correlated with organizational commitment (Steers, 1977). Blau and Boal (1987) found that employees with high levels of commitment had lower levels of absenteeism and turnover. Moreover, dissatisfied people are more absent from work than satisfied people (Spector, 1997).

Researchers have found links between job satisfaction, organizational commitment and job performance. However, meta-analysis performed on the subject concluded that the correlation between job performance and job satisfaction is rather moderate (Iaffaldano & Muchinsky, 1985; Judge et al., 2001). Christen et al. (2006) argue that there are conflicting findings in the literature of the relationship between job satisfaction and job performance, as there are inconsistent results in both the measurement and constructs across studies. Only when rewards were tied to job satisfaction and performance, the two variables correlated more strongly (Spector, 1997). There are also conflicting findings in the literature between organizational commitment and job performance. Steers (1977) and Mathieu and Zajac (1990) found a minor relationship between the two variables, but not significantly enough to have a direct association. On contrast, Riketta (2002) did find some positive correlation between organizational commitment and performance.

The last job behavior factors is costly and can reduce a company's profitability, as new employees will require training resources and are less productive after recruitment. Also, turnover can result in losing valuable knowledge to the competitors. Furthermore, employers are interested in understanding on-the-job behavior that can affect the productivity of the company's services. On-the-job behavior consists of factors such as attendance, job performance and organizational citizenship behavior (Meyer et al., 2002). Absenteeism is withdrawal behavior that is highly correlated with organizational commitment (Steers, 1977). Blau and Boal (1987) found that organizational citizenship behavior (OCB), which is job behavior that influences business productivity where performance goes beyond the job requirements such as helping co-workers (Spector, 1997). OCB positively correlates with organizational commitment and job satisfaction, but it also correlates marginally with job performance (Meyer, Allen, & Smith, 1993; Organ & Ryan, 1995).

Another concern at work is the health and welfare of the labor force. Even though the subject has not been studied to the same degree as the other outcomes mentioned above, it has become more relevant in the organizational theory literature on topics such as stress and conflict with external factors (Meyer et al., 2002). The literature on organizational theory is fairly clear with regards to the outcomes of organizational commitment and job satisfaction, as the focus has been on the employer's concern with profitability and productivity growth. However, the antecedents of the two variables are much more varied and inconsistent (Reichers, 1985). This stems from the diverse ways the topics have been expressed by the authors. As the terms are widely defined and considered complex, it is not easy to find universal factors that can be used in any situation.

Norwegian employers have gradually become more interested in employee satisfaction and commitment, especially within international environments, as they have become more dependent on labor productivity. In spite of this, organizational commitment and job satisfaction have not been widely studied in a Norwegian context. Most academic studies are from the health sector, and there are few studies that consider both variables.

According to a report made by Oslo Chamber of Commerce (2013) it is important for Norwegian firms to attract highly educated people in order to be globally competitive in the long run, and to meet the high cost level the country has today. Due to limits in the Norwegian job market, especially within engineering and IT, Norwegian companies are increasingly employing foreigners (Dzamarija & Andreassen, 2013). However, working in intercultural work environments can lead to conflicts, even though it is a source of specialized knowledge and experience (Hofstede & Hofstede, 2005). By understanding the causes of job satisfaction and organizational commitment in a multicultural context, employers can reduce the risk of the negative outcomes, such as turnover and absenteeism.

Most Norwegian managers have numerous tools that they can apply in the work environment to increase the employees' job satisfaction and organizational commitment. For instance, a pay rise or increased responsibilities can make employees more satisfied and committed to the firm. It is natural to assume that the same measures can have similar effects on people from different cultural backgrounds. However, this might not always be the case. By assessing possible disparities between cultural groups, changes in company policies can indirectly affect the profitability in a positive way. When using the term culture, it refers to national culture, and must not be confused with organizational culture. National culture is an identity with which one has grown up and associates oneself. Even though there are many different sub-cultures within a country, there will normally be one culture the majority of the population identify themselves with. Organizational culture, on the other hand, is a social system that one joins for a certain time period, and that the members can influence (Hofstede & Hofstede, 2005).

### **1.5 OCCUPATIONAL STRESS AND JOB SATISFACTION:**

A variety of variables have been studied as potential mediators of the personality job satisfaction relationship: identity, variety, feedback, autonomy, significance, job complexity, (Judge, Bono, & Locke, 2000). Occupational stress has also been widely researched as a variable linked to job satisfaction. Brief and Atieh (1987) reported that one of the most frequently used indexes of job stress is job satisfaction. A review by Jackson and Schuler (1985) cited more than thirty studies in which job satisfaction was used in relation to job stress. This relationship should not be surprising when one



considers the commonalities in the conceptual definitions of job stress and job satisfaction. Much of the research on organizational stress has focused on its relationship with job satisfaction. These studies generally indicate that job stress and satisfaction are inversely related (e.g., Miles, 1976).

Within the domain of work, an individual's level of satisfaction results from the experience and reaction to positive and negative events. More stressful work environments that involve more "hassles," that is, daily experiences that an individual would appraise as potentially harmful to well-being such as interpersonal conflict, heavy workloads, strict deadlines, or high levels of accountability or responsibility, would likely place more strain on an individual and require greater coping. An individual with lower Emotional Stability is less likely to cope effectively, is more likely to perceive the added stress as negative, and is more likely to translate this into lower satisfaction with one's job (Hart, 1999). The relationship between personality and satisfaction may be mediated through experience of stressful or non-stressful events (Hart, 1999).

In support of this, Hart (1999) found that Neuroticism was moderately correlated with job satisfaction in a sample of IT employees. The results also indicated that the relationship between personality and satisfaction may have been mediated through the IT officers' daily experiences of stressful and non-stressful events. In a study that examined the relationships between workplace stress, Emotional Stability, and satisfaction, Decker and Borgen (1993) found that higher job stress was related to lower job satisfaction and that lower Emotional Stability was also related to lower job satisfaction. While this study did not look at stress as a moderator of the Emotional Stability – satisfaction relationship, the findings lend support that these variables are related. Sarason and Johnson (1979) found that negative stress events were significantly related to lower levels of job satisfaction with regard to supervision, pay, and the work itself.

## **1.6 STATEMENT OF THE PROBLEM**

Individual's job satisfaction and organizational commitment can lead to valuable consequences such as organizational success, reduced employee turnover and absence. An extensive review of the literature revealed that a great deal has been written about the causes and adverse effects of occupational stress as well as the importance of job

satisfaction and organizational commitment for the realization of organizational and professional goals. However, very few studies were found which addressed this relationship in the IT sector in India. There are some previous researches which focus mainly in the domain of occupational stress related to dimensions like job satisfaction, life satisfaction, and job performance. (Khan, 2005; Haider et al., 1986) In addition, IT employees have their own area of interest and they function in a unique work environment with their stakeholders. Therefore, such general descriptions about the employees' issues, and problems might not be enough. Empirical evidence is still needed to exhibit the relationship between occupational stress, job satisfaction, and organizational commitment in IT sector.

*The problem to be investigated is to, “examine the relationship between occupational stress, job satisfaction, and organizational commitment among the employees of Information Technology industry in Coimbatore. Further, this study aims to explore the effect of demographic variables on occupational stress, job satisfaction, and organizational commitment of the IT employees.”*

## **1.7 RESEARCH OBJECTIVES**

The objective of this empirical is to examine the relationship between occupational stress, Job satisfaction and organizational commitment among the employees of IT sector. The literature review failed to provide any viable data about the nature of job satisfaction and its relationship with occupational stress and organizational commitment of IT employees in Coimbatore.

Therefore, this study attempts to fill this vacuum by providing additional information that might be of interest to the researchers, IT managers, psychologists, and career counselors. The specific objectives of this study are:

- To study the relationship between occupational stress, job satisfaction and organizational commitment among the employees of IT industry in Coimbatore.
- To study the level of occupational stress among the employees of IT industry.
- To study the level of job satisfaction among the employees of IT industry.

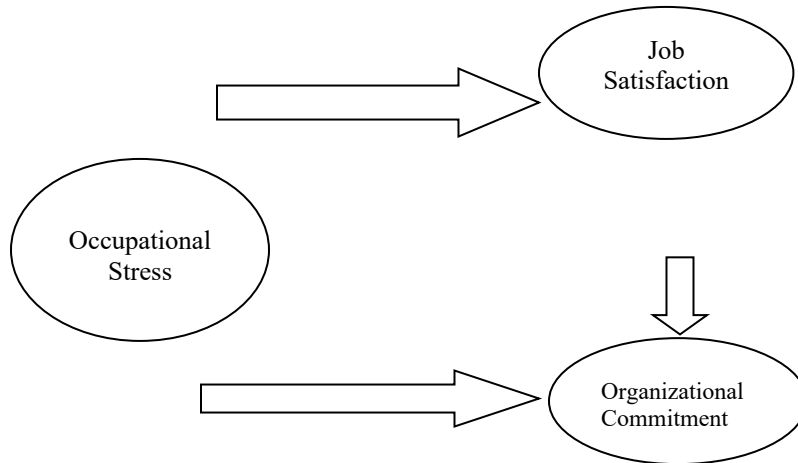
- To study the level of organizational commitment among the employees of IT industry.
- To analyze the effect of various personal variables such as age, gender, education, experience, and monthly income on occupational stress, job satisfaction and organizational commitment among the employees of IT industry.

## **1.8 CONCEPTUAL FRAMEWORK OF THE STUDY**

A conceptual framework is proposed to explain logically the interconnection among variables of the study. The proposed conceptual model shows variables including occupational stress, job satisfaction and organizational commitment.

Job satisfaction is the level of contentment employees feel about their work, which can affect performance. It can be influenced by a person's ability to complete required tasks, the level of communication in an organization, and the way management treats employees. Occupational stress is a major hazard for many workers. Increased workloads, downsizing, overtime, hostile work environments, and shift work are just a few of the many causes of stressful working conditions. Organizational commitment is characterized by three factors; a strong evident of confidence in the organization's goals and values, willingness to exert ability and effort on behalf of the organization, and a strong desire to be a member of the organization.

To explore the relationship between the Job satisfaction, occupational stress and organizational commitment of IT employees, this study treats occupational stress as independent variable that influence the dependent variables, i.e. job satisfaction and organizational commitment. An increase in job stress may lead to augmented strain and decreased job satisfaction and commitment, which eventually results in poor employee work performance.



**Figure 1.1 A CONCEPTUAL MODEL OF THE STUDY**

Furthermore, this study aims at investigating how do employees belonging to different age groups, different experience level, different genders, qualifications, different monthly income, different marital status and different family size in an organization perceive and experience occupational stress and how these factors affect employees’ job satisfaction and organizational commitment.

### **1.9 INDIA’S EMERGING ECONOMY: IT SECTOR**

The global sourcing market in India continues to grow at a higher pace compared to the IT-BPM industry. India is the leading sourcing destination across the world, accounting for approximately 55 per cent market share of the US\$ 185-190 billion global services sourcing business in 2017-18. Indian IT &ITeS companies have set up over 1,000 global delivery centres in about 80 countries across the world.

India has become the digital capabilities hub of the world with around 75 per cent of global digital talent present in the country.

#### **Market Size**

The IT-BPM sector in India stood at US\$177 billion in 2019 witnessing a growth of 6.1 per cent year-on-year and is estimated that the size of the industry will grow to US\$ 350 billion by 2025. India’s IT &ITeS industry grew to US\$ 181 billion in 2018-19. Exports from the industry increased to US\$ 137 billion in FY19 while domestic revenues

(including hardware) advanced to US\$ 44 billion. IT industry employees 4.1 million people as of FY19.

Spending on information technology in India is expected to reach US\$ 90 billion in 2019.

Revenue from digital segment is expected to comprise 38 per cent of the forecasted US\$ 350 billion industry revenue by 2025.

### **Investments/ Developments**

Indian IT's core competencies and strengths have attracted significant investments from major countries. The computer software and hardware sector in India attracted cumulative Foreign Direct Investment (FDI) inflows worth US\$ 39.47 billion between April 2000 and June 2019 and ranks second in inflow of FDI, as per data released by the Department for Promotion of Industry and Internal Trade (DPIIT).

Leading Indian IT firms like Infosys, Wipro, TCS and Tech Mahindra, are diversifying their offerings and showcasing leading ideas in block chain, artificial intelligence to clients using innovation hubs, research and development centres, in order to create differentiated offerings.

Some of the major developments in the Indian IT and ITeS sector are as follows:

- Total export revenue of the industry is expected to grow 8.3 per cent year-on-year to US\$ 136 billion in FY19.
- UK-based tech consultancy firm, Contino, has been acquired by Cognizant.
- In May 2019, Infosys acquired 75 per cent stake in ABN AMRO Bank's subsidiary Stater for US\$ 143.08 million
- In June 2019, Mindtree was acquired by L&T.
- Nasscom has launched an online platform which is aimed at up-skilling over 2 million technology professionals and skilling another 2 million potential employees and students.
- Revenue growth in the BFSI vertical stood at 6.80 per cent y-o-y between July-September 2018.

- As of March 2018, there were over 1,140 GICs operating out of India.
- PE investments in the sector stood at US\$ 2,400 million in Q4 2018.

### **Government Initiatives**

Some of the major initiatives taken by the government to promote IT and ITeS sector in India are as follows:

- On May 2019, the Ministry of Electronics and Information Technology (MeitY) launched the MeitY Startup Hub (MSH) portal.
- In February 2019, the Government of India released the National Policy on Software Products 2019 to develop India as a software product nation
- The government has identified Information Technology as one of 12 champion service sectors for which an action plan is being developed. Also, the government has set up aRs 5,000 crore (US\$ 745.82 million) fund for realising the potential of these champion service sectors.
- As a part of Union Budget 2018-19, NITI Aayog is going to set up a national level programme that will enable efforts in AI<sup>^</sup> and will help in leveraging AI<sup>^</sup> technology for development works in the country.
- In the Interim Budget 2019-20, the Government of India announced plans to launch a national programme on AI\* and setting up of a National AI\* portal.
- National Policy on Software Products-2019 was passed by the Union Cabinet to develop India as a software product nation.

### **Achievements**

Following are the achievements of the government during 2017-18:

- About 200 Indian IT firms are present in around 80 countries.
- IT exports from India are expected to reach highest ever mark of US\$ 137 billion of revenues in FY19 growing at 8.3 per cent.
- Revenue of GICs is expected to touch US\$ 50 billion by 2025.
- Highest ever revenue was generated by Indian IT firms at US\$ 181 billion in 2018-19.

## **Road Ahead**

India is the topmost off shoring destination for IT companies across the world. Having proven its capabilities in delivering both on-shore and off-shore services to global clients, emerging technologies now offer an entire new gamut of opportunities for top IT firms in India. Export revenue of the industry is expected to grow 7-9 per cent year-on-year to US\$ 135-137 billion in FY19. The industry is expected to grow to US\$ 350 billion by 2025 and BPM is expected to account for US\$ 50-55 billion out of the total revenue.

### **Overview of India's IT and ITES Industry:**

India is the world's largest sourcing destination, accounting for approximately 55 per cent of the US\$ 185-190 billion market. The country's cost competitiveness in providing Information Technology (IT) services, which is approximately 3-4 times cheaper than the US, continues to be its Unique Selling Proposition (USP) in the global sourcing market.

India's highly qualified talent pool of technical graduates is one of the largest in the world and is available at a cost saving of 60-70 per cent to source countries. This large pool of qualified skilled workforce has enabled Indian IT companies to help clients to save US\$ 200 billion in the last five years. India has become the digital capabilities hub of the world with around 75 percent of global digital talent present in the country.

India's IT &ITeS industry grew to US\$ 181 billion in 2018-19. Exports from industry increased to US\$137 billion in FY19 while domestic revenues advanced to US\$44 billion. Spending on Information Technology in India is expected to grow over 9 percent to reach US\$ 87.1 billion in the next year. Revenue from digital segment is expected to comprise 38 percent of the forecasted US\$ 350 billion industry revenue by 2025.

The IT-BPM sector in India grew at a Compound Annual Growth rate (CAGR) of 15 per cent over 2010-15, which is 3-4 times higher than the global IT-BPM spend, and is estimated to expand at a CAGR of 9.5 per cent to US\$ 300 billion by the end of 2020.

The Government of India has extended tax holidays to the IT sector for software technology parks of India (STPI) and Special Economic Zones (SEZs). Further, the

country is providing procedural ease and single window clearance for setting up facilities.

The major segments of the Industry are IT Services, BPO, and Engineering Services, R&D, and Products. Much of the activity is centered on service offerings in Banking, Financial Services, and Insurance (BFSI), Hi-Tech and Telecom, Manufacturing, and Retail. These are also referred to as various 'industry verticals' in common parlance.

### **IT and ITeS: Leading services segment**

- About 200 Indian IT firms are present in around 80 countries. Leading Indian IT firms like Infosys, Wipro, TCS and Tech Mahindra are diversifying their offerings and showcasing leading ideas in block-chain, artificial intelligence to clients using innovation hubs, research and development centres.
- IT exports from India are expected to reach highest ever mark of US\$ 126 billion in current financial year.
- Highest ever revenue was generated by Indian IT firms at US\$ 181 billion in 2018-19.
- Export revenue of the industry has increased 7-9 percent year on year to US\$ 135-137 billion in FY19. The industry is expected to grow to US\$ 350 billion by 2025.

### **Share of segments**

The IT Services segment is the largest contributor to the IT and ITES Industry, accounting for about 60% of industry revenues. The following are the major segments in the IT Services sector.



**Table 1.1*****Major segments in IT Services exports***

<b>IT Services – Exports</b>	<b>Contribution (%)</b>
<b><i>Project Oriented</i></b>	<b>58%</b>
IT Consulting	3%
Systems Integration	3%
Custom Application Development	49%
Network Consulting and Integration	1%
Software Testing	2%
<b><i>Outsourcing</i></b>	<b>33%</b>
Application Management	12%
IS Outsourcing	6%
Others	15%
Software development and support	7%
<b><i>Support and Training</i></b>	<b>9%</b>
Software development and support	7%
Hardware deployment and support	1%
IT education and training	1%
<b><i>Total</i></b>	<b>100%</b>

***Source: NASSCOM and IMAcS analysis***

Customer Application Development and Maintenance contribute to over 50% of revenues in this space. This is primarily because the activity is viewed as ‘outsourcable’. The industry garners a large chunk of its revenues from IS outsourcing and software support activities.

Enterprise solutioning, Remote Infrastructure Management (RIM), testing services, are expected to fuel growth in this segment. In order to grow, companies are increasingly looking at positioning themselves as end-to-end solution providers. Recent acquisitions by IT companies are primarily meant to acquire either scale or capabilities in niche segments such as IT consulting, telecom and healthcare products. The BFSI, telecom, retail, and manufacturing sectors account for major portion of the IT Services revenues.

### ***Demand Drivers for IT Services***

The key demand drivers for the IT Industry in India are as follows:

***Global growth in IT Services spending:*** The IT spending is expected to grow at 6.3% globally in the next five to six years. Given the growth in the spending base, as well as India being poised to increase its share from the current levels of about 7% in the IT Services space, it is well poised to tap into the global IT spending. The ‘addressable’ market is expected to triple from US \$ 500 billion today to US \$ 1.5 to 1.7 trillion till 2022.

***Growth in markets beyond US and EU:*** Markets beyond US and EU, especially BRIC5 (Brazil, Russia, India, China) and APAC will be major growth areas in the future. These markets are expected to witness growth much more than the US and EU.

***Growth in domestic spending:*** The growth in domestic spending will be fuelled by the following:

***High rates of GDP growth:*** As per the BRIC Report of Goldman Sachs, India is likely to be the only country among the BRICs to clock GDP growth between 5% and 6% across all years till 2050. This would fuel growth in a host of downstream industries where IT adoption would be high, such as BFSI.

***Other areas which will drive domestic demand:*** Other areas which will drive domestic demand are increasing Government spend on IT and e-governance. Industry adoption will be spearheaded in BFSI, telecom, retail, and healthcare.

***Sustaining cost competitiveness:*** It is estimated that for multinational corporations sourcing from India, cost savings delivered are in the range of 25 to 60 per cent of the company’s original costs. This is expected to sustain for the next 15 years. On a scale of 4 in terms of overall financial attractiveness for this industry, India scored 3.22 as compared to China (2.93), Malaysia (2.84), and Thailand (3.19).

***Large technical pool of skilled professionals:*** a diversified product, service, and market play; and innovation are expected to enable this growth, as described in the later sections.

## **Indian IT-BPO performance**

The global outsourcing market in India continues to grow at a higher pace compared to the IT-BPM industry. India is the leading sourcing destination across the world, accounting for approximately 55% market share of US\$185-190 billion global services sourcing business in 2017-18. Indian IT and ITeS companies have set up over 1000 global delivery centres in about 80 countries across the world

India has become the digital capabilities hub of the world with around 75 per cent of global talent present in the country.

The sector is estimated to aggregate revenues of USD 177 billion in FY2019, with the IT software and services sector (excluding hardware) accounting for USD 76.1 billion of revenues.

**Exports market:** IT exports in FY 2019 crossed \$137 billion in revenues and it has increased more than a half comparing to USD 59 billion in FY2011.

**Geographic focus:** The year was characterized by a consistent demand from the US, US has been the biggest importer of Indian IT exports over 62% of Indian IT products were absorbed by US during 2019.

**Vertical Markets:** While the sector's vertical market mix is well balanced across several mature and emerging sectors, FY2019 was characterized by broad based demand across traditional segments such as Banking, Financial Services and Insurance (BFSI), but also new emerging verticals of retail, Healthcare, Media and Utilities.

**Service Lines:** Within exports, IT Services segment was the fastest growing segment, Being the low cost exporter of IT services, India is going to attract more markets in other regions. As of FY18, US and UK are the leading customer markets with a combined share of nearly 80%. However is growing demand from Latin America and Middle East Asia. Software as a service market is driving growth in almost all software segments in India, and the consumer relationship management SaaS market in India is among the fastest growing in the world. Overall, enterprise software spending is forecast to amount to \$6.3 billion and grow 12.9% in 2019.

**Domestic market:** IT services are one of the fastest growing segments in the Indian domestic market. Strong economic growth, rapid advancement in technology infrastructure, increasingly competitive Indian organizations, enhanced focus by the government and emergence of business models that help provide IT to new customer segments are the key drivers for increased technology adoption in India.

Spending on devices (PCs, Tablets and mobile phones) is set to total \$ 33 billion in 2019, a growth of 7.4 % over a year

Government sector is a key catalyst for increased IT adoption- through sectors reforms that encourage IT acceptance, National e-Governance Programmes (NeGP), and the Unique Identification Development Authority of India (UIDAI) programme that creates large scale IT infrastructure and promotes corporate participation.

The BPO segment is projected to reach \$1.7 billion and is on pace to achieve 18.5 percent growth the highest 2019 growth rate of the IT services segment. The consulting segment is ranked second, totaling \$ 4 billion-a 15.9 percent increase in 2019.

#### **FUTURE OUTLOOK:**

India is the topmost off shoring destination for IT companies across the world. Having proven its capabilities in delivering both on-shore and off-shore services to global clients, emerging technologies now offer an entire new gamut of opportunities for top IT firms in India. Social, mobility, analytics and cloud (SMAC) are collectively expected to offer a US\$ 1 trillion opportunity. Cloud represents the largest opportunity under SMAC, increasing at a CAGR of approximately 30 per cent to around US\$ 650-700 billion by 2020. The social media is the second most lucrative segment for IT firms, offering a US\$ 250 billion market opportunity by 2020. The Indian e-commerce segment is US\$ 12 billion in size and is witnessing strong growth and thereby offers another attractive avenue for IT companies to develop products and services to cater to the high growth consumer segment.

Information Technology Industry consist of two major components: IT services and Business process out sourcing (BPO) The sector has increased its contribution to India's GDP from 1.2% in 1998 to 7.7% in 2017. According to, NASSCOM, the sector

aggregated revenues of US\$160 billion in 2017, with export revenue standing at US\$48 billion, growing by over 13%. The United States accounts for two-thirds of India's IT services exports.

An IT industry in India has shown a remarkable growth in the last two decades. It has moved very far from the minimal percentage of GDP to an impressive percentage. As the global economy improves, and the consumer confidence increases, investing in new technologies such as internet of things, products and platforms, cloud computing, mobility and analytics etc. will enable vendors to gain efficiency. India is expected to be the world's fastest economy by 2020, according to Economist Intelligence Unit (EIU)

In the future, the global IT-BPO industry is likely to go through a paradigm shift across five parameters.

**Markets:** Growth will be driven by new markets – SMBs, Asia, public sector and government-influenced entities which will become a priority customer base.

**Customers:** Customers will demand 'transformative' value propositions, that go beyond lower-cost replication; as technology creates virtual supply chains, customers will require a seamless experience across time zones and geographies; increasing demand for innovation and end-to-end transformation.

**Service Offerings:** Offerings that are high-end deeply embedded in customer value chains will emerge. Services and delivery will become location-agnostic leading to new opportunities such as design services in manufacturing, Remote Infrastructure Management (RIM), etc. Solutions for the domestic market will be a key focus area.

**Talent:** Government pressures to create local jobs and the need for local knowledge will alter the employee mix - a higher proportion of non-Indians with multilingual and localized capabilities. There will be a much greater focus on ongoing development of specialized skills and capabilities.

**Business models:** Driven by a focus on expertise and intellectual property, offerings will shift from piecemeal, technology-centric applications to a range of integrated solutions and higher-end services, spanning new service lines (e.g., green IT).

While developed markets constitute the largest share of IT spend, increasingly emerging markets are spearheading growth as a large consumer base becomes increasingly tech-savvy and enterprises adopt IT solutions to improve their global competitiveness. Given this scenario, the Indian supply base has begun to explore market opportunities beyond US and UK. By 2020, new segments (SMBs), new verticals (Public sector and Defence, Healthcare, Utilities, Printing and Publishing) and new geographies (BRIC) will account for 50-55 per cent growth in the addressable market. India supply base is well placed to tap this potential, with their two decade long experience, mature service capabilities, presence in almost all verticals, global footprint and an abundant talent pool.

Further, the India supply base has also begun to look for expansion across various non-metros both to control costs and have access to a large talent pool. This expansion has resulted in the development of a local talent pool and the physical and social infrastructure. The industry is now moving to rural areas creating employment, improving living standards, positively impacting career and personal development, empowering women and developing a social infrastructure, thus leading to a balanced regional growth.

The government will be a key driver for increased adoption of IT-based products and solutions. It has embarked on various IT-enabled initiatives including Public services (Government to citizen services, citizen identification, and public distribution systems), Healthcare (telemedicine, remote consultation, and mobile clinics), Education (e-Learning, virtual classrooms, etc) and financial service (mobile banking/payment gateways), etc. These initiatives are expected to substantially improve the economic conditions of a large, under-served population, thereby reducing the government's fiscal burden.

### **IT sector in Coimbatore**

Today, the IT software export from Coimbatore is close to Rs.150 crores. Tamil Nadu has the maximum number of potential BPO companies in the country. Coimbatore is on the fast track all that makes the city an irresistible destination for IT companies to set up shops and they have employed around 15,000 people here. To complement the need of skilled manpower, Coimbatore has around 54 engineering colleges, over 70 arts

colleges, seven universities, two medical colleges and 18 polytechnics. Every year, Coimbatore produces around one lakh arts graduates and 50,000 engineering graduates. This has been one of the major reasons for big companies such as Larsen & Toubro, Robert Bosch Engineering and Business Solutions and Cognizant setting up large bases near the city.

Today Coimbatore has made giant strides in the fields of engineering, auto components, education, healthcare, motors and pumps and wet grinders. The city supplies around 60 per cent of pumps and 40 per cent of motors used in India. Tata Motors sources over 25 per cent of its components from here. The healthcare sector in Coimbatore is one of the best in the country with the presence of several hospitals and specialty clinics such as AryaVaidya Pharmacy that provide world class services. There are nearly 750 hospitals in and around the city with a capacity of 5,000 beds. The size of the Coimbatore health care industry is estimated to Rs.1, 500 crores in 2010.

The city is the second largest software producer in Tamil Nadu, next only to Chennai. IT and BPO industry in the city has grown greatly with the launch of TIDEL Park and other planned IT parks in and around the city. It is ranked as 17<sup>th</sup> among the global outsourcing cities. Companies like Cognizant Technology Solutions, Wipro, Infosys, Robert Bosch GmbH, IBM, Tata Consultancy Services, Tata Elxsi, Dell, Cameron International, CSS Corp and KGISL are functioning in the city. Software exports stood at ₹1710.66 Crores (77.1 billion) for the financial year 2009-10 up to 90% from the previous year.

### **1.10 NASSCOM**

The **National Association of Software and Services Companies** (NASSCOM) is a trade association of Indian Information (IT) and Business Process Outsourcing (BPO) industry. Established in 1988, NASSCOM is a non-profit organisation. NASSCOM is a global trade body with over 1500 members, of which over 250 companies are from the United States, UK, EU, Japan and China. NASSCOM's member companies are in the business of software development, software services, software products, IT-enabled/BPO services and e-commerce.

NASSCOM facilitates business and trade in software and services and encourages the advancement of research in software technology. It is registered under the Indian Societies Act, 1860. NASSCOM is headquartered in New Delhi, India, with regional offices in the cities of Mumbai, Chennai, Hyderabad, Bangalore, Pune, and Kolkata. NASSCOM organizes the India Leadership Forum. It gives a platform for the developing companies to network and present their products. Some of the notable events such as NASSCOM product conclave, Developer road show, Engineering summits, developer Conferences etc.

### **Membership**

Members of NASSCOM are Indian Companies in varied businesses such as software development, software services, and IT-enabled/BPO services. NASSCOM role has primarily been to make sure that service quality and enforcement of Intellectual Property Rights have been properly implemented in the Indian software and BPO industry. As of June 2007, more than 1,110 information technology companies in India were members of NASSCOM, which included domestic software/ITES companies along with multinationals operating within India. NASSCOM has a Mentorship Programme for the mid-sized companies. This is a six-month engagement, which will help the organization to develop a better assessment of their strengths and weaknesses.

### **NASSCOM in Coimbatore**

The Indian IT-BPO industry has witnessed sustainable growth; the country today has emerged as the preferred outsourcing destination and offers an unmatched advantage of cost competitiveness, innovation and quality. The growth of the IT sector in India has also outlined and brought into prominence cities with great potential. Exponential growth, coupled with zealous businesses expanding in Coimbatore, has catapulted the city as the growing hub of IT-BPO industry in India. Coimbatore's strategic location amid the cluster of other IT destinations of Salem, Trichy and Madurai, have made it a foremost choice for multiple industrial centers and an environment also conducive to IT entrepreneurs. Coimbatore is the second largest location of Tamil Nadu and one of the seven where the Government wants to develop the IT-BPO sector.



With maturing of the industry, it is imperative to expand the geographical spread of IT-BPO growth to enable more balanced economic development of the country, lower migration across cities, and reduce the burden on the stretched infrastructure in the current hubs. A recent study by NASSCOM assessed a total of 50 locations across the country for their potential and attractiveness for IT-BPO sector and also provides a directional roadmap for development of each location. NASSCOM has promoted Coimbatore as a preferred IT-BPO destination, this will act as a platform for the industry, government and the academia in the region to congregate and discuss issues, share best practices and build strategies for ensuring that Coimbatore gets its rightful place in the galaxy of leader cities for IT-BPO business.

### **1.11 SIGNIFICANCE OF THE STUDY**

Studies on occupational stress, job satisfaction, and organizational commitment have been carried out by past researchers mainly in the western countries. Due to lack of studies addressing the issue of IT employees' job satisfaction, occupational stress and organizational commitment, it is questionable whether western findings can be applied in the non-western context, like India. For instance, people in the western countries have an individualistic direction towards job whereas people in the South Asian countries in general have a collective direction. Therefore, more studies are needed to erase the doubt on the applicability of western studies in the Indian context. The present study is unique as it is an attempt to describe the relationship between occupational stress, jobsatisfaction, and organizational commitment in the context of IT sector.

### **1.12 LIMITATIONS**

Data for the study was collected from the employees of IT industry in Coimbatore and so the results cannot be generalized to other geographical areas. The respondents may have completed the questionnaires during a part of the year that was overwhelming. The time in which the respondent completed the questionnaires may have influenced their perceived stress level.

### **1.13 RESEARCH METHODOLOGY**

This section describes the research methodology and the process of data collection needed to empirically test the conceptual framework developed in the previous chapter. This study explores the relationship between occupational stress, job satisfaction and organizational commitment in the IT sector in Coimbatore. To ensure the accuracy of results it is therefore important to choose an appropriate research methodology.

#### **BRIEF OVERVIEW OF THE RESEARCH OBJECTIVES**

The objective of this empirical study is to examine the relationship between Job satisfaction, occupational stress and organizational commitment among the employees of IT sector in Coimbatore. The literature review failed to provide any viable data about the nature of job satisfaction and its relationship with occupational stress and organizational commitment of IT employees in Coimbatore.

Therefore, this study attempts to fill this vacuum by providing additional information that might be of interest to the researchers, IT managers, psychologists, and career counselors. The specific objectives of present study are:

- To study the relationship between occupational stress, job satisfaction and organizational commitment among the employees of IT industry in Coimbatore.
- To study the level of occupational stress among the employees of IT industry in Coimbatore.
- To study the level of job satisfaction among the employees of IT industry in Coimbatore.
- To study the level of organizational commitment among the employees of IT industry in Coimbatore.
- To analyze the effect of various personal variables such as age, gender, education, experience, and monthly income on occupational stress, job satisfaction and organizational commitment among the employees of IT industry in Coimbatore.

## **RESEARCH QUESTIONS**

To achieve the specific research objectives, following are the key research questions:

1. What is the relationship between occupational stress, job satisfaction and organizational commitment among the employees of IT industry in Coimbatore?
2. What is the level of occupational stress among the employees of IT industry in Coimbatore?
3. What is the level of job satisfaction among the employees of IT industry in Coimbatore?
4. What is the level of organizational commitment among the employees of IT industry in Coimbatore?
5. What is the influence of various personal variables such as age, gender, education, experience, and monthly income on occupational stress, job satisfaction and organizational commitment among the employees of IT industry in Coimbatore?

## **RESEARCH HYPOTHESES**

Hypotheses are important and indispensable tools of scientific research. They are tentative answers to research problems. They are expressed in the form of a relation between independent and dependent variables. The following hypotheses were formulated to achieve the research objectives.

H1 - Occupational stress will vary significantly with variation in demographic factors like age (H1a), gender (H1b), education (H1c), experience (H1d), and monthly income (H1e) among the employees of IT industry in Coimbatore.

H2- Affective commitment will vary significantly with demographic factors like age (H2a), gender (H2b), education (H2c), experience (H2d), and monthly income (H2e) among the employees of IT industry.

H3- Continuance Commitment will vary significantly with demographic factors like age (H3a), gender (H3b), education (H3c), experience (H3d), and monthly income (H3e) among the employees of IT industry.

H4- Normative commitment will vary significantly with demographic factors like age (H4a), gender (H4b), education (H4c), experience (H4d), and monthly income (H4e) among the employees of IT industry.

H5- Job Satisfaction will vary significantly with demographic factors like age (H5a), gender (H5b), education (H5c), experience (H5d), and monthly income (H5e) among the employees of IT industry.

H6- There will be a significant correlation between job satisfaction and normative commitment (H6a); job satisfaction and Continuance commitment (H6b); job satisfaction and affective commitment (H6c).

H7 – There will be a significant correlation between occupational stress and normative commitment (H7a); occupational stress and Continuance commitment (H7b); occupational stress and affective commitment (H7c).

H8 – There will be a significant correlation between occupational stress and job satisfaction.

H9 - Job satisfaction will affect normative commitment (H9a), continuance commitment (H9b) and affective commitment (H9c) among the employees of IT industry.

H10 – Occupational stress will affect normative commitment (H10a), continuance commitment (H10b) and affective commitment (H10c) among the employees of IT industry.

H11 - Occupational stress will affect job satisfaction among the employees of IT industry.

## **RESEARCH DESIGN**

The aim of a research design is to provide an intended and prepared way of achieving the research objectives and to augment validity and reliability. The present study is a descriptive co-relational study that seeks to explore the relationship between Job satisfaction, occupational stress and organizational commitment. This type of study requires a research that does an in-depth investigation and description of phenomena, and systematically classifies the variables of a construct and describes the attributes as accurately and precisely as possible. In order to attain the aim of the research design, it should address the serious questions including the unit of analysis and the method of data collection. These components are therefore discussed in the following section.

### **Unit of Analysis**

In this study, the unit of analysis was subgroups of IT employees based on age, gender, education, year of experience, and monthly income. The participants' identity was kept confidential and their privacy was strictly maintained in the study.

### **RESEARCH METHODOLOGY AND JUSTIFICATION**

Research method refers to the means of bring together and examine empirical proof. To make sure validity and reliability a research should make use of both quantitative and qualitative methods where it come into view appropriate (Allan, 1998). In the following sub-sections, both the qualitative and quantitative approaches are briefly evaluated:

#### **The Qualitative Approach**

Qualitative methods are more effective for seeking a thorough description within a limited area, but they are not appropriate for detection of co-variance between variables, in difference to quantitative methods (Thompson, 2003). The qualitative research method may be helpful for understanding the relationship between personality, Job satisfaction and occupational stress if the purpose of the research was to study the impact of this relationship on few individuals over a period of time in any one particular organization.

Qualitative methods provide less clarification of variance statistical terms than quantitative methods, they can give way data from which process theories and rich explanations of how and why procedure and outcome crop up can be developed (Marcus and Robey 1988) taking all of the above into account it was decided to adopt an approach for this research which can be called the qualitative method.

#### **The Quantitative Approach**

According to Garber (1999), "Quantitative research methods put importance on the making of detailed and generalizable statistical conclusion. The data composed by using the quantitative techniques are likely to be numerical and are open to explanation by use of statistics, thus the data are said to be quantitative and there is certain impartiality about actuality, which is quantifiable". Quantitative methodologies, however, have been criticized for their lack of notice to procedure aspects, for frequently meeting data only from the top of an organization, and for their failure to find significant relationships (King, 1990).

## **OPERATIONAL DEFINITION OF VARIABLES**

The aim of this research is to examine the relationship between Occupational stress, Job satisfaction and organizational commitment of the employees in the IT industry. The operational definitions of the study variables, description and justification of the use of the measurement instruments are discussed below:

### **Job satisfaction**

Job satisfaction is the degree to which an individual feels positively or negatively about various aspects of the job (Schermerhorn, J.R 1996). It describes the comfortable zone of an individual is with his or her job. Job satisfaction is linked with productivity, motivation, absenteeism/tardiness, accidents, mental and physical health, and life satisfaction (Landy, 1978). Job satisfaction is a significant factor because a person's attitude and beliefs may affect his or her behavior. Attitudes and beliefs may cause a person to work harder, or, the opposite may occur, and he or she may work less. Job satisfaction also affects a person's general well-being for the reason that people spend a good part of the day at work. Consequently, if a person is dissatisfied with their work, this could lead to dissatisfaction in other areas of their life.

### **Job satisfaction Scale**

The Job satisfaction, instrument developed by Weiss et al. (1967) was used to measure employee satisfaction with his or her job. The respondents were asked to rate each of the 20 items on the following 5-point Likert scale:

1. Highly dissatisfied
2. Dissatisfied
3. Neutral
4. Satisfied
5. Highly satisfied

Responses were scored as follows:

Highly satisfied = 5, Satisfied =4, Neutral =3, Dissatisfied =2, Highly dissatisfied =1

## **Occupational Stress**

Stress that happens due to a person's employment is termed occupational stress. According to Cooper & Bright (2001), the most widespread definitions of occupational stress may be classified into three types. The first type of definition is stimulus based. It considers stress as an environmental based stimulus, forced upon the person. The second type of definition is response based. It defines stress as an individual's psychological or physiological response to the situational forces. The third definition of stress applies an interactive approach often called the stressor-strain approach.

Keeping in view all the above definitions, for the purpose of this study, occupational stress is defined as the harmful emotional (that is anxiety and depression), physical (that is insomnia, headaches, and infections), and behavioral responses (that is job dissatisfaction, low commitment and poor work performance) that occurs when work necessities do not match the capabilities, possessions and needs of the worker. The present study treated occupational stress as an independent variable that could influence job satisfaction and organizational commitment.

For the purpose of the present study the operational definition of stress is that: Occupational Stress refers to intrinsic and extrinsic stressors of IT employees which are related to their job including; stress associated with various work roles; personal strains due to physiological, psychological and behavioral processes that occur under the influence of stress and disrupt the normal functioning of IT employees.

## **Occupational Stress Scale**

The Occupational stress scale developed by Srivastava and Singh (1984) was used for assessing stress among the respondents. The respondents were asked to rate each of the 15 items on the following 5-point Likert scale:

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

Responses were scored as follows:

Strongly agree = 5, agree=4, neutral=3, disagree=2, strongly disagree=1

### **Organizational Commitment Scale**

Organizational Commitment scale was developed by Allen and Meyer (2001) was used for assessing the level of organizational commitment among the employees. It uses 18 item scale to assess affective, continuance and normative commitment. Responses were obtained by using a 5-point Likert Scale:

1. Strongly Disagree = 1,
2. Disagree = 2,
3. Neither Disagree Nor Agree = 3,
4. Agree = 4
5. Strongly Agree = 5.

Scores were obtained by reversing responses (e.g., 1 = 5, 2 = 4, 3 = 3, 4 = 2 & 5 = 1) to the four negatively stated items (items 3, 4, 6, and 13) and then summing across all scale items.

### **Demographic Variables**

Information Technology employees include individuals working at any level, performing any type of work assignment in IT sector. The personal variables of age, gender, education, experience, and monthly income were selected for the present study.

### **SAMPLING PROCESS**

Sampling is a fundamental method of inferring information about an entire population instead of measuring every member of the population. Developing the proper sampling technique can greatly affect the authenticity of the results.

### **Sampling Population**

The population of the study included employees from selected IT companies in Coimbatore. Since it would be almost impossible to reach all the employees of ITs all over Coimbatore, it was, therefore, necessary to sample the population. As per The National Association of Software and Services Companies (NASSCOM) 10 IT



companies are existing in Coimbatore out of which four IT companies were chosen using lottery method. The total population of these four IT companies is 590 employees. The researcher had distributed the questionnaires for all the 590 employees in the targeted population. But for the final study the researcher had considered only 531 questionnaires, due to non compliance of the questions, 59 questionnaires were discarded. Therefore the final sample size for this study is 531.

## **DATA COLLECTION**

For data collection, the respondents were approached in their job settings and were briefed about the nature and purpose of the research. The respondents were assured of the confidentiality of the results. After their willingness; occupational stress, job satisfaction and organizational commitment questionnaires were handed over to them to complete the scales in one session. A soft copy of the research questionnaire was also provided to some of the respondents on request. Also to internally circulate the research questionnaires in some organizations, the web administrators of their organizations were contacted with the soft copy of the questionnaires in simple MS word, which was circulated among the staff members via e-mail.

### **Method of data collection**

- ✓ **Primary data:** The primary source of the study includes the opinion of the respondents which was collected through administering the structured questionnaires.
- ✓ **Secondary data:** The secondary sources were collected from journals, websites, and magazines.

## **PILOT STUDY**

Pilot study was conducted with a sample of thirty respondents and the reliability and validity for the same were tested. The responses were collected and analyzed and due modifications were done in the instruments as indicated by the study. The instruments were tested for reliability.

**Table 1.2**

**Reliability Scores of instruments**

<b>Variables</b>	<b>Items</b>	<b>Alpha</b>
Job Satisfaction	20	0.7012
Occupational stress	15	0.8060
Organizational commitment	18	0.9120

Source: Primary data

**STATISTICAL TECHNIQUES**

The statistical package for social sciences (SPSS-16th Edition) was used to conduct the analysis of the collected data. Various statistical techniques were employed to examine the data such as mean and standard deviation, correlation analysis, regression analysis, percentile analysis and analysis of variance. As these techniques are appropriate to test the internal consistency, construct validity, average, and dispersion, determination of cut off scores, variance and relationship among different variables.

**Tools and techniques used for data analysis**

The data collected through questionnaires were analyzed using Percentage analysis, Mean and Standard Deviation, One way Analysis of Variance (ANOVA), Correlation and Regression done through SPSS. ANOVA and Correlation are calculated by taking the sum of each factor.

- ✓ **Percentage analysis:** Percentage analysis is the method to represent raw structure of data as a percentage for better understanding of collected data; this was done for the demographic factors of the respondents.
- ✓ **Descriptive statistics:** The Descriptive procedure displays univariate summary statistics for several variables in a single table and calculates standardized values (z scores), this was done for the variables relating to HRM practices and organizational commitment.

- ✓ **One way Analysis of Variance:** In statistics, analysis of variance (ANOVA) is a collection of statistical models, and their associated procedures, in which the observed variance in a particular variable is partitioned into components attributable to different sources of variation. In its simplest form, ANOVA provides a statistical test of whether or not the means of several groups are all equal, and therefore generalizes t-test to more than two groups. Doing multiple two-sample t-tests would result in an increased chance of committing Type I error. For this reason, ANOVAs are useful in comparing two, three, or more means.
- ✓ **Correlation:** Correlation refers to any of a broad class of statistical relationships involving dependence. Correlation can refer to any departure of two or more random variables from independence, but technically it refers to any of several more specialized types of relationship between mean values. There are several correlation coefficients, often denoted  $\rho$  or  $r$ , measuring the degree of correlation. The most common of these is the Pearson correlation coefficient, which is sensitive only to a linear relationship between two variables (which may exist even if one is a nonlinear function of the other). Other correlation coefficients have been developed to be more robust than the Pearson correlation – that is, more sensitive to nonlinear relationships.
- ✓ **Regression:** Regression analysis is a statistical process for estimating the relationship among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between dependent variables and one or more independent variables.

## CONCLUSION

This chapter presented the research methodology used in this study and its justification. It illustrates research design of the study, the unit of analysis and operational definition of variables included in the study, details about research instruments including Likert scale used for data collection and the procedure of data collection and data analysis.

## **CHAPTER SCHEME**

### **Overview of Chapters**

**Chapter one** deals with the introduction of the study. Introduction with a note on theoretical framework on the three variables of the study namely job satisfaction, occupational stress and organizational commitment, need for the study, statement of the problem, significance of the study, objective of the study, research methodology, limitation is explained in part I of the chapter and part II of the chapter focuses on the Information technology industry and the NASSCOM members of IT industry.

**Chapter Two** presents the review of literature. This chapter gives review of selected studies on occupational stress, job satisfaction, and organizational commitment in detail. It deals with reviews of various authors who have dealt with similar studies associated to the current topic of the study.

**Chapter Three** elaborates on the analysis and interpretation. This chapter deals with analysis and interpretation of the data collected. The data analysis and interpretation helps in providing a meaningful insight into understanding the objective of the research study.

**Chapter Four** enumerates the discussion of the study. The chapter explains the detailed discussions made in the study on occupational stress, job satisfaction and organizational commitment of the employees working in informational technology industry in Coimbatore.

**Chapter Five** recapitulates the findings, suggestions, research for future and concludes.