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CHAPTER-V

FINDINGS AND SUGGESTIONS

5.1 MAIN FINDINGS:

5.1.1 Occupational Stress:

It was found that Occupational Stress for the entire sample was moderate. There was no significance found in the entire sample on all subscales of stress like role overload, role ambiguity, role conflict, unreasonable group and political pressure, responsibility for persons, under participation, powerlessness, poor peer relations, intrinsic impoverishment, low status, strenuous working condition and unpredictability.

5.1.2 Influence of Independent Variables on Stress:

1. The influence of managerial levels on occupational stress was found to be significant on the subscales of stress like responsibility for persons, under participation, powerlessness, and poor peer relations. Top-level managers had significantly more stress in the area, ‘responsibility for persons’ than middle and lower level employees. Lower level employees had more stress in the areas powerlessness and under-participation compared to the other two categories. However influence of managerial level on stress was not found on subscales of stress like, role overload, role ambiguity, role conflict, unreasonable group and political pressure, intrinsic impoverishment, low status, strenuous working condition and unprofitability.

2. Educational level influenced occupational stress in subscales of stress like, role conflict, responsibility for persons, under-participation, powerlessness and intrinsic impoverishment. Diploma holders had more stress in areas like role conflict, under participation and powerlessness, than graduates and post graduates. It was found that educational levels did not influence occupational stress in areas like, role overload, role ambiguity, unreasonable group and political pressure, poor peer relations, low status, strenuous working conditions and unprofitability.
3. **Age**, had an influence on stress in areas like, responsibility for persons, under participation and powerlessness. It was also noted in all these subscales of stress the employees in the age group 26-40 had more stress compared to the other two groups. However age did not influence stress on the other subscales.

4. It was also observed that **family environment** had a significant influence on total stress as it was found to be significant on most of the subscales. It was also observed that those employees who said their family environment as ‘average’ had more scores on the subscales of stress like, role overload, under participation, powerlessness, intrinsic impoverishment and low status.

5. The influence of **gender** on stress was significant on subscales of stress like, responsibility for persons, under participation and powerlessness. Men had more stress in the area of ‘responsibility for persons’ than women. Women had more stress than men in the areas like, under participation and powerlessness.

6. The influence of **marital status** on stress was found on subscales of stress like, unreasonable group and political pressure, responsibility for persons, under participation and powerlessness. It was also observed that married employees had more stress in the areas of unreasonable group and political pressure, responsibility for persons, under participation than the unmarried employees.

**5.1.3 Coping:**

Of the 8 coping mechanisms entered into the equation using stepwise multiple regression analysis, taking stress scores as dependent and coping mechanisms as independents, the following results were obtained. Out of 8 coping mechanisms, only 4 coping mechanisms best predicted occupational stress of the employees. They are unproductive coping mechanisms (CCL7), spiritual religious coping (CCL3), healthy cognitive mechanisms (CCL1) and unhealthy coping habits (CCL6). The first and foremost variable to predict the stress was unproductive coping mechanism, with correlation coefficient of .411 with the contribution of 16.9%, followed by spiritual religious coping with the correlation coefficient of .455 and contribution of 20.7%. The third variable to enter into the equation was healthy cognitive mechanisms along
with CCL7 and CCL3, with the correlation coefficient of .463 and a contribution of 21.4%. The last and final coping mechanism, to enter into the equation was unhealthy coping mechanism, along with CCL7, CCL3 and CCL1 with the correlation coefficient of .469 and a total contribution of 22.0%. Rest of the contribution for the stress was unaccounted for. Remaining 4 coping mechanisms – social support coping, physical activity related coping, problem solving coping, and high risk coping did not predict the occupational stress of the employees and did not enter into the equation.

5.1.4 Influence of Independent variables on coping:

1. The influence of managerial levels on coping was found to be significant on the subscales of coping like, healthy cognitive mechanism, physical activity related coping and unproductive coping mechanisms. Lower level employees made more use of these coping mechanisms as compared to the top and the middle level employees.

2. Educational levels influenced coping significantly on the subscale, ‘social support coping’. Diploma holders seemed to use more of this coping mechanism than graduates, post graduates and others. On the other subscales of coping the influence was not significant.

3. Age had a significant influence on coping in areas like ‘healthy cognitive mechanism’ and ‘unproductive coping mechanisms’. It was found that employees who were in the age group ‘20-25’ used more of these coping mechanisms.

4. Family environment had influenced the use of coping mechanisms on subscales of coping like, problem solving coping, unproductive coping mechanisms and high risk coping. It was observed that employees who mentioned their family environments as ‘can’t say’ used more of ‘problem solving coping’ and ‘high risk coping’. Family environment had no influence on the other subscales of coping.

5. Influence of Gender was found on subscales of coping like, unhealthy coping habits and high risk coping. It was also observed that male employees used more of these coping mechanisms than female employees.
6 Marital status influenced coping only on the subscale ‘high risk coping’. Unmarried employees used more of this coping mechanism than married employees, to alleviate stress.

5.2 HYPOTHESIS 1

Information Technology employees experience higher levels of stress.

Hypothesis 1 is rejected as the IT employees found to have moderate levels of stress on the whole.

In the present study, occupational stress among the IT professional is found to be moderate.

The contemporary analysis of stress proposes that Stress is a transactional phenomenon, experienced when some situation is appraised as taxing the individual’s resources beyond tolerable limits (Lazarus, 1991). Studies in general on the Information Technology employees revealed that, their roles are extremely demanding. They work under different management systems where the working conditions are not similar. The IT employees are found to be workaholics, working for money ignoring their health. Moreover according to THE WEEK (C Voter survey published in the issue dated May 7th 2006), every third workaholic is getting more quick tempered and physically sicker than before. Young professionals want rewards instantly. Exceptional salaries, perks and big increments are the prime motivators.

The Hindu, Monday, Jan 31, (2005) in an article “Stress causing psychological problems in IT professionals” quoted that, work-related concerns such as severe competition, unrealistic expectations from superiors, being achievement oriented, lack of job security, and the inability to accept failure have led to a host of psychological problems among software professionals. The enormity of the situation came to light at a session on "Psychological concerns as occupational hazards among computer professionals" by Brunda Amruthraj, consulting clinical psychologist at Zeidgeist. The session was a part of the 33rd Annual Conference of the Indian Association of Physical Medicine and Rehabilitation, which was inaugurated at the National Institute for Mental Health and Neurosciences, Bangalore. According to Dr. Amruthraj, people working in the field of Information Technology go through a lot of anxiety,
depression and loneliness because of their work environment and often exhibit feelings of inadequacy, lowered self-esteem and dissatisfaction. This reflects itself in the form of social, marital and sexual problems.

An article by Deepa Kurup and Raghava (The Hindu, Sep 10, 2008) quoted that, psychiatrists and counselors blame it on the “fast and cut-throat lifestyle” and say that the otherwise progressive city (Bangalore), fights shy of seeking professional help. A recent survey by a media house revealed that 5 percent of Information Technology employees in Bangalore commit suicide and 36 per cent of them need counseling.

In the article entitled “Death by overwork” by Ms. Visa Ravindran, (The Hindu, Aug. 6, 2000) wrote “Hard work may not kill a person; but why take risk?” Ms. Ravindran has rightly pointed out that excessive stress may prove to be fatal in the days of globalization when everyone is in a hurry to meet the target. While government jobs are the safest in this respect, private sector IT jobs constitutes high-risk jobs. This is basically because IT employees are the best paid anywhere now. This means that IT employees will be exposed to long working hours or rigid targets, both of which would subject them to enormous stress.

In the present study, occupational stress among the IT professional is found to be moderate. The reason could be that employees are capable of performing the task with efficiency and they do not confront any difficulty in their tasks. Their perception regarding their work is quite positive. The organizations are also very keen in helping employees cope with work stress, by providing various stress busting activities like, facilities to workout at the gym, swimming pool, vacations, yoga, relaxation camps, training on how to manage stress etc. Some people seem to have the ability to stay in control of their workload and to handle job frustrations without becoming worn out, irritable or depressed. These people are able to handle stress, having ways of taking the rough with the smooth, keeping a sense of humour and renewing their energy and resources so that working life continues to bring pleasure and reward. In the present study IT employees seem to have found the situation as not taxing the individual’s resources and as within tolerable limits. Though, some studies have indicated that IT employees experience higher levels of stress, present study revealed that the sample selected had moderate levels of stress.
5.3 HYPOTHESIS 2

Information Technology employees employ various coping mechanisms to cope with stress.

Hypothesis 2 is accepted on subscales like, unhealthy coping habits and high risk coping.

Hypotheses 2 is rejected on subscales like, healthy cognitive coping, social support coping, spiritual religious coping, physical activity related coping, problem solving coping and unproductive coping mechanisms.

In the present study the Information technology employees were found to use unhealthy coping habits and high risk coping mechanisms, which are not positive approaches to cope with stress. The other coping methods like, healthy cognitive coping, social support coping, spiritual religious coping, physical activity related coping, problem solving coping and unproductive coping mechanisms, were not found to be used by them.

"Coping" is a combination of responses made in a stressful situation to in some way reduce the adverse qualities of that situation. Lazarus and Folkman (1984) considered coping to be a response in cognitive or behavioural terms to the stressful demands of a given situation. "Coping", then, is used to refer to the aspects of the stress process which include the individual’s attempts to deal with the stressors. It is a response brought about by the stressful situation and implemented in order to deal with or neutralize it. This assumes the existence of excessive demands and attempts by the individual to restore the balance (Rodríguez-Madín, 1995).

When a transaction is appraised as stressful, coping is required. Lazarus and Folkman (1984) identified two types of coping: emotion-focused coping and problem-focused coping. Emotion-focused coping attempts to regulate emotional distress and return to normal social and physiological functioning. Whereas, problem focused-coping is goal directed, and includes strategies such as decision-making and planning to resolve conflicts or to manage the problem.
In the research on the influences of coping responses on adjustment uses of effective coping strategies have consistently been associated with higher levels of well being (Mc. Crea & Casta, 1986). The presence of coping patterns in a person's repertoire can be emotionally comforting because they signify potential control (Rooskies & Lazarus, 1980). Problem oriented coping strategies have generally been found to moderate the adverse effects of negative life events on psychological functions. (Billings & Moos, 1981). Certain forms of coping such as denial, avoidance coping, uses of drugs and high risk taking activities have found to impede health (Rooskies & Lazarus, 1980). Coping strategies also depend upon job satisfaction, mental and physical ill health. It was also found that role efficiencies and job anxieties were negatively related (Singh & Mohanty, 1996). According to Richard and Siegrast (1997), active coping with the experience of chronic work stress is more likely to be associated with physical health consequences of sustained autonomic arousal, such as hypertension, whereas passive coping may predispose an individual to withdrawal behaviour such as, sickness, absence from work etc.

The Stress and Coping paradigm hold that life stresses are associated with a wide range of disorders, while coping resources are compensatory factors that help maintain health (Billings & Moos, 1984). Coping is viewed as a stabilizing factor that may help individuals maintain psychological adaptation during stressful periods (Folkman & Lazarus, 1980). There is a longstanding and widely held conviction among medical practitioners and researchers in the field of mental health, that the ways in which people cope with the demands of stressful situations determines or influences how they feel emotionally. Obviously, just as stressors affect each person differently in each situation, each person likewise tries to cope with stressors in a different way, in accordance with individual variables and with their resources. If we consider the type of response employed to deal with stressors, coping strategies can be of the "approach" or "avoidance" type, depending on whether the subject opts for fight or flight. One could also add, according to Perrez and Reicherts (1992), "passive" coping is, where no action is taken, involving strategies often referred to as "wait and see". Although coping strategies have chiefly been considered as defensive, from another angle, closer to positive psychology, they are seen as being related to well-being and health (Taylor, Kemeny, Reed, Bower & Grue newald, 2000). Coping need not only be reactive, but can also take active forms to prevent situations from becoming stressful. These forms of proactive coping are proposed from a perspective of the promotion of health and quality of life.
In this present study it has been observed that the IT employees are using more of ‘unhealthy coping habits’ and ‘high-risk coping mechanisms’. Stress affects each person in a different way in different situations due to their different personality types, perceptions, capabilities (resources) for work execution, behaviour patterns, and adaptability to situations. As a result each employee uses different coping styles to deal with stress. Problem solving coping and healthy cognitive coping are considered to be better approaches to cope with stress. However, under the present study the employees were not found to use these methods. However, the use of coping methods like unhealthy coping habits and high risk coping greatly affects the health of the employees and there is a necessity that this problem needs immediate attention.

5.4 HYPOTHESIS 3

There is significant relationship between Occupational Stress and Coping Strategies adopted.

Hypothesis 3 is accepted for subscales of coping like, unproductive coping mechanisms, spiritual religious coping, healthy cognitive mechanisms and unhealthy coping habits.

Hypothesis 3 is rejected on the subscales of coping like, social support coping, physical activity related coping, problem solving coping and high risk coping.

Out of 8 coping mechanisms, only 4 coping mechanisms best predicted occupational stress of the employees. They are unproductive coping mechanisms (CCL7), spiritual religious coping (CCL3), healthy cognitive mechanisms (CCL1) and unhealthy coping habits (CCL6).

It was found that the employees used more of unproductive coping mechanisms which are not good signs of managing stress. It was also observed that the employees preferred spiritual religious coping also as a means to cope with stress. Traditional practices that one has followed over a period of time may be the reason for the use of this coping method. We have been taught from childhood to get some solace by following religious practices which help us to keep cool and undisturbed. However, the use of ‘healthy cognitive mechanism’ is quite a positive way of coping. It was also noted that employees also used unhealthy coping habits which need to be addressed.
Deborah and Callan (1997) tested the utility of the stress-coping model of employee adjustments to organizational change. It was proposed that the characteristics of the change in situation, employees’ appraisals of the situation, their coping strategies, and the extent of their personal resources would influence employees’ adjustment to this type of work stress. Results revealed high levels of psychological distress and were related to a reliance on informal sources of information, high appraised stress, low appraised certainty, and use of avoidant rather than problem focused strategies; whereas, poor social functioning was associated with low self esteem, high levels of disruption across the period of change, a reliance on informal sources of information, and use of avoidant coping strategies. There was no evidence that coping strategies mediated the effects of the event characteristics, situational appraisals, and personal resources on adjustment; however there was some evidence linking these variables to coping strategies, in particular problem-focused coping.

An article published by one of the staff reporters in “The Hindu”, Monday, Jan 31, 2005; titled “Stress causing psychological problems in IT professionals” the views of Dr. Brunda Amruthraj and Padmini Prasad had been quoted. According to Dr. Amruthraj, people working in the field of Information Technology go through a lot of anxiety, depression and loneliness because of their work environment and often exhibit feelings of inadequacy, lowered self-esteem and dissatisfaction. This reflects itself in the form of social, marital and sexual problems. Apart from working with the individual to treat the psychological concerns of IT professionals, it is also necessary to address the management of it by a company. Some of the methods that can be used to help professionals overcome stress and help them lead a balanced life are, relaxation training, cognitive therapy, and assertiveness training, Dr. Amruthraj added. According to Padmini Prasad, Director of the Institute of Sexual Medicine, 40 per cent of the couples visiting infertility clinics are computer professionals. Long working hours, stress and pressure at work, night shifts, and lack of sleep can lead to various sexual problems, she said. Many of the couples who come to infertility clinics for artificial insemination, in-vitro fertilization and for other associated reproductive techniques are IT professionals.
In the present study, employees used four coping methods out of eight which were considered under this study. This shows the use of coping methods is quite moderate. However, the type of coping used varies with each individual and with every different situation and it is necessary that employees use positive coping methods like problem solving coping, social support coping, healthy cognitive coping rather than unproductive and unhealthy coping methods.

5.5 HYPOTHESES 4

Independent variables significantly influence Occupational Stress and Coping.

5.5.1 Influence of Independent variables on Stress:

5.5.1.1 Hypotheses 4 (1)

IT Employees in different managerial positions differ significantly in their stress scores.

Hypothesis 4 (1) is accepted for the subscales of stress like, responsibility for persons, under participation, powerlessness and poor peer relations.

Hypotheses 4 (1) is rejected for subscales of stress like, role overload, role ambiguity, unreasonable group and political pressure, intrinsic impoverishment, low status, strenuous working condition and unprofitability.

In this present study it was observed that top level IT employees scored high on responsibility for persons as they have to deal with more responsibility as compared to lower level employees whose score showed the lowest. On the subscale poor peer relations, middle level IT employees scored high as they have to do more of coordinating between the higher and the lower levels. Lower level employees scored high on powerlessness and under participation as they have a limited say in the decision making aspects of the organization.

In response to a survey by Times of India 13th August 2008, ‘Are young professionals the most stressed out?’ One of the responses from Varsha, Mumbai, was “I agree that the stress levels in IT sector is extremely high. One can see the fat pay
cheques but then there is lot of mental drainage also and on top of it Politics, Peer pressure, difficult and cranky bosses are always there”.

Chandraiah, Kenswar, Prasad and Choudhary (1996) found that junior managers expressed higher sources of job related tensions and also Peter et al (2005) noted that lower level employees exhibited higher levels of stress as compared to the other two as they had high scores on social support coping.

In an article by Shobha John (Times of India, dated 8th March 2003), it was noted that, stress is attacking the best and the brightest insidiously. Hardly surprising, considering the punishing deadlines, demanding bosses and long work hours, a survey by Achal Bhagat of an NGO, Saarthak among 30 companies found 50 per cent of the employees had stress in some form, 20 per cent had depression and 30 per cent had problems like alcoholism, marital discord, etc. ‘This was more evident in companies which were start-ups or mergers’ says Bhagat. Reaction of the corporate: When Bhagat showed his findings to corporates, he says, there was denial. Workshops and training programme for employees are fine as long as it is on a continuous basis, he says. “Corporate should realize that stressed out employees hit the bottom line of the company. People should listen to the problems of their employees instead of just asking them to play golf.” However, increasing tie-ups between corporate and hospitals could mitigate this problem.

Dr. Jeanne Segal (2008), in her book titled ‘The Language of Emotional Intelligence: The Five Essential Tools for Building Powerful and Effective Relationships’, put forth that “When we’re in control of our emotions, we can accurately display our trust, empathy, and confidence. Lose control—and we spin into confusion, depression, and doubt. Learn how to bring your emotions into balance and improve communication in all your relationships, providing a big boost for your emotional intelligence. Emotional Intelligence is the ability to appropriately manage and use your emotions in positive and constructive ways that make you more forceful and successful. It's about engaging with others in ways that draw people to you. Emotional Intelligence is also about recognizing your own emotional state and the emotional states of others and having choices in how you relate to all the important people in your life. Managers and leaders have a big advantage”.
It has been observed that lower level employees have more scores on the subscales powerlessness and under participation. The IT employees do more of a technical job at the entry levels and as they go up the ladder of their career they tend to do more of managerial work than technical work. Hence the employees at lower levels find that their jobs do not allow them to participate in decision making aspects and consequently a feeling of powerlessness. As they take up the managerial work, in which most of them are not very capable, and as they are from technical background, with little or no knowledge of the managerial aspects, the middle level employees tend to have more stress on subscale ‘poor peer relations’. Once they reach the highest level in the career they have to be more responsible because they are not only answerable for their own actions but also for the actions of their subordinates. While some stress is a normal part of life, excessive stress interferes with your productivity and reduces your physical and emotional health. Hence it is important to find ways to keep it under control. The ability to manage stress in the workplace can make a difference between success and failure on the job.

5.5.1.2 Hypothesis 4 (2)

Employees with different educational levels differ significantly in their scores of stress.

A hypothesis 4 (2) is accepted on subscales of stress like, role conflict, responsibility for persons under participation and powerlessness intrinsic impoverishment.

A hypotheses 4 (2) is rejected for subscales of stress like, role overload, role ambiguity, unreasonable group and political pressure, poor peer relations, low status, strenuous working condition and unprofitability.

It was also observed that diploma holders had more stress in areas like role conflict, under participation and powerlessness than graduates and post-graduates. Graduates had higher stress than the other categories on the subscale ‘intrinsic impoverishment’. On the subscale ‘responsibility for persons’, the group other than diploma holders, graduates and post-graduates had higher stress.
Peter, Zahir, and Marinos 2004, carried out an exploratory study of psychological adjustment and coping among Information Technology personnel in Australia. He found that, in terms of educational achievement, 20% were found to have attained a post-graduate degree, 55% had obtained under-graduate degrees or diplomas, 24% indicated they had a TAFE (Tertiary Further Education Institution) qualification, and 1% of the sample held no tertiary qualifications at all. Education, identified as either university degree or TAFE qualification, was a significant predictor of stress, but not depression or anxiety. The relationship indicated that IT personnel who had acquired a university education had reduced work related stress. Yet, there appears to be little evidence in the literature that clearly supports one form of education over the other. Depression and anxiety were not influenced by education; however, this was not the case for stress. Stress involves a psychological judgment about the environmental or internal demands that exceed available resources and require mobilization of additional resources (Lazarus & Launier, 1978). When a particular stressor is overcome or adequately managed, the stress dissipates. It therefore appears that a university education can equip IT personnel with the necessary skills to adequately deal with work-related stressors. Lazarus and Launier (1978), identified depression and anxiety as stress emotions that cause pain and distress. These stress emotions may be more enduring and continue after the stress has been overcome, and therefore less influential in relation to the type of educational background (Peter, Zahir, & Marinos, 2003).

In the present study it was observed that diploma holders had more stress in the areas of, role conflict, under participation and powerlessness than graduates and post graduates. It is not that educational level influences stress, but education helps people to acquire resources to face any stressful situation and use better coping methods to combat stress. It is thus observed that diploma holders do not possess the necessary soft skills to understand the roles they have to play in the organizations as a result of which they tend to have more scores on the role conflict subscale. This further leads to a feeling of under participation and powerlessness. It is also observed that graduates had stress in the area of intrinsic impoverishment. This is because the IT employees join as technical graduates at the entry level. It is also found that IT sector recruits people from any field and trains them to suit their needs. It is also noted that people who come with a lesser qualification demand less on the pay
packages. If the technical graduates are treated on par with the diploma holders this would cause lack of zeal and enthusiasm among them. It is also found that employees from the category ‘others’ seemed to have more stress in the area of responsibility for persons. This category may have employees who are highly qualified and are on top positions in the organizations. It is natural they have more responsibility towards other employees in the organization and hence more stress on this subscale.

5.5.1.3 Hypotheses 4 (3)

Software employees of different age groups differ significantly on their stress scores.

A hypothesis 4 (3) is accepted on subscales of stress like, responsibility for persons, under participation and powerlessness.

A hypothesis 4 (3) is rejected on the subscales of stress like, role overload, role ambiguity, role conflict, unreasonable group and political pressure, poor peer relations, intrinsic impoverishment, low status, strenuous working condition and unprofitability.

In the present study, IT employees in the mid age group, 26-40 showed significantly higher score as compared to the other two groups, on the subscale ‘responsibility for persons’, ‘under participation’ and ‘powerlessness’. On the subscales of stress like, ‘responsibility for persons’ and ‘under participation’ the higher age group (40 and above) employees had least scores. On subscale ‘powerlessness’, young employees (20-25) had least scores.

The IT discipline is subject to continuous and fast-paced changes that require continuous upgrading of knowledge on the part of the professionals. This also plays a significant part in contributing to stressful situations. A study by Holmes and Rahe (1967) indicated that changing to different lines of work is more stressful to elderly people than younger ones. In a study on the effects of computers on workplace stress by the Government of Canada (Govt of Canada, 2002) it was observed that to learn new computer skills is more likely to cause workplace stress for older workers. IT professionals also have to work under constant time pressure having to work for long hours to complete the work under tight schedules and time deadlines to meet. This
also causes additional stress for older persons who are more troubled with health, family and social matters. The older age group is more distressed than the younger age group (Sunetra & Jayanthi, 2007).

Statistics suggest that work-related stress affects men and women in equal numbers, and that people in the 45-retirement age suffer more than younger people (UK HSE-Health and Safety Executive). Contrary to our findings, in a survey of U.S. adults aged 25 to 74 years of age, just 8% of young adults said they had even one stress-free day in a given week, compared with 12% of mid-lifers and 19% of those over 60. The difference appears to be one of attitude according to Almeida of The University of Arizona. “We’re finding that older people are mellowing a bit”, he said. According to his research, the older we get, we begin to realize that “hey, it's not worth getting upset about the small things” (Mundell, 2002).

In response to the question put forth in Times of India on the 13 August 2008, “Are young professionals the most stressed out” Murali Krishnan of Bangalore opined that, young professionals want to have everything in life at a very early age. For example, a luxury car, a huge flat, holidays, latest gizmos etc. This obviously requires the person to stretch beyond his capacity and capability. These create pressure and in turn leads to suicides, depression etc. If a person has good control on his mind and plans his work effectively, there will be no pressure.

In the present study it has been found that IT employees who were aged 40 and above showed lower levels of stress as compared to the age group 26-40. It was also found that the entry level (20-25) IT professionals’ also experienced lower stress as compared to the 26-40 age groups. This is because they generally are new to the environment and have less experience about their jobs and as a result they tend to have fewer expectations from their jobs. These employees are still young, having enormous amount of energy and enthusiasm to prove that they are successful. These employees are generally unmarried and have fewer responsibilities at home, have more time to spend at the work place, enjoy their work, with nobody to interfere in their work schedules. They are just starting their career and as a result do not expect much from the organizations. All these aspects which are quite positive among this young generation who are highly achievement motivated, helps them experience lower levels of stress. Though, in the present study, older IT employees experiences
lesser stress some other studies indicated that the older age group (above 30 years) IT professionals face greater distress than the younger generation. As people age, the ability to achieve relaxation response after a stressful event becomes more difficult. Aging may simply wear out the systems in the brain that respond to stress. So, aged persons may find it difficult to cope with the great demands of their lives.

In the present study, though age is a predictor of stress, in many cases it is found that stress is the result of various other factors, like attitude and perception about the stressful situation. If one perceives a situation as stressful then the body gears up to face the stressful situation. However if one finds the situation as not stressful, then such people are cool and do not experience any stress. Hence personality type also plays an important role in a situation of being stressful or not. It is also noted that employees in the mid-age group had higher stress in the areas of responsibility for persons, under participation and powerlessness. The reason could be that employees in the IT sector are considered to be the generation ‘F’ (Fast) who like to achieve everything within a short span of time. These mid-age group employees are on the way of their fast progress and hence face more stress in the areas of, responsibility for persons, under participation and powerlessness.

5.5.1.4 Hypothesis 4 (4)

Male and female IT employees differ significantly on their stress scores

Hypothesis 4 (4) is accepted for subscales of stress like, responsibility for persons, under participation and powerlessness.

Hypothesis 4 (4) is rejected for the subscales of stress like, role over load, role ambiguity, role conflict, unreasonable group and political pressure, poor peer relations, intrinsic impoverishment, low status, strenuous working condition and unprofitability.

In this present study, it is found that women were comparatively more stressed on matters of powerlessness and under participation. It was also observed that men experienced comparatively more signs of stress on the subscale responsibility for persons.
According to Zimmerman, Haddock, Current, and Ziemba (2003), stress is one of the many factors that affect men and women differently. The genetic make-up of men versus women makes them react differently to situations, and women rate some events as more stressful than men. It is not known for sure if stress affects men and women differently. Generally, as the two genders often operate in different social contexts, both tend to develop different emotional dispositions and personality traits. Accordingly, their responses and coping mechanisms to stress situations vary.

According to Phillips-Miller, Campbell, and Morrison (2000), differences in women's and men's perceptions of control, influence, and power over life may be another aspect responsible for gender variations in stress-coping. A number of earlier studies have emphasized that working women in general face higher stress levels and possibly adverse health effects, presumably because they bear a greater and more diffused workload than men. These asymmetries are manifested not only in terms of differential susceptibility and exposure to risks – for example vulnerability to sexual violence, but also, fundamentally, in the power of men and women to manage their own lives, to cope with such risks, protect their lives and influence the direction of the health development process. This balance of power has generally favored men and related women to a subordinate, disadvantaged position (Pan American Health Organization, 1997).

According to Peter, Zahir, and Marinos (2004), the male dominated environment within which IT personnel work may promote the attitude of not being able to display one’s emotions and share their problems with others. It is therefore preferred that IT personnel engaging in self-controlling strategies inhibit feelings and actions towards a stressor, focusing their attention on controlling their emotions and concealing the situation and their stress rather than managing and overcoming the problem, which increases their stress levels. IT is a male dominated industry (Lim & Teo, 1996). Matud (2004), found that women experience a higher level of chronic stress and minor daily stressors. In addition, women also felt more negative about the life events of the past two years, which information is also supported by Bekker, Dejong, Zijlstra, and Von Landeghem (2000).
In an article about Summit and Angina, it was said that their main problem is incompatibility. They blame long working hours, lack of quality time between new spouses. Whatever the version, the dark side of IT sector is up for public scrutiny. Many companies are now getting counselors to their workplace. Moreover spending long hours at workplace naturally give rise to extramarital relationships. However the IT industry already faces talent shortage and hence they can’t afford to lose existing employees. There is more concern for the emotional well being of the employees. The tie-ups with counseling agencies are definitely on the rise. (Bangalore Mirror dated 25 / 3 / 2008)

Aziz (2003) investigated the prevalence of organizational role stress among Indian Information Technology employees. Inadequacy of resources emerged as the most potent stressor. The study reported more stress among men as compared to women. Results were discussed in terms of hierarchy. As a majority of women are working at lower levels, men seem to have more stress resulting from the complexities that are part of the higher level.

In a study by Sunetra Bhattacharya and Jayanti Basu (2007), women and men in IT profession were comparable in terms of distress. Males had higher but not statistically significant organizational role stress than women and women had greater subjective sense of wellness. Much of the stress men go through arises from their self nurtured identities, especially related to their professional status. "If you ask a man who he is, the first thing he refers to is his work—I'm an executive, I'm a doctor, I'm a house builder," says Glenn E. Good, an associate professor of educational and counseling psychology at the University of Missouri, Columbia. "Suppressing feelings and internalizing stress are acquired male traits", says Good, "On some inner level, it comes down to: If I can't rough it out, then I'm not much of man."

In this present study, it was found that women tend to have more stress on matters of powerlessness and under participation. It is but natural in this male dominated society that women have such a feeling of vulnerability. Women, these days, have a lot of balancing work to do between home and workplace, including balancing between social and personal requirements. Issues of maternity, menopause, parenthood, gender roles, conditions at home and workplace, familial and social support etc, often blight women's lives in the long run. Women are capable of
multitasking and are capable of handling adverse situations, if they are treated on par with men. It was also observed that men showed more signs of stress on the subscale responsibility for persons. Men occupy the highest positions in office, as a result of which he has a feeling of more responsibility towards persons. He also is the sole bread winner in many families, as a result of which he tends to have more stress on this subscale. Man have a feeling that the whole world is on their head and they are the one’s who can handle tough situations, and if not they are not fit to be called men. They opine that women are vulnerable and incapable of taking up higher responsibilities. This kind of an attitude causes more stress on the subscale ‘responsibility for persons’.

5.5.1.5 Hypothesis 4 (5)

Married and unmarried IT employees differed significantly on their stress scores.

A hypothesis 4 (5) is accepted on subscales of stress like, unreasonable group and political pressure, responsibility for persons, under participation and powerlessness.

A hypothesis 4 (5) is rejected on subscales of stress like, role overload, role ambiguity, role conflict, poor peer relations, intrinsic impoverishment, low status, strenuous condition, unprofitability.

In this present study married IT employees’ were found to have more stress on subscales like, ‘unreasonable group and political pressure’ and ‘responsibility for persons’. It was also observed that unmarried people had more scores on the subscales like, under participation and powerlessness.

However some studies have found, a happy marriage reduces stress levels in women but not in men (Nic Fleming, 2008). Researchers found that women enjoying wedded bliss have lower levels of a stress hormone than those who are dissatisfied in their relationships. For men, the state of their marriage was much less important to their stress levels than how busy they were at work.
According to a report in the Journal of Gerontology, caring spouses often encourage each other to eat right, exercise, take vacations, and choose a healthy lifestyle. Close and supportive companionship also acts as a buffer against stress and all of its physical and emotional consequences. At the same time, women have the most to lose when the marriage is unhappy. Starting at about age 40, women tend to feel more marital stress than men.

In this present study married IT employees’ were found to have more stress on subscales of stress like, ‘unreasonable group and political pressure’ and ‘responsibility for persons’. This is because generally people, who are married, are older employees and are in the higher levels of managerial hierarchy where responsibility for persons will be more than lower level employees. They also face pressures from various groups inside and outside the organization. It was also observed that unmarried people had more scores on the subscales, ‘under participation’ and ‘powerlessness’. Unmarried employees are generally entry level employees, who are very enthusiastic, want to participate in all matters and exercise power. They are not happy when they do not get what they desire and as a result may feel stressed.

5.5.2 Influence of Independent Variables on Coping Mechanisms relied on by IT employees.

5.5.2.1 Hypothesis 4 (6)

IT employees of different managerial levels differed significantly on their coping mechanism scores.

Hypotheses 4 (6) is accepted on subscales of coping like, healthy cognitive mechanisms, physical activity related coping and unproductive coping mechanism.

Hypotheses 4 (6) is rejected on the other subscales of coping like, social support coping, spiritual religious coping, problem solving coping, unhealthy coping habits and high risk coping.

IT professionals in lower managerial levels were found to use significantly more of healthy cognitive mechanisms which were expected otherwise. At present no
study supporting this finding exists. However, IT employees at lower levels were found to use more of physical activity related coping and unproductive coping mechanisms.

Singh and Mohanty (1996) also found that managers differed significantly compared to supervisors with respect to their role efficacy. Siddegowda, Gururaj and D’Souza (2000), noted that engineers use more of active coping than executives and managers. According to Bonita (1998), the personality disposition of a genetic trait has a stronger influence on coping strategies for different levels of positions in an organization. The lower the level the lesser will be the coping resource, which might result in more distress and less satisfaction. Coping strategies also depend upon job satisfaction, mental and physical ill health. It was also found that role efficiency and job anxieties were negatively related (Singh & Mohanty, 1996). They also found that managers differed significantly from supervisors with respect to their role efficacy.

In a study by, Siddegowda, Gururaj and D’Souza (2000), it was found that executives and managers have in depth knowledge in managerial aspects, due to their educational background. Engineers are from technical background, and as a result do not have knowledge of problem solving skills. Engineers are said to possess unhealthy, unproductive and high risk coping mechanisms, because they only dealt with the machinery, floor level workers and other related aspects, which might induce high stress and thereby increase the use of unproductive, unhealthy and high risk coping mechanisms.

According to Peter et al (2005), active coping involves active coping and behavioral attempts to manage stress. This includes a meaning based coping process, in which the individual actively seeks and finds positive meaning in a stressful event, and attempts to engage in activities to alleviate the stress. This form of coping can be equated with problem-focused coping, which is a goal directed strategy including information gathering, decision making, planning and conflict resolution in order to manage or solve the problem obstructing the goals and creating distress. However Mitchell et al (1983); Folkman, (1997); Stein et al (1997) found that problem focused coping is associated with reduced depression. Folkman (1997) noted that reappraisal is an expansion of appraisal, incorporating a feedback system of stress related information involving subsequent evaluations of reactions to the environment and a
process of ongoing reflection. Positively reappraising the event as less stressful or reframing the situation to see it in a positive light, can sustain coping efforts to deal with the ongoing stressor.

In the present study, it is observed that lower level employees are more enthusiastic and eager to prove themselves capable of performing various tasks, try to work things out in the most efficient and positive manner and hence try to use more of healthy cognitive mechanisms and physical activity related coping mechanisms. However in some instances when things go out of their control, they have a ‘give up’ feeling and hence adopt unproductive coping mechanisms to alleviate stress. The increasing demands being imposed on firms by customers to deliver services and products more efficiently and effectively is often reliant on IT personnel being able to be adaptive and responsive to the environment within which they work. Consequently, if firms are to improve their performance, then they need to provide their IT personnel with an environment that encourages problem-focused coping through improved training and skills development.

5.2.2 Hypothesis 4 (7)

**IT employees of different Educational levels differed significantly on their coping mechanism scores.**

Hypothesis 4 (7) is accepted on only one subscale, that is social support coping,

Hypothesis 4 (7) was rejected on subscales of coping like, healthy cognitive coping, spiritual religious coping, physical activity related coping, problem solving coping, unhealthy coping habits, unproductive coping mechanisms and high risk coping.

In the present study it has been found that, diploma holders had highest score on the subscale social support coping and the category ‘others’ had least scores.

Schabracq and Cooper (2000), suggest that investment in professional development (vocational and professional skills) can mitigate stress, as IT personnel are able to improve their efficiency and effectiveness, and ultimately their career prospects and even progression. Training and skill development can provide the IT
personnel with additional skills to better organize and integrate work within specified constraints, and the ability to deal with technical and environmental developments. Professional development may also take place through hands-on experience of the job, where the learning process coincides within the activity of carrying out the job (Mumford, 1986). It is likely that the longer IT personnel are employed the more job-related skills they acquire, through either professional development or on-the-job experience, which enables them to be psychologically better adjusted than those who have spent less time in the job.

According to a study by, Huarng (2001), social coping is an interpersonal approach to coping involving social support and a confrontive approach. Increased use of social coping was associated with high stress and high anxiety. There may be instances when an IT employee’s social support may be restricted. Consequently, they may feel isolated from the rest of the organization, and therefore are unable to receive adequate support from other personnel. Thus, this may contribute to higher levels of stress and anxiety being experienced. Another possible explanation by Peter, Zahir, and Marinos (2004), is the positive relationship between stress, anxiety and social coping which may be the confrontive element within social coping, involving challenging and confronting persons or situations viewed as the problem. IT personnel engaging in a confrontive style interpersonal approach may blame others for the stressful situation, or take chances to rectify the problem without actually dealing with the stressor at hand. As a result, this can also result in higher levels of stress and anxiety.

In the present study it has been found that, diploma holders had the highest score on the subscale social support coping and the ‘others’ category had least scores. An explanation to this finding is, the employees who had a higher qualification, and those who possessed the necessary skills, did not find any difficulty in managing their work. However those who had least qualification, who did not possess the requisite skills, had to take the help of other employees in the form of social support. It is thus analyzed that, higher education leads to lesser dependency and thus do not look for social support. However level of education did not make a significant impact on the stress levels of the employees as the significance was only found on the subscale, ‘social support coping’.
5.2.3 Hypothesis 4 (8)

The IT employees of different age groups significantly differed on their coping mechanism scores.

Hypothesis 4 (8) was accepted on the subscales of coping like, healthy cognitive coping and unproductive coping mechanisms.

Hypothesis 4 (8) was rejected on the subscales of coping like, social support coping, spiritual religious coping, physical activity related coping, problem solving coping, unhealthy coping habits, and high risk coping.

In this present study, it was observed that, IT employees of different age groups differed in their stress levels only on the subscales of coping like, healthy cognitive coping and unproductive coping mechanisms. It was also noted that the employees in the age group of 20-25 used more of healthy cognitive coping and unproductive coping mechanisms whereas employees in the mid age group used the least healthy cognitive coping and those in the age group 41-55 used least unproductive coping mechanisms compared to the other two age groups. It can be noted that in both subscales, employees in the age group 20-25 had highest scores.

In a study on “Age differences in Stress, Coping, and Appraisal: Findings from the Normative Aging Study” by Aldwin, Sutton, Chiara, and Spiro (1996), controversies exist concerning the influence of age on the stress and coping process, in part due to differences in methods across studies. They examined age differences in stress, appraisal, and coping, using both semi-structured interview questions and a coping checklist in middle-aged, young-old, and old-old men. Despite extensive probing, nearly a quarter of the old-old reported having had no problems and they expended less coping effort even when they did have problems. The types of problems reported varied systematically with age. Middle-aged men were more likely to appraise their problems both as challenges and as annoyances than the older men. Different age patterns emerged from the coping interviews as against the checklists, but controlling type of problem significantly attenuated age differences. However, there were no age differences in perceived stressfulness of the problem, appraisals of
harm/loss, or helpless appraisals, number of emotions reported, or coping efficacy. One interpretation of these results is that the nature of stress changes with age, from episodic to chronic, which in turn affects appraisal and coping processes.

A study carried out on “Coping in the Aged-Results and Problems of Psychological Studies of Coping Behavior in the elderly” by Saup (1987), revealed that, recent research in the psychology of aging places increasing emphasis on the coping concept as a means of explaining the psychological consequences of stresses and demands at old age. Nevertheless, only a few empirical studies on the coping behavior of aging people have been made. These studies show the following: (a) coping varies with age, as well as with sex differences, (b) coping strategies differ according to the actual characteristics of daily hassles, critical life events, and persistent life-strains, (c) coping strategies differ also according to the subjective appraisal of these events, (d) there is no evidence for the protective function of coping behavior in general, but only for specific coping strategies. Although there is some speculation about the "growth" and "regression" hypotheses, there are, as yet, no studies in this area. The author concludes by considering some theoretical and methodical problems of coping research in gerontology.

A study on “Age Differences in the Use of Coping Mechanisms” by McCrea, and Robert (1982), reports, two cross-sectional studies assessing the influence of age on the use of 28 coping mechanisms. Results showed older people coped similarly to younger people, and where they employed different mechanisms it was because of different types of stress. Middle-aged and older people used less hostile and escapist reactions.

In the present study, it was observed that employees in the entry level (20-25 age groups) tried to cope with stress using healthy cognitive coping as well as unproductive coping mechanisms. This is because this category of employees are fresh college graduates with high energy, greater dreams, wanting to achieve everything in a short period of time, hence have to cope using healthy cognitive coping mechanisms, when they are stressed (when they are unable to reach the heights they dream of, within a short period of time). They are still in the process of getting themselves settled in one particular job position which suits them, and are more vulnerable and undecided when it comes to shifting jobs from one organization to
another. Hence they normally have to look for a better way to cope with such stress. Sometimes when cognitive coping mechanisms do not work they tend to use unproductive coping mechanisms. It was also noted that the employees in the age group of 41-55 had least usage of unproductive coping mechanisms compared to the other two categories. These employees are those who have reached a particular level in their career and are somewhat settled with choosing their career options as a result of which are careful enough to analyze how best they can use various coping methods to alleviate stress.

5.2.4 Hypothesis 4 (9)

Software employees of different genders differed significantly on their coping mechanism scores.

Hypothesis 4 (9) is **accepted** for subscales of coping like, *unhealthy coping habits and high risk coping*.

Hypothesis 4 (9) is **rejected** for subscales of coping like, *healthy cognitive coping, social support coping, spiritual/religious coping, physical activity related coping problem solving coping and unproductive coping mechanisms*.

In the present study, influence of gender on coping can be found only in two subscales, ‘unhealthy coping habits and ‘high risk coping’ in which male and female employees differed and the scores revealed that men used more of such coping strategies than women on both subscales.

According to Phillips-Miller, Campbell, and Morrison (2000), although gender has not been a primary focus of inquiry in stress and coping research, researchers have increasingly given greater attention to the role that gender may play in explaining the use of coping methods. Differences in women's and men's perceptions of control, influence, and power over life may be another aspect responsible for gender variations in stress-coping. Women tend to have less control over resources for coping with job stress, less influence on their work environments and their male colleagues, and less power in marital relationships to bring about a more equitable distribution of child care and household responsibilities. This perspective is supported by findings reported by Duxbury and Higgins (1991), Apostal and Helland (1993),
and Steil and Weltman (1992). It also has been suggested that lower perceived control, influence, and power in home and work domains may limit the range of effective coping strategies available to women and increase role overload and depression (Greenberger & O'Neil, 1993). Supporting this contention, Davidson and Fielden (1999) noted that "in comparison to men, women tend to report significantly poorer mental health, characterized by low self-esteem, increased self-doubt, and self-blame".

In another study by Davidson and Fielden, (1999) it was found that other possible gender-based variations in stress coping may be related to the unique stressors women encounter in the workplace and at home. Discrimination and prejudice (e.g., career blocks, sexual harassment) and being viewed as "tokens" in non-traditional jobs (e.g., male-dominated organizational structures and climates, gender stereotyping) are examples of stressors that are unique, typically, to employed women. At home, women tend to have the primary responsibility for attending to the needs of others and care-taking (e.g., children, aging parents, partners), which often takes precedence over their own needs. Men, conversely, appear to have the expected privilege or option of not taking on such responsibilities (Gilligan, 1982; Henderson, et al., 1996; Wearing, 1998).

Fielden and Davidson (2001), found evidence, that showed females tend to use behavioural coping (e.g., taking direct and positive actions to deal with problems) more actively than males. Similarly, Gianakos (2000, 2002) found that women were more likely than men to use direct action coping to deal with stress by working longer and harder. Gianakos (2000) also noted that working women might utilize coping skills such as active planning and time management to juggle work and family responsibilities effectively. She suggested that this result might be explained by the idea that employed women must work harder to survive in careers, particularly when their professions are male-dominated. A study found that the differing expectations placed on women and men illustrate the socially constructed nature of gender and a male dominated hierarchy of status (Anderson, 1997; Ghorayski, 2002). The privileged position of men appears evident in a number of social arenas including employment settings, wealth and income (Connell, 1995), and even leisure settings.
(Henderson et al., 1996). The rewards of masculinity, however, also have a price to pay (e.g., lack of interest in preventive health among men) (Young & White, 2000).

Findings reported by Apostal and Helland (1993), Duxbury and Higgins (1991), and Steil and Weltman (1992) put forth that, women tend to have less control over resources for coping with job stress, less influence on their work environments than their male colleagues, and less power in marital relationships to bring about a more equitable distribution of child care and household responsibilities. Tyagi and Sen (2000), found that males scored higher on problem focused coping than females. McDonald and Korabik (1991) found that male managers embraced coping strategies which were categorized as ‘avoidance/withdrawal’ whereas female managers reported that they were more likely to talk to others and seek social support. Lim and Teo (1996) examined stress and coping strategies among IT personnel in Singapore. Their research found that women are more likely to seek social support than their male counterparts when dealing with stress. Male IT personnel, on the other hand, were likely to engage in ‘logic’ i.e., suppress their emotions and deal with stress in an objective and unemotional manner. Ptacek, Smith, and Dodge (1994) proposed that gender differences in coping strategies could arise from early socialization that promotes stereotypes of women as emotional, supportive, and dependent, compared to men who are portrayed as independent, instrumental, and rational.

The present study aimed at studying the influence of gender on coping strategies adopted by employees of IT companies. Male and female employees differed on the usage of ‘unhealthy coping habits’ and ‘high risk coping’, where, men used more of these coping mechanisms and on the remaining subscales differences were not found between them. The reason could be that men are more casual in their approach to work compared to women. They do not take things very seriously as women do. They tend work hard rather than work smart. It should be noted however that, the use of ‘unhealthy coping habits’ and ‘high-risk coping’ are not found to be positive approaches to cope with stress.
5.2.5 5. Hypothesis 4 (10)

IT employees of different marital status differed significantly on their coping mechanism scores.

Hypothesis 4 (10) is accepted for only one subscale of coping, that is high risk coping.

Hypothesis 4 (10) is rejected for subscales of coping like, healthy cognitive coping, social support coping, spiritual/religious coping, physical activity related coping, problem solving coping, unhealthy coping habits and unproductive coping mechanisms.

In the present study it is observed that married and unmarried IT employees differed only on the subscale high risk coping, and unmarried employees had more scores on this coping mechanism. In a study by Times of India, dated 13th Aug 2008, “Are young professionals the most stressed out?” Amit Kumar Gupta’s response was, “Perhaps it is right. Stress at workplace is pretty high, but I believe singles panic at a higher rate than others. Married or any other individual who have partners cope up with the challenges and stress easily”.

In this present study it was observed that one’s marital status did not significantly influence the employees in the use of various coping mechanisms, except on the subscale, “high risk coping”. This coping mechanism is a negative approach, and is generally used under extreme circumstances; hence, needs serious attention towards those using this style. It was also noted that unmarried employees seemed to use more of this coping mechanism. This clearly indicates that married employees have someone to lean on in times of trouble and hence lesser use of this coping method.
5.6 HYPOTHESIS 5

Family environment plays a significant role on Occupational Stress and Coping mechanisms adopted.

5.6.1 HYPOTHESIS 5 (1)

5.6.1.1 Family Environment plays a significant role on Occupational Stress:

A hypothesis 5 (1) is accepted on subscales of OSI like, role overload, role ambiguity, role conflict, unreasonable group and political pressure, responsibility for persons, powerlessness, poor peer relations, intrinsic impoverishment, low status and strenuous working condition.

A hypothesis 5 (1) is rejected on the subscales of OSI like, under participation, and unprofitability.

In the present study, it was also noted that, influence of the family environment on the level of stress seemed to be very significant, as the significance was found on most of the subscales except on ‘under participation’ and ‘unprofitability’. The total of all subscales of occupational stress reveals that there was a significant difference among employees coming from different family environments. The employees who opined that their family environment as ‘can’t say’ or ‘average’ had higher levels of stress while those who opined that their family environments as ‘good’ had lower levels of stress.

In an article titled “Women with stressful jobs and passive lifestyles are falling Prey To Ovarian Disease (PTOD)” in Bangalore Mirror 17/3/2008, overeating, increase in food intake; lack of time for exercise, spending too many hours in front of the computer without any movement are some of the reasons for PTOD.

In another article in, Bangalore Mirror dated 25 / 3 / 2008, another case of Summit and Anjana showed their marriage on the verge of breakdown. Their main problem was incompatibility. They blame long working hours, lack of quality time between new spouses. Whatever the version, the dark side of IT sector is up for public scrutiny. Many companies are now getting counselors to their workplace. Moreover spending long hours at one’s workplace naturally gives room for extramarital
relationship. However IT industry already faces talent shortage and hence they can’t afford to lose existing employees. There is more concern for the emotional well being of the employees. The tie-ups with counseling agencies are definitely on the rise.

According to P.A.Thoits, (1986), some research indicates that social support reduces the adverse psychological impacts of exposure to stress and stressful situations. A support group is simply a group of family members or friends with whom a person can spend time. Supportive family and friends can help people deal with normal stress on an ongoing basis. Support groups can be particularly useful during times of crisis. For instance an employee has just learnt that she did not get the promotion she has been working towards for months. It may help her tremendously if she had good friends to lean-on, be it to talk to or to yell at (Daniel.C.Ganster et al, 1986).

In the present study, occupational stress among IT employees was found to be high especially among those whose family environments were ‘average’ and those who opined that their family environments as ‘can’t say.’ The level of stress was found to be less among those employees who had good family environments. It clearly shows that influence of the family environments on stress is very significant. The reason may be that family acts as a buffer to alleviate or cope with stress. Good family environment supports the employees in times of crisis. Employees who had average or bad family environments add to the organizational stress the employee is already facing. A good family acts as a support group and helps the employee to manage or cope with the stress.

5.6.2 HYPOTHESIS 5 (2)

Family Environment will play a significant role on Coping

Hypothesis 5 (2) is accepted for subscales of coping like, problem solving coping, unproductive coping mechanisms and high risk coping.

Hypothesis 5 (2) is rejected for subscales of coping like, healthy cognitive coping, social support coping, spiritual religious coping, physical activity related coping and unhealthy coping habits.
In the present study, it was observed that the influence of family environment on use of coping methods was found to be significant only on subscale of coping like, *problem solving coping, unproductive coping mechanisms and high risk coping*. On all the three subscale, it was found that those who opined that their family environments as ‘average’ and ‘can’t say’ had more scores than those who opined that their family environments as ‘good’. It may be because the family environments help individuals to cope with stress in a better way.

In an article in Bangalore Mirror dated 28 / 3 / 2008, IT spouses have the IQ but not enough EQ to keep a marriage going. The cities’ detective agencies are witnessing a boon in insecure techies asking them to spy on their spouses. In the fragile world of techies’ marriages where the honeymoon is barely over, before the mutual spying begins. According to some agencies, they get 15-20 cases to do with marital infidelity every month. According to Javed M.Khatib of Black Belt commandos’ security system, every month they get around 15 cases revolving around suspicion of marital infidelity. According to Gopinath.C of Rapid Force Security and Facility Management most of the 15-20 cases which come to his agency are to do with extra-marital affairs. Most of them who come to the detective agency are females and they are a between the age group ‘25-30’. However Annaiah of Eagle Detective Agency said ratio of male to female is 50:50. Out of 100 cases of divorce that she gets a month, 90 are from IT industry. The techies’ divorces are on the rise due to lack of EQ which is the result of stress and quality time they have with their spouses. “Wife accuses techie family of dowry harassment. She paid Rs. 10 lakhs, but there was no end to her in-laws greed”.

Amit Bhudiraja a native of Delhi, who killed his wife Rinku and killed himself, is fresh in one’s memories. It is one of the cases of ‘stress’ which led to such extreme steps taken by Amit. Amit had been working with Infosys for the last 9 years and Rinku was working with Standard Chartered Bank. For most techies, obsession with career precludes development of crucial social and interpersonal skills. There is enough research to show that BPO employees and IT professionals do not have time to bond with family members and their quality of life suffers because of long working hours, unearthly shifts and pressures at workplace. They might be getting a good pay
packet and have material comforts, yet there is little effort made to understand each other to make a relationship work (Bangalore Mirror dated 24th Mar 2008).

In the present study, it is observed that employees are found to use only ‘problem solving coping’, ‘unproductive coping’ and ‘high risk coping mechanisms’. On all these subscales employees who said that their family environment as ‘average’ and ‘can’t say’ had higher scores than those who said they had good family environments. Hence it can be said that good family environments would help employees to cope better with stress.

5.7 LIMITATIONS OF THE STUDY

The study was carried out only on select IT Companies in Bangalore and Mysore. Employees were unwilling to respond to variables like religion and income. The study did not take into consideration individual differences in personality which is also considered as one of the important factors which contributes to stress. The sample of the study has focused only on software developers. Employees of BPO’s and Call centers were not taken into consideration. The study also did not take into account other factors, other than the work environment that may cause stress.

5.8 SUGGESTIONS

1. The pressure of workload can be reduced by delegating responsibility and selectively worrying about the most important stress producing situations, and establishing goals and setting priorities to accomplish important objectives.

2. Time management: Managers should make a list of activities to be performed and prioritize them in their order of importance. They should utilize their precious time to concentrate on the few prioritized tasks.

3. The third important factor is person environment fit. The managers need to adapt or cope with the environment which is not suitable for them. If this is not feasible it is better to quit.

4. The political climate is also an important factor to be taken into consideration. If the organizations atmosphere, conveys a perception that, “it’s not what you know, but whom you know,” then the organization will be a very stressful place to work. If the
problem seems to be significant enough, based on turnover, absenteeism and other important factors, thought should be given to hire a management consultant to evaluate the climate and make recommendations for change.

5. It is also important that people always maintain a sense of humor, especially regarding themselves. A sense of humor about ourselves is acknowledgement of the fact that we are imperfect human beings.

6. One cannot rely on the individual coping strategies alone to mitigate stress. Managers need to understand the employees’ workload and provide social support whenever necessary. Managers should provide acknowledgement and appreciation to those performing their jobs well.

7. It is necessary to equip the employees with necessary skills to face any challenges that may come. Schabracq and Cooper (2000) suggest that investment in professional development (vocational and professional skills) can mitigate stress. Training and skill development can provide the IT personnel with additional skills. Professional development may also take place through hands-on experience of the job, where the learning process coincides within the activity of carrying out the job. It is likely that the longer IT personnel are employed the more job-related skills they acquire.

8. A process of stress management can be adopted to keep their employees fit and ready to face any challenge that may arise due to the changing nature of technology. Firstly, to have a scientifically developed induction system; To conduct regular educational sessions on stress and lifestyle management; To implement innovative stress-relieving programs; To provide access to counselors; To keep track of employees’ health with preventive checks at regular interval, risk stratification of employees’ health; risk management programs and review of health status at regular intervals.

9. Among the new approaches are bio-feedback and meditation. Some traditional approaches are physical exercise and spiritual practices. Biofeedback is a method where brain gives off electrical signals that can be measured by a recording machine, now called the electroencephalograph or EEG. It takes less time away from the job; it’s cheaper and its effectiveness can be objectively measured. Transcendental Meditation is the ability to control bodily reactions mentally. Jogging and walking as
a form of physical exercise has been quite a popular approach followed. An important element in human life is faith. It puts everything into spiritual focus.

10. Organizations are just as worried about stress as are individuals. Organizations need to reduce or eliminate stress by improving communication, through better participation by employees, and by redesigning jobs to be more fulfilling.

11. From the individual’s point of view, the best way to manage stress is to learn to relax, take interest in something outside the job, for example, listening to music, playing an instrument, going for picnics with loved ones or taking long walks. The best way, undoubtedly is meditation and practice of yoga. Doing exercise and aerobics early in the morning also helps cope with stress. Worshipping at a temple, chanting prayers and slokhas, or just sitting around at the place of worship enjoying the serenity of the place, participating in community prayers and social gatherings help in keeping the mind fresh and balanced.

5.9 GENERAL DISCUSSION

IT employees have to keep pace with the change in the job culture which affects the mental health of the employees. This is particularly relevant because jobs in information technology is the most coveted one in modern India, and the most brilliant section of the youth are going for it. While each job has its own stress, IT jobs are somewhat different from our traditional and typical concept of secured employment. IT jobs are mostly contractual with less job security but high pay, and entail strong competitiveness, along with globalized lifestyle. There are a few evidences that IT jobs are offering an elevated standard of life, but taking tolls on the mental health and relationship aspects of the professionals. Stress during work may hit health hard. Stress at workplace may increase rates of heart disease, flu, virus, metabolic syndrome and high blood pressure. (Times of India, 24th Nov 2006).

It is critical for both the organization and individual to think about the issue of stress on a long-term basis. The real question is not how to handle the issue of stress on a short-term basis but to consider the long-term causes and consequences of job-related stress. A long-term perspective is needed because short-term solutions are typically not real solutions. If the norm is unhealthy stress, then the seeds for an
ineffective IT organization have been planted, that will hamper organizational
effectiveness. In such cases, both management and IT professionals should follow the
remedies outlined here. Managers must be aware of the potential work stressors on
staff and take appropriate measures to reduce stress. They must develop and
implement solutions to work problems that will benefit the individual, which will
result in happier, healthier, and more productive employees. IT professionals need to
take responsibility for maintaining the necessary balance in their lives by addressing
these workplace stressors. Once the stressors are identified by the individual, a
commitment must be made to work on easing this stress. Generally IT employees are
found to have various causes of stress like, heavy workload and its concomitant time
pressures and unrealistic deadlines; what must be accomplished on the job and what
the manager would like the employees to accomplish; the general organizational
political climate; and lack of feedback on job performance.

Recession has set in all over the world, especially hitting the IT sector
severely, as most of the IT companies have their clients abroad. The great depression
which has resulted in the closure of Lehman Brothers, and Merrill Lynch, have
increased the level of uncertainty on employees of the IT sector. Companies are
downsizing, which is another great cause for worry and stress. A fraud by Satyam
Computer Services to the tune of 7000 crores has left people with a rude shock. IT
employees are now the most vulnerable lot, who are left with an uncertain future and
least security from such IT companies. Most of the leading IT Companies are giving
pink slips to experienced employees who had served them for more than ten years.
Lack of job security, is one of the factors to be given serious concern, as it acts on the
stress of the employees. Bail out plans for Satyam Computer Services by the
government can show some sign of relief for these employees who are suddenly on
the streets. The state ought to step in, as part of its responsibility to maintain the
viability of the IT industry in the long run.

It is true that companies do offer a variety of solutions like yoga classes,
exercise, meditation, flexi-time, and tele-commuting. But they cannot be substitutes
for professional mental health counseling and care, especially when stress-related
problems have already set in. Such counseling needs to be necessarily third party,
precisely because many employees may find it delicate to reveal their personal
problems to in-house people. I do feel that a proactive decision by major players in the IT industry regarding the provision of professional mental health care for employees will definitely have a salutary effect on the general acceptability of mental health care in the country as a whole.

The issue of access to professional mental health care for IT employees (and of other industrial sectors as well) is not merely the employees' or the companies' issue. Indeed this is one area in which the state ought to step in, as part of its responsibility to maintain the viability of the IT industry in the long run.

The skills, behaviour and attitudes mentioned here are just a few of the many available to people, to combat stress. One person’s nourishment may well be another’s poison. What is important is for each individual to have some programme for dealing with stress. The results of having no methods at all may be disastrous.

- The employees have to be educated about the various ways in which they can cope with a stressful situation. Discover stress issues and capitalize on coping strength to manage stress.

- Learn to minimize or eliminate common daily stressors.

- Identify areas for coping skills improvement.

- Develop flexibility in responding to change.

- Communicate more effectively to improve problem solving.

- Build mutually supporting relationships

According to, “The Week” May 7 2006, the new-age work culture adopted by companies like Coco-Cola and Intel, managements discourage employees from working late and insists on health and fitness. Their philosophy is sound planning and work-life management and strategy is flexi-timing allowing employees to work at their time schedules. After work hours, it is exercise time. These companies believe that productivity levels peak when-their employees are happy.
5.10 SUGGESTIONS FOR FUTURE RESEARCH

- As there has been limited research undertaken that has addressed coping and psychological adjustment of IT personnel the findings reported in this paper provide the impetus for future research in this area.

- It is suggested that future research should focus on determining whether personality (type A/ type B) influence coping strategies and subsequently the psychological adjustment of IT personnel to work-related stress.

- A more comprehensive study to examine the validity of the findings in India and in an international context should be undertaken.

- Research efforts should also focus on the determinants and consequences of coping among IT personnel. Thus, management needs to understand not only how their IT personnel cope with psychological adjustment but also why they cope as they do.

Consequently, if firms are to improve their performance, then they need to provide their IT personnel with an environment that encourages problem-focused coping through improved training and skills development. For example, determining whether personality type influence the coping strategy and subsequently the psychological adjustment of IT personnel to work-related stress. The degree and pace of change being imposed on businesses by globalization and developments in information and communication technologies increases the levels of work-related stress among IT personnel. As businesses seek to improve their competitive positioning within their respective marketplaces, they are creating an environment that fosters change, much of which adds to the everyday pressure and stress on employees. It would appear that stress has become an intrinsic feature of the workplace, especially among IT personnel, but how they cope with the pressures of technological change imposed on their work environment will ultimately influence overall business performance. There are limited studies in the area “influence of educational level on the coping mechanisms used” and hence scope for future research. There is also scope for research on the effect of layoffs on the employees in the IT sector due to the recession and down trend which has given rise to serious effects on the levels of stress and consequences employees have to face.