# JOB STRESS, COPING PROCESS AND INTENTIONS TO LEAVE

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The purpose of this study was to find out the causes of occupational stress amongst the software professionals, the ways adopted by them to cope up with it and their intention to leave employment in a sample of twenty six software professionals working in three different software companies. The sample included professionals working for full time, with varying demographic details. Qualitative methods were used to collect the data which included four focused group discussions and twenty six in-depth interviews. Hence, this study tries to bring readers attention to work related issues of the software professionals and the impact of it on them.

## Key Words: Job Stress, Coping Strategies, Work demand and stress.

# Introduction

Generally, for a company, it is believed that employees are their key assets, but nowadays, companies are realising that employees are their most important assets. This is because in a world where technologies, processes, and products are quickly duplicated by competitors, and the pace of change and level of competition are constantly increasing, people are the key to the most reliable sources of advantage – better service, increased responsiveness, stronger customer relationships, and the creativity and innovation that keep a company one step ahead. At the same time, however, it's getting tougher to hold on to those employees. Retention is becoming a major issue, as; unemployment is at its lowest point in a quarter of a century.

Living in an "information society", we are bombarded with information technology, especially at work environment, whether or not we actually want to. Software organisations are growing both vertically and horizontally throughout the globe. For organisations, the adverse effects of stress may act as an impediment to performance and to the change process. The effects may be seen in poor job performance, high levels of absenteeism, discontent among the workforce, high turnover of labor with the loss of "good" employees, and a large increase in recruitment and retraining costs (McHugh and Brennan, 1992). Although having undeniable effects on organisational performance, stress at work has been understood mainly from the perspective of the individual. Although information on the costs of workrelated stress is scarce, where available, costs appear to be high. The main portion of the costs is determined by the absence and by disability resulting from psychological (health) problems.

# Background

Stress, particularly work-related stress, has aroused growing interest across all over the globe in recent years. The workplace has changed dramatically due to globalisation of the economy, use of new

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information and communications technology, growing diversity in the workplace and an increased mental workload (Kompier, (2002); Landsbergis, (2003); National Institute for Occupational Safety and Health, (2002). At the same time, workers have been reporting an increasing level of mental health problems. Moreover, work-related stress has also been associated with a number of other ill-health outcomes, such as cardiovascular diseases (e.g. Kivimäki et al., 2002), musculoskeletal disorders, particularly back problems (e.g. Hoogendoorn et al., 2000) and neck-shoulder-arm-wrist-hand problems (the so-called RSI-repetitive strain injuries; (e.g. Ariëns et al., 2001), as well as absence from work (e.g. Houtman et al., 1999). The most general job stress model is probably the Michigan Model, which reflects four main groups of variables having causal sequence. Organisational characteristics like company size, hierarchical structure and job description can lead to stressors, such as role conflict or role overload. These stressors may lead to stress reaction or strains. Finally, strains can lead to physical illness. (Le Blanc et al. 2000) Moderators like enduring properties of the individual worker and interpersonal relationships can reduce or increase the stress reactions.

The potential outcomes of stress at work are thus rather diverse, and do not only pertain to health but also to actual participation in the workforce. This study focuses on the job related stress amongst the software professionals, their coping strategies and the impact of it.

## **Literature Review**

In the process of collecting Stress related Literature, stress particularly as applied to work in business organisations, relevant articles have been collected, classified, and summarised (e.g., Igbaria et al., (1994); Li and Shani, (1991); Singh, (1990); Sonnentag et al., (1994); and Weiss, (1983). Attempts were made to find out: i) perceived causes of work stress (e.g. Jick and Burke, 1982), ii) personal factors related to experienced work stress, iii) coping with stress (Fisher, (1986); Lazarus and Folkman, (1984); Trumbell and Appley, (1986) iv) effectiveness of efforts initiated to reduce occupational stress (e.g. Newman and Beehr, 1979) and v) employee's intentions to leave the organisation. (Firth and Britton, (1989); Jackson et al., (1986); Moore, (2000); Pines et al., (1981).

In literature attempting to analyse stress within the Information Systems profession, it is accepted that occupational stress is related chiefly to the interaction of the person factors with work environment factors. Ivancevich et al. (1983) propose a model which first identifies Work Environment Stressors as related to i) Job (time pressures, job scope, obsolescence), ii) Role (ambiguity, conflict) iii) Career (development) and iv) Organisation (rewards, change, communication). They then identify Person (Individual) Factors such as self-confidence, decisiveness, tolerance of ambiguity and locus of control. Stress ("the physical or psychological condition of a person that puts him or her under strain, and that threatens the person by stimulating him or her beyond their limits" (Bonoma and Zaltsman, 1981) arises from the interaction of Work Environment and Person Factors and results in Outcomes which can be classified as i) Psychological (satisfaction, commitment, tension), ii) Physical / Behavioural (blood pressure, cholesterol, smoking, drinking) and iii) Organisational (absenteeism, turnover). Young (1992), in his study, has also applied an adapted version of this model. Wastell and Newman (1993) present an eclectic model of work-related stress and organisational behaviour similar to the one above, cast in cause-effect terms. It identifies Sources of Stress at Work (physical working conditions, role factors, interpersonal conflict, over/under promotion, job insecurity and organisational change). These sources interact with Individual Characteristics, Organisational Context, and Work Group Factors, yielding Individual Symptoms (e.g., poor health, absenteeism, resistance to change, ego defense mechanisms) as well as Group Symptoms (e.g., group think, internecine strife).

With the increase of computer-supported work, there has been a dramatic increase in health problems related to it (Bergkvist, (1993); Aronsson et al., (1994); Punnett and Bergqvist, (1997). Health problems in IT-supported work are well known and well documented. The main symptoms are visual discomfort,

musculoskeletal disorders (repetitive strain injuries, RSI) and stress-related symptoms (Aronsson et al., (1994); Punnett and Bergqvist, (1997); Smith (1997); Aarås et al., (2000).

Efficient use of IT systems demands competent users with certain kind and amount of knowledge. Persons lacking necessary knowledge feel that they cannot satisfactorily handle the work demands and control their work situation, and lack of control is a well-known stress factor (Karasek and Theorell, 1990). The imbalance we experience when we feel that we don't have enough resources to deal with the work demands is a classic stressful situation, referred to as high job strain, leading to increased risks for health problems. This is described in the widely used stress model called "the demand-control model" or "the Karasek model". The model subsequently became three-dimensional, by adding the factor social support (i.e. support from supervisors and colleagues). Social support has been shown to have an important effect on work related stress and health. (House, (1981); Wahlstedt, (2001).

Coping includes the cognitive, emotional or behavioural strategies, which are used to adjust to the stressful situation. Despite decades of research, the process of coping with stress is not well understood. (Coyne and Racioppo, (2000); Folkman and Moskowitz, (2000); Lazarus, (2000); Somerfield and McCrae, (2000). Most experts agree that a coping strategy is likely to be most effective when appropriately matched to the stressor.(e.g Banyard and Graham-Bermann, (1993); Somerfield and McCrae, (2000); Steed, (1998); Tamres, Janicki and Helgeson, (2002) but there is no consensus on how to match types of stress with types of coping. Theories of stress, coping and health posit relationships between high stress levels, ineffective coping and poor health consequences. (e.g. Fisher, (1986); Lazarus and Folkman, (1984); Trumbell and Appley, (1986) When there is a poor fit between a person's stress levels and their coping capacity, adjustment strategies are likely to be ineffective and negative health outcomes can occur. It is generally accepted that matching the type of stress with an appropriate coping strategy would be most effective and thus, beneficial to health, while use of an inappropriate coping strategy would be less effective and therefore, detrimental to health. This could lead to development of intentions to leave the organisation.

Researchers have noted that job satisfaction is directly related to employee turnover/retention rates (Cotton and Tuttle (1986); Shore, Newton et al., (1990) and absenteeism (Scott and Taylor, 1985) and indirectly to job performance and productivity although the findings for productivity have been somewhat contradictory.

Turnover of highly skilled employees can be very expensive and disruptive for firms (Reichheld, 1996). Losing highly skilled staff members means that companies incur substantial costs associated with recruiting and re-skilling, and hidden costs associated with difficulties completing projects and disruptions in team-based work environments (Niederman and Summer, 2003). The "job churning", specifically, with relation to information technologies have short life cycles, requiring continuous hiring of new workers with new skills, as opposed to the more time consuming approach of training current employees (Network, 2000). The demand for management information systems (MIS) employees, for example, is extremely high and MIS professionals have historically displayed very high rates of turnover (Igbaria and Siegel, (1992). Determining the causes of turnover within the IT workforce and controlling it through human resource practices is imperative for organisations (Igbaria and Siegel, 1992). Research conducted by Igbaria and Greenhaus (1992), confirms that a range of job factors can influence attitudes, causing job dissatisfaction which in turn, can influence turnover intention. It has been proved that increase in stress related factors lead to reduced job satisfaction (Burke and Greenglass, (1995); Maslach and Jackson, (1986); Pines et al., (1981); Wolpin et al., (1991) causing reduced organisational commitment (Jackson et al., (1986); Leiter, (1991); Sethi et al., (1999) and high turnover and turnover intention (Firth and Britton, (1989); Jackson et al., (1986); Moore, (2000); Pines et al., (1981).

# **Purpose of the Study**

The current study is aimed at exploring the sources of stress amongst the software professionals, the strategies adopted by them to deal with it and finally, finding out if they had the intentions to leave the organisation.

# **Research Design**

For better understanding of the Stress related sources and problems of the software professionals, qualitative methods were employed in this study. This is because; "A major strength of the qualitative approach is the depth to which explorations are conducted and descriptions are written, usually resulting in sufficient details for the reader to grasp the idiosyncrasies of the situation." (Myers, 2000a). Hence, qualitative methods were used in this study as this helped to foster an understanding of each participant's unique experience through in-depth and focused group discussion. It also provided an understanding of the phenomenon being researched through direct, first hand experience.

This study was influenced by the sensitising concepts that emerged from the review of the literature, namely work stress, sources of stress amongst software professionals, coping techniques adopted by them and their intentions to leave the organisation.

## **Methods and Procedures**

Since the recruitment process involved a request for voluntary participation, it was difficult to accurately predict the number of staff who would participate in this study; as many as forty-five software professionals from three different companies were approached, however, twenty six participants agreed to volunteer. We obtained data from four focus group interviews of software professionals held between August and December 2006 and twenty six in-depth interviews with individual software professionals between July and December 2006. The underlying theoretical perspective used in the study was phenomenological (Patton, 1990). Using a phenomenological approach involves discovering how people experience some phenomenon by capturing how they perceive, describe, remember, and make sense of it. Conducting in-depth interviews with people who have direct, first hand experience with the phenomenon of interest is believed to be the most effective way to gather such data (Patton, 2002). However, the study drew on other theoretical constructs such as a naturalistic theme of inquiry (Gubrium and Holstein, 1997) and an interpretive research approach (Hones, 1998). Perceptions of the impact of living with stressful situations were studied in a non-manipulative and non-controlling method with no preconceived constraints on what the outcomes of the research should be.

Interviews were conducted using a semi-structured interview guide which served to guide but not govern the discussion. Questions were open-ended in order to provide participants with the opportunity to fully explain their experiences. Individual interviews were conducted either at a restaurant situated near the participant's organisation or at his home and also in a private area, often chosen by the participant. Interviews generally lasted one hour, were tape recorded, and transcribed verbatim. Participants were made aware of the recording and transcribing procedures prior to their involvement with the study. After the interviews, memos and notes were written about questions, impressions, and feelings researcher had during the interviews. Broad transcription approach was used where standard orthographic full stops and commas were used to mark major pauses and grammatical phrase groups

Also, Focus groups have been used as a complement to surveys for course evaluation to explore reasons behind quantitative responses. Bloor (2001) notes that focus groups can be used "adversarially" to contest survey data and results or at least to offer alternative interpretations of apparent results (Bloor, 2001, p.11). In this paper, both the individual professional's "account" of experience and this account as a response to the group – both the individual "moving picture" and group "snapshots" (Catterall and Maclaran, 1997) – is explored as significant effects of the focus interview. Myers (2000b), rejecting the

view that talk in moderated groups is artificial, adds, rather ambitiously in researcher's view, that focus group analysis, is "a chance to explore how society emerges" and, in particular, how the individuals locate themselves in society.

For the four focused Group Discussion, availability of the informants were checked, and after mutually deciding the time and date, meetings were held. Software professionals were invited to participate in the focus group discussion over the phone, at a mutually agreed location, generally at a private place. Each focus group comprised six participants. However, two of the participants, after repeated attempts, could not make themselves available due to their busy schedule. In order to maintain the confidentiality of all recorded material, appropriate safeguards were taken to ensure that this material is protected. At the conclusion of the focused group as well as individual interviews, participants were asked to allow the researcher to contact them for follow-up verification of the transcription and interpretation of the data. The anonymity of the organisations and the participants was protected by referring to each participant only as a *participant* and assigning each participant with a number. Similarly, the organisations being referred as "A", "B" and "C".

In their review of qualitative criteria for assessing research validity, Anfara, Brown, Mangione (2002, p.30) note that "publicly disclosing methods and research processes" is still insufficiently addressed in research writing and that credibility, transferability, dependability, and confirmability, need to be addressed. In the following outline of the research process, the researcher attempt to address these dimensions. The interviews were based around a set of focus questions, which were explored for different groups and individuals as is typical with focus group semi-structured interviewing (Morgan, 1997). Evidence of a desire for consensus and "group think" among participants was evident (Carey and Smith, 1994). The researcher also intervened at several points in the interviews to clarify interviewees responses, to direct participants to elaborate, and to rephrase statements; thus, interviews were very much a jointly constructed discourse and questions "part of a circular process through which its meaning and that of the answer are created in the discourse between interviewer and respondent as they try to make continuing sense of what they are saying to each other" (Mishler, 1986, p.53). The first five minutes of each interview and focused group discussion were devoted to developing trust and creating an informal atmosphere.

Data collection stopped at the point of "Theoretical Saturation", the point in data collection at which no new themes or insights are revealed. (Flick, 1998). Data collection and analysis used a thematic analysis approach to derive patterns in informants' perceptions of the impact of living with stress. (Miles and Huberman, 1984). No preliminary hypotheses were offered and data was analysed continuously to identify common themes.

# **Participants or Informants**

The data for the study were collected from three different software companies having their offices in Pune. Strength of Company "A" was around 100 employees. Company "B" had the strength of around 500 employees and Company "C" had around 1000 employees. In all the three organisations, informants were dispersed throughout the organisational hierarchy and were selected via randomised quota sampling to reflect a mix of age, experience, gender and position they held with the organisation.

The demographic details have been summarised in the table below to provide a broad outline of the distribution of some of the relevant characteristics of the sample.

# Analysis

The data from this study was systematically gathered and analysed using a grounded theory approach (Strauss and Corbin, 1998). As defined by two of its major proponents (Strauss and Corbin, 1990), "the

Distribution	Name of the Company			Total
Age wise	Company A	Company B	Company C	
21 - 30	3	5	6	14
31 - 35	2	2	3	7
36 - 40	1	2	2	5
Experience wise				
0 - 5	3	5	4	12
6 - 10	2	3	4	9
11 - 15	1	1	3	5
Gender wise				
Male	4	6	8	18
Female	2	3	3	8
Position wise				
Manager	1	2	2	5
Team Leader	2	3	4	9
Executives	3	4	5	12

Table 1: Demographic details of the Participants (n=26)

grounded theory approach is a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon" (p.24). Grounded theory offers coding procedures as a framework for providing standardisation and rigor to the analytic process (Strauss and Corbin, 1998). In this study, the analysis of the transcribed data followed the coding procedure using open, axial, and selective coding. Coding is referred to by Strauss and Corbin as representing the operations in which data are broken down, conceptualised, and put back together in new ways. Open coding involved the identification of categories or themes that emerge from the first interview and continued with new categories being added in subsequent interviews. The second step involved the use of axial coding, which included a more in-depth examination of the emerging themes and the identification of additional information that led to further themes being developed. Once the major themes were identified, selective coding was used. This stage of the analysis involved a search for connections between themes that led to theory building. Throughout the coding process the researcher used the constant comparative method (Lofland and Lofland, 1995). According to Patton (2002), comparative analysis constitutes a central feature of grounded theory development. Therefore, each participant transcript was compared with the other transcripts and codes and categories were compared with each other. Negative cases were also analysed (Kirby and McKenna, 1989) against existing themes to affirm and ensure the relevance of themes and patterns. Direct quotes were used to illustrate the themes.

# **Establishing Trustworthiness and Credibility**

There are various ways and techniques that can be used to find the credibility and trustworthiness of the findings and interpretations emerging from qualitative research, as suggested by Lincoln and Guba (1985). Triangulation, which involves using multiple sources of data collection to verify or justify a theme, is one way of enhancing trustworthiness and credibility (Creswell, 2003). However, Richardson (2000) offers the notion of crystallisation to support the idea that data can be considered from many perspectives. This idea is also supported by other authors in qualitative research (Lincoln and Denzin, (2000); Janesick, (2000). Crystallisation recognises that any given approach to study the social world as

a fact of life has many facets. The crystal "combines symmetry and substance with an infinite variety of shapes, substances, transmutations, multi-dimensionalities, and angles of approach. Crystals grow, change and alter, but are not amorphous" (Richardson, 2000: 934). Crystallisation provides us with a complex, deep, but completely partial understanding of the topic. We have rich data that reflect different angles at different points in time and from different perspectives. If we move beyond triangulation towards crystallisation, Richardson (2000) suggests that our research be evaluated on the basis of substantive contribution and asks whether it contributes to our understanding of social life. This study aimed to enhance our understanding of the participants' working lives with respect to quality of work life and issues relating to it. Richardson also offers reflexivity and impact as evaluative measures for research. A reflexive journal was used throughout the study in order for the researcher to reflect on and document researcher's beliefs, feelings, and emotions. Any thoughts or questions that surfaced regarding new research directions and practices were also documented. Finally, Richardson evaluates research on its expression of reality and asks whether the text provides an embodied sense of lived experience. This study was designed to capture the participants' lived experiences through the use of observation and in-depth, open ended interviews. In keeping with the tenets of crystallisation, recognition is given to the notion that only a partial understanding of the phenomenon can be obtained from this study and this understanding is reflected from many different perspectives.

# Findings

The findings of the twenty six in-depth and four focused group interviews of the software professionals are stated as follows: On explaining the concept of stress, each of the participants accepted that they experienced quiet an amount of stress due to their nature of work, although the level of stress observed, varied amongst the participants. Many of the stressors, identified by the participants, seemed to be typically associated with the nature and type of their work. Stress was mainly associated due to the interaction of the person factors with works environment factors. Time pressure, scope of the job, role ambiguity and lack of communication, role conflict and rewards were found to be the major causes of stress. (Ivancevich et al., 1983). However, other causes included visual, musculoskeletal (Aronsson et al., (1994); Punnett and Bergqvist, (1997); Smith (1997); Aarås et al., (2000) and lack of competence (Karasek and Theorell, 1990), leading to lack of control.

The issue of "Work demand and stress", therefore, merged out to be the key theme of the study. As and as discussion continued, the ways and strategies that the participants adapted to "Cope up with stress", emerged out to be the second theme.

Finally, on further in-depth probing, the intentions of the participants that they had at the back of their mind, started coming-out, giving emergence to our third theme i.e. *"Intentions to leave"* the organisation. Research findings also indicate that unsuccessful strategies to cope up with stress contribute to disturbed personal well being and functioning.

The following section deals with each of the themes one by one. To help the readers to understand the various themes in a better way, direct quotes are used for illustration.

# **Work Demand and Stress**

Time pressure and role conflict was considered to be one of the major cause of stress amongst the software professionals. With inadequate number of staff and high attrition in the industry, the major responsibility lies with the existing team players. All of these are reflected in the participant's comments:

"Since last two months, I was continuously working on my project for around fourteen hours a day, even in the weekends. Our project had come to a critical stage. The work was such that we could not say "NO." I had developed back problems due to continuous strain. Even in the morning, I used to feel mentally exhausted. The project had to be completed on time." (Participant No. 18)

"Last week, two of my team members left the organisation. They had got a better opportunity. As it is, we are running short of time. Being the project manager, now tell me.... Can I do their role along with mine...?? I have to. Until we are able to find their replacements, situation is going to remain critical." (Participant No. 15)

Other types of stressors identified by the participants were related to the scope of their job, communication, rewards, etc.

"Look, the salary that I was promised, during the time of my interview, and that I am now getting, .....there is a difference....!! Lots of deductions are there in my salary. Now this was not told to me...else, I would have not joined this organisation. Every moment I feel that I have been cheated. Its ridiculous...!! (Participant No. 9)

It is important to note, here, that the work of the software professionals, generally, are project based, which have to be completed and delivered in time. When a software professional joins the organisation, the project team is in a hurry to put him on the project without giving much information. Also, he does not get sufficient information regarding the project, his role and information regarding whom he needs to approach incase he faces difficulty. This, ultimately, causes communication gap amongst the professionals, leading to role ambiguity.

"I remember, when I had joined this organisation, on the very first day, after a brief discussion with the project manager, I was immediately asked to join my team. Now... how do you expect me to know even the basic details like whom to approach for administrative problems and whom to for Technical ones...!!...nobody had a clear idea...it took me six months to understand the work flow and structure of this organisation, due to this, my work suffered a lot...now this could have been avoided through proper communication...!!" (Participant No. 7)

Continuous sitting in the chair for hours together and working on the computer causes severe strain amongst the professionals. Further, if the software professional lacks adequate skills to perform the job given to him, it becomes a stressful situation for the professional to complete the work in time. These experiences are elaborated as under:

"Actually, I do not have much experience on the area in which I am presently working...I took up this area because, presently, its in demand. I very often need my colleagues' help to work on this area. Even, they are not able to do much. After office hours, I have to sit and learn this area at the earliest. I always have a kind of fear of failure in my mind. Due to this, I am not able to sleep at night." (Participant No. 21)

# **Coping Strategies**

Coping strategies vary from participant to participant, but they often involve some form of past-time that is personally enjoyable or rewarding to the individual. Participants described spending time socialising with others, engaging in physical activity, and spending quality time with family members in order to take their minds off work and its accompanying stressors. Furthermore, participants seem to select experiences that will provide them with an element of escape, both mentally and physically, from the demands of work. Iwasaki and Mannell (2000) refer to this type of escape-orientated strategy as leisure palliative coping, in which leisure provides a temporary escape from stressful events in people's lives. Some of the strategies adopted by the participants are reflected as under:

"I try do to things that make me feel good, just maybe going out to a bar, having a few drinks and freak out with friends. That's a good thing. Like just letting loose and doing things that are totally different from what I'm doing in my professional life." (Participant No. 6) "I go out with my friends and watch a movie with them. Sometimes, in the weekends, I go to the disc also. Dancing on the rhythm of music gives me immense pleasure. It helps me to forget all my tensions for that period of time. (Participant No. 5)

"Generally, I go to the Gym. I find it an easy way to release my tension. Sometimes, I go for a ride along with my friends. This helps me to forget my office pressures and brings back my smile." (Participant No. 10)

"I have got a three year old son. I love my child very much. Most of the time, I play with my child. I do not realise how time passes away when I am with my family". (Participant No. 4)

"I need to smoke after every hour. If I do not get a cigarette, I start feeling uneasy and am not able to concentrate in my work. There is tremendous pressure on me. Yesterday, I had an argument with my boss. I do not have time to take lunch. Most of the time, I skip it by having a mug of coffee." (Participant No. 19)

# **Intention To Leave**

While conducting the in-depth interviews, some of the participants revealed that there was a possibility that they would soon, leave the organisation. The intention behind leaving the organisation, though some had developed recently, others had it in their mind well before joining the present organisation they are working with. Their views are quoted as under:

"I have been working in the same domain since the last two years. It's not so interesting. It's very boring and now I need a change. My company is giving chance to the freshers in the challenging areas but not to me. This is very frustrating. I will wait for another two months, if they do not give me an opportunity, I will leave." (Participant No. 22)

"Look, basically, I belong to the Southern part of this nation. I had joined the present organisation because it has a big brand and my profile is good. My salary is also pretty high. Incase, I get a similar opportunity in the south with a decent hike in the salary, then why not....? I will be the first one to move out." (Participant No. 5)

"Before I joined this company, I was jobless for two months. I knew that the company is small and the package that I was offered is comparatively, lower than the industry standards. But as you know, beggars cannot be choosers, I took up this job. I am in search of a better opportunity since then." (Participant No. 2)

However, one of the participants had a different view regarding their intention to leave the organisation. She had received enormous support from the organisation which had positively influenced her personal as well as professional life. It should be noted that earlier research has already shown that workplace social support from the superiors or colleagues plays a major role in reducing stress amongst the software professionals. "Social support" could be explained as good relationships with others, availability of others when in need and understanding and attention provided when one faces difficulties (Le Blanc et al. 2000). According to House, (House, 1981) Work place social support, has been classified under four heads: emotional support (e.g. empathy, trust), instrumental support (e.g. direct help provided by others), informational support (e.g. advice, information, suggestions or directions) and appraisal support (e.g. feedback or social comparison relevant to a person's self-evaluation). Her views are quoted as under:

"Few months ago, I had met with an accident. I did not understand what to do. I was new to this city. Also I did not understand the local language. I was admitted in the hospital for two months. During this time, my colleagues proved to be of great help. Every day, some one from the office used to come

to meet me and asked about my well being. My entire medical expense was borne by the company. My seniors also came to meet me regularly. They made sure that I did not feel alone at any point of time. They never made me realise that I was alone in the city. It's really a great thing. I would never like to leave these people." (Participant No. 24)

# Limitations

While conducting this study, there were quiet a number of limitations that were noted in the design of the study. Recognising these limitations help us to give future direction for research. Since the nature of this research was interpretive, the findings may not be generalised to represent the larger section of the work force. Even amongst the twenty-six participants, some different meanings, experiences and views were found. Examples of these divergences were found while individually accessing and narrating their stress level and how it varied in accordance with job responsibilities. Another example how views and experiences differed amongst participants came into picture while discussing their coping strategies that they had individually adopted to deal with and the time that they required to cope up with the stressors.

The nature of this study was interpretive. While this approach allows us to illuminate and more clearly understand the concept and constructs of work stress, the nature of the design precludes causal claims. Although the researcher feels that the approach has generated deep, rich and interesting insights into these phenomena, it limits the extent to which researcher is able to comment on the full range of issues related to stress and related aspects amongst the software professionals. The limitations and contributions of the study lead to number of potentially fertile opportunities for further research.

# Discussion

Though quiet a number of researches have already been conducted on stress and its impact on individuals, this research has grown the evidence that sources of stress lie within the work role amongst the software professionals.

The findings of the present research show that a range of work features that are specific for software professionals, should be considered for a full comprehension of the relation between the work demand, nature of work and health and wellbeing.

It was found that almost all the employees interviewed, were experiencing very high amount of work stress, underlying the importance of work site health promotion interventions. Hence, investigating the most important job stressors can help in designing the organisational focused interventions. The importance of stress as a target of future interventions can also be highlighted by the correlations between stress and subjective health status.

The findings of this study support the work of Gredilla and Gonzalez (1991) detecting sleep disorders and poor mental health focus amongst software professionals. In the present study, behavioural changes identified amongst software professionals were sleep disorders and the difficulty of turning the mind off work problems; work was viewed to be affecting the personal life of individuals.

Leisure activities were found to be as being part of the professionals' individual strategies to facilitate "turning the mind off" work, to reduce mental strain and improve their personal life.

As we know that coping has a central role in understanding the relation between organisational stress and mental ill health or psychological well being, and it is impossible to present a model of occupational stress that doesn't include coping strategies (Burke, 1994), present findings show that most of the strategies adopted by the software professionals to cope with stress is not adequate. Another important aspect highlighted in this study was relating to coping with new skills that the software professionals need to develop in order to remain updated. Coping with the pace of change demands quick learning of new technologies. For those who do not have previous experience or training in the relevant area may put harder pressure on them to acquire the desired skills. The study further supports the work of Arnetz and Wiholm (1997), whose research in high technology industries suggest the psychosomatic symptoms are related in part to high perceived mental demands in combination with lack of sufficient skills.

The present findings suggest that enough time and training should always be provided by the organisation when hiring a new employee. Sufficient skills should be provided to all the employees in order them to be able to digest ever changing I.T skill demands.

Lastly, this study highlights the importance of work place social support provided by the superiors and colleagues in order to reduce stress and developing a healthy work environment. The concept of social support has referred as the existence of good, pleasant relationship with others, the availability of others, in case of problems and help, understanding and attention provided when one faces with difficulties. (Le Blanc, 2000). This study provides empirical evidence towards the same.

# Conclusion

In summary, this study examined the levels of Job Stress, their impact on the software professionals and the ways that they had found out to deal with it. This study also tried to throw some light on the intentions of the professionals regarding leaving their organisations. Through in-depth interviews and focused group discussions, the researcher found out that the software professionals are going through huge amount of occupational stress. Burnout amongst the professionals was noted to be the real issue and something that was common amongst all the professionals. This was the major cause that often gave the birth to the thought to change careers completely and get away from it all. More often than not, however, the intention to leave the organisation came into the mind in search of the "solution" to look elsewhere for a new job thinking the immortal words, "it can't possibly be this bad over there."

The job of the software professionals is a tedious business and a difficult task for all involved. As projects came nearer and nearer to completion, work life is full of meetings, dis-organisation, overtime, and stress. Even the standard day for a good professional is found to be full of heavy thinking, problem solving, frustrating compilation errors, and the like.

The commitment of the organisation itself and the involvement of both workers and management could to be crucial for the success of stress management activities, although other factors are also identified as important. Within the area of individual strategies for stress management, more scientific and better strategies could be adopted by the professionals like Yoga, Meditation, and spending time with family, going for short vacations, etc. From this study, it can be concluded that immediate attention of the organisation needs to be drawn so that they could take qualitative measures to reduce the stress level of their employees. Social support is one of the most important moderators of that are found to release stress.

Though the issue of work-related stress, its identification and management, has received increasing attention, efforts taken for implementation of these stress releasing initiatives, seem to be lacking. There seems to be a need for establishing a framework within which employers and employee representatives can work together to prevent, identify and combat stress at work.

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