

Work Stress Analysis among Workers in the Organization

MD Naveed¹ Dr H Ramakrishna²

¹M.Tech Student ²Vice principal

^{1,2}Department of Industrial Engineering and Management

^{1,2}Dayananda Sagar College of Engineering, Bangalore-560078

Abstract— Stress at work is common for many professions. While some stress is a normal part of work, excessive stress or high levels of stress over prolonged periods of time can interfere with employee’s productivity and have serious implications for the physical and emotional health of the person. As a worker, being aware of your own stress levels is already an important step towards the prevention of diseases and increase of the productivity. Work stress has become a subject of interest only recently. It can be justified by 2 reasons. Firstly, stress is an independent variable influencing employee satisfaction and performance. Secondly, it is incumbent on management to improve quality of life of organizational members. As stress is linked to coronary heart disease, a reduction in stress is expected to improve the longevity of workforce. Therefore, the problem of our study is to study the level of work stress among the various employees of the organization.

Key words: Work Stress, QWL

I. INTRODUCTION

There are many definitions of stress, and many theories about it. No definition or theory of ‘stress’ is perfect. Each theory and definition seems to answer one aspect of the problem well but other aspect less well. The definitions adopted by OSH are:

Stress – defined in terms of the interaction between a person and their (work) environment and is the awareness of not being able to cope with the demands of one’s environment, when this realization is of concern to the person, in that both are associated with a negative emotional response.

Stressors – events or circumstances which may lead to the perception that physical or psychological demands are about to be exceeded. They can be of several types and can arise in and out of work.

A. Work-Related Stressors May Be

- Inevitable: e.g. starting a new job, learning a new skill, the difficulty of dealing with adverse weather conditions such as drought or flood, unpredictable emergencies in the workplace, intrinsic difficulties in the work such as working in a competitive industry
- Avoidable: e.g. undertaking hazardous work for too many hours each week for long periods in a physically demanding environment; producing multiple reports which no-one reads; inhospitable or dangerous physical environments; no performance feedback or only negative feedback; no interest shown by the supervisor in helping solve problems.

B. Non Work-Related Stressors May Include

- Personal: e.g. relationship, child or other family problems, financial difficulties
- Intrinsic: feelings of not coping may just arise from within, with no apparent stressor(s) being discernible

C. Model of Stress Interactions

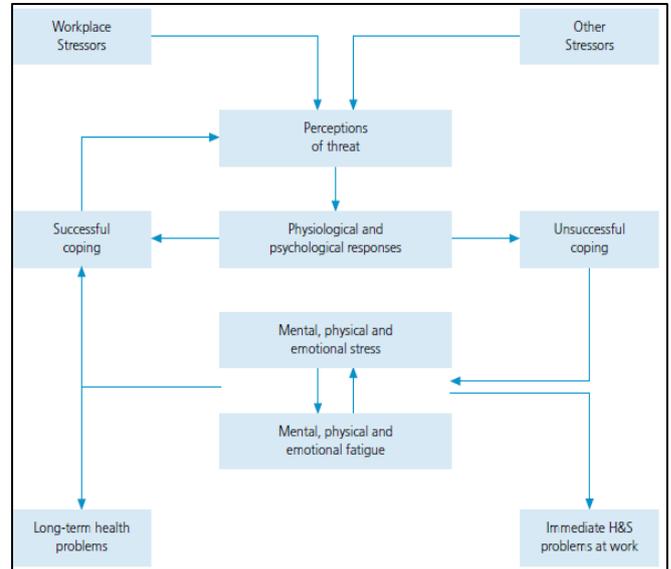


Fig. 1: Model of Stress Interaction

II. LITERATURE

A. Stress at Work

Stress and health risks at workplace can be categorized as content- and social or organizational context-related. Those that are intrinsic to the job include long work hours, work overload, time pressure, difficult, demanding or complex tasks, lack of breaks, lack of variety, and poor physical work conditions (limited space, inconvenient temperature, limited or inappropriate lighting conditions). Yet other causes of stress at work are conflicts, limitations, and high responsibility. Also under promotion, lack of training and job insecurity are considered stressful. Continuing, managers who are critical, demanding or unsupportive create stress as well. On the other hand, job development opportunities, positive social dimension of work and good team working are all important buffers against stress. From the organizational point of view, a culture of unpaid overtime causes stress. Organizational changes, especially when consultation has been inadequate, are a huge source of stress. Such changes include mergers, relocations, restructuring or “downsizing”, individual contracts, and redundancies within the organization.

The problem of job stress is generally recognized as one of the major factors leading to a spectrum of health problems. People with certain professions, like intensive care specialists or call-center operators, and people in certain phases of their lives, like working parents with young children, are at increased risk of getting overstressed.

The working environment in the service sector is filled with emotional exhaustion, stress, low levels of job satisfaction resulting in high attrition rate. Ill-treating the employees and abusing them further degrades their self-

esteem and self-efficacy. Inefficiency of organisation to provide high quality of work life eventually results in demotivation and low performance of the employees. The employees unable to cope up with the stress in workplace tend to opt for voluntary retirement. According to the researchers, the turnover intention of the employees is to a major extent is dependent on the stress in work life. The unfavourable conditions in the work leads to the decrease in the job satisfaction, affecting physical and mental health of the employees, thus, increasing their turnover intentions. Any institution or system to endure, maintain and draw its staff members is dependent on the quality of work life it provides. The important elements of a high quality work life are the adequate and fair compensation, safe and healthy working environment, opportunity for the constant growth and development, opportunity to use the human capacities, co-operation and social integration in the work organisation, constitutionalism in the work environment, space in work life, social relevance of work life.

Service industries play a crucial role in Indian economy wherein it creates employment and contributes towards national economy.

The relationship between job involvement, role stress and personality types were studied by Dhadda in aviation and railway officials. He found a negative correlation between role overload and stress among the railway officials. On the contrary, role ambiguity had negative correlation with stress. Job involvement was also shown to be positively related to role stress. Venkatachalam et al. studied the impact of job level and the organisations identity on job involvement and job satisfaction among the workers of banks, schools and government organisation. In all the three organisations, job level had a significant effect on job involvement and job satisfaction and organisation identity demonstrated an effect on job satisfaction.

B. Work-Related Driving Stress

Full-time drivers are exposed to a range of stressors such as the behaviour of other drivers, traffic congestion, ergonomic factors, noise, climate conditions, and work scheduling, resulting in poorer health and work performance (Evans, Johansson, & Rydstedt, 1999). Kloimuller, Karazman, Geissler, Karazman-Morawetz, and Haupt (2000) examined stress-inducing factors for bus drivers and found that irregular driving services, long periods of sitting, and thermal conditions were the main stressors. In turn, the main strains experienced were unusual tiredness, headaches, and sleep disorders, which significantly impacted on the drivers' ability to work. Carty, Stough, and Gillespie (1998) studied psychological predictors of work-related motor vehicle crashes in a sample of Australian transport industry workers and found a significant positive correlation between occupational strain and self-reported crash involvement. Similarly, Hartley and El Hassani (1994) found a significant relationship between self-reported stress and traffic violations for full-time truck drivers. Whilst the link between stress and driving is clearly evident from these studies, the source of stress may not always be directly driving related. That is, potential exists for the effects of stress (strains) to be carried over from other aspects of people's lives outside of the driving environment and affect individual functioning and their subsequent safety.

C. Life Events, Daily Hassles, and Driving

Life stress, viewed as an accumulation of strains resulting from specific major events and/or daily hassles, has been linked to detrimental road safety outcomes in several previous studies. McMurray (1970) examined the driving records over a seven year period for 410 drivers who had been involved in divorce proceedings (stressful life event measure). She found that crash involvement and traffic violations were significantly higher for this group than for the greater driving population. Furthermore, the percentage of participants involved in crashes and traffic violations steadily rose in the six months immediately prior to filing for divorce, reached a peak within three months after filing, then declined. It is suggested that this period is when the psychological strain would be particularly paramount.

Lagarde et al. (2004) used retrospective self-report data from a sample of French drivers to examine at-fault serious motor vehicle crash involvement over a seven year period and found a significant odds ratio (4.4) for participants who had been involved in marital separation or divorce within the year prior to the crash compared to those who had not. However, it must be mentioned that it is possible that there is some other underlying characteristic that renders individuals prone to both motor vehicle crashes and marital problems (e.g., aggressive personality).

Similarly, Legree et al. (2003) used retrospective self-report to examine antecedents to road crashes over the previous five years. They found that "heightened stress due to life events" was significantly positively correlated with at-fault status. Hennessy, Wiesenthal, and Kohn (2000) found that greater exposure to daily hassles over the previous month significantly predicted state driver stress when exposed to high traffic congestion. For drivers with high trait stress (ie. chronic) this effect was more pronounced. This suggests that daily events from outside the driving environment can interact with situational (on-road) and more enduring personal traits to elevate levels of subjective strain. Finally, financial difficulties have been found to be associated with higher crash risk (Norris et al., 2000). This further highlights the need to examine the impact of subjective stress that develops external to the driving environment.

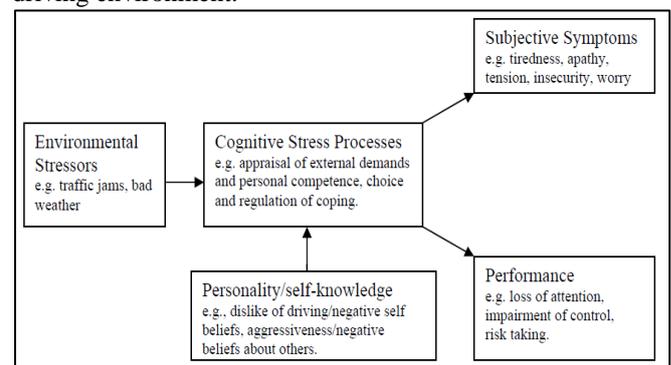


Fig. 2: Transactional model of driver stress (source Mathews, 2001)

Greene, et al. [18] have demonstrated in a study that when employees are treated as internal customers and are involved in contingent organisational practices then these internal marketing resourcefulness leads to outstanding service and successful external marketing. Consequently, satisfied employees naturally provide a

higher level of external service quality, furthering increased customer satisfaction [19], [20]. On the contrary, low QWL may affect the quality of services and commitment to the organisation [21]. In the service sector, the quality of work life depends on the satisfaction in a job, autonomy to prioritize the work, challenging task, motivation by the organisation and organisational commitment. Service industries are becoming increasingly important to the economies of developed nations [22]. Managers of service organisation know that their employees are the most valuable asset [23]. This is particularly relevant for those service sectors, which are largely dependent on the direct interaction of employees and customers [24]. Inducing quality into the work life of employees is an incredible task as well as inevitable for any organisation, which is especially true in the case of service sector employees. Hodson and Roscigno [25] describes that organisational success and employee well-being are complementary to each other. Any initiative taken towards improving the QWL of the employees will extend to their greater self-esteem and improved job satisfaction [26], as satisfied employees are motivated to work harder and offer better services [27]. Similarly, according to Gröpel and Kuhl [28], there is a direct relationship between satisfaction at work and social domains and work life balance and subjective well-being.

Edvardsson and Gustavsson [29] believe that despite understanding the relationship between well-being of the employees and success of the organisation, not much attention has been paid towards working conditions of the employees at the workplace, which is the foundation for service inclined employees. Earlier to that, Mowday et al. [30] stressed on commitment to the organisation where the employees demonstrate a strong desire to be part of the organisation, therefore, are willing to exert high level of efforts and believe and accept the goals and values of the organisation. Modern management of employees attempt to foster employee's commitment to the organisation by reinforcing employee loyalty as those committed are reported to perform better [31], [32]. In line with those thoughts, Mowday et al., [30] felt that committed employees are more aligned to the goals of the organisation and less likely to seek employment outside. Hossain and Islam [33] claim that QWL plays a greater role in job performance than the job satisfaction. Their studies among the nurses of the government hospital demonstrated revealed a significant positive correlation between QWL and job satisfaction, between QWL and performance, and job satisfaction and performance. QWL has the highest contribution to performance. Many of the call centres in order to compete with the service quality design tasks such that it involves the discretion of employees thereby facilitate individual autonomy [34], [35]. In contrast to this view, some companies, who aim to minimise costs and maximise volume, accentuate on service standardisation. These companies automate the tasks in such vigour that the tasks almost become "repetitive, routine and highly scripted" [35]. Acute automation of tasks strips of creative involvement of the employees' effort and offers limited job diversity and little decision-making prudence [36], [37].

Hannif [38] demonstrated that call centre employees, who were given work that had job variety and

had some autonomy that helped them to control their work functions as well as working hours, were found to be a satisfied with their work, which in turn produced low turnover. The advancing technology and easily accessible information, the study of organisations with respect to productivity, efficiency and quality of services are very crucial in order to improve the performance of work in India[39]. Four dimensions have been identified as the construct of quality of nursing work life by Brook and Anderson [40] realizing the need to improve organisational productivity in the health care industry.

III. METHODOLOGY

A. Unstructured Discussion

Under this method of data collection the researcher personally interviews the respondents to gather the information. The respondents are asked to present their views and opinions about the topic under discussion. The opinions of the respondents are used as the primary source of information for preparing the study report.

B. Structured Questionnaire

It is usually associated with the self-administered tools with items of the closed or fixed alternative type. The respondents feel greater confidence in the anonymity of questionnaire than in that of any interview. It places less pressure on the subject of immediate response. These were the reasons for choosing questionnaire as one of the tools for data collection.

The questionnaire consists of two types of questions:

- Close-ended questions: The close-ended questions consist of multiple choices, which offer the respondents with a choice of specific answers.
- Open-ended questions: An open-ended question is a question where no choices of answer are given the respondent and the respondent is given freedom to respond according to his wish.

Cronbach's is a coefficient of reliability. It is commonly used as a measure of the internal consistency or reliability of a psychometric test score for a sample of examinees

In the context of statistical analysis, we often talk about alternative hypothesis and null hypothesis. If we are to compare method A and with method B about superiority and if we proceed on the assumption that both method are equally good, and then this assumption is termed as the null hypothesis

Hypothesis tests may be performed on contingency tables in order to decide whether or not effects are present Hypothesis test on contingency table are based on a statistic called Chi square. A Chi Square test evaluates if two variables are independent of each other. A Chi Square test of a contingency table helps identify if there are difference between two or more demographic

IV. WORKING PROCEDURE

A structured questionnaire with both quantitative and qualitative items was prepared and 100 copies are made and then it is given to employee's individually. Data collected from the employees is entered in to the excel sheet systematically for finding cronbach alpha by reliability test.

Hypothesis testing is done for age, salary, prolong experience, marital status. Coefficient of Reliability test administered to 100 employees in a organization the responses were tabulated. reliability of questionnaire was established by determining chronbach alpha co efficient as 0.713. Item wise data analysis was conducted and hypothesis testing with respect to the quality of work life(QWL) was tested it was found that the gender, salary, prolong experience and age does not influence QWL . Question considered in questionnaire include on stress such as on daily basis output, work output, family related stress, interpersonal and personality trait.

V. CONCLUSION

Study conducted in organisation shows that considered demographic factor and parameters does not have influence on the quality of work life(QWL)

REFERENCES

- [1] W. E. Greene, G.D. Walls, and L. J. Schrest, Internal marketing: The key to external marketing success. *Journal of Services Marketing*, 8(4), 1994-13
- [2] B.Edvardsson, and B. Gustavsson, Quality in the work environment: a prerequisite for success in new service development. *Managing Service Quality*, 13(2), 2003, 148-163.
- [3] M. M.Hossain, and M. T. Islam, QWL and job satisfaction of Nurses in Government Hospitals in Bangaladesh. *Indian Journal of Industrial Relations*, 34(3), 1999, 33-34.
- [4] Hannif, Zeenobiyah, (2008), " Call Centers and the Quality of Work Life: Towards a Research Agenda", *Journal of Industrial Relations*, 50(2) 271–284.
- [5] P.Gropel, and J. Kuhl, Work-Life Balance and Subjective Well-Being: The Mediating Role of Need Fulfilment. *British Journal of Psychology*, 100(2), 2009, 365-375.
- [6] McLean AA: *Work Stress*. Don Mills: Addison-Wesley, 1979.
- [7] Matthews, G. (2001). A transactional model of driver stress. In P. A. Hancock & P. A. Desmond's (Eds.), *Stress, workload and fatigue* (pp. 133-163). New Jersey, USA: Lawrence Erlbaum.
- [8] Kloimuller, I., Karazman, R., Geissler, H., Karazman-Morawetz, I, & Haupt, H. (2000). The relation of age, work ability index and stress-inducing factors among bus drivers. *International Journal of Industrial Ergonomics*, 25, 497-502.
- [9] Lagarde, E., Chastang, J, Gueguen, A., Coeuret-Pellicer, M., Chiron, M., & Sylviane, L. (2004). Emotional stress and traffic accidents: The impact of separation and divorce. *Epidemiology*, 15(6), 762-766.