## **ABSTRACT**

Work has always been a significant part of life for most adult people. Working people spend a large amount of their life at the workplace. Employee well-being has become important for organisations/employees to have a highly productive workforce. Well-being in terms of occupational stress and Work-related Musculoskeletal Disorders (WMSDs) are among the most discussed health-related issues in the workplace. Numerous factors affect occupational stress and WMSDs. The association between organisational factors and 1)psychological well-being and 2) WMSDs has been studied in the past. A literature survey revealed that Job Demand Control (JDC) model and its extended version Job Demand Control Support (JDCS)model are the most cited and used models to explain such associations. These models have been used in studies to predict various dimensions of stress, psychological well-being, WMSDs and other outcomes related to employee health, job satisfaction and work performance. In the present work also, JDC and JDCS models have been used. Various studies related to JDC and JDCS models predicted different effects of demand, control and support on outcomes in different occupations, so a general overview can not be derived. Also, such research studies had focused mainly on the western and European working populations. There are very few studies that were based on the Indian working population. Also, this gap widens more in the case of Indian Middle-Level Managers (MLMs) working primarily in telecommunication organisations. This research is an effort to bridge this research gap in the present work focusing on analysing the effect of organisational, social and personal factors on psychological stress, WMSDs, and the work performance of the MLMs of an Indian telecommunication organisation. For this purpose, the following objectives were identified:

- To check the validity of the job demand-control (support) model and analyse the direct and indirect effect of job demand, job control and "support at work" on psychological stress and job satisfaction.
- 2. To analyse the effect of job control dimensions on psychological stress.
- To analyse the effect of organisational factors on psychological stress and WMSDs.
- 4. To analyse the direct and indirect effects of organisational, social, and personal factors and physical and psychological stress on work performance.

Based on the study's objectives, a questionnaire was designed to collect the data on various variables used in the study. 250 MLMs of a case organisation, i.e., a public telecommunication organisation in India, were contacted for data collection. Out of 250, 210 MLMs responded. The response rate of the questionnaire was 84%. For the data collection, the validity and reliability of the questionnaire were checked using Exploratory Factor Analysis (EFA) and Cronbach's  $\alpha$ , respectively. The results of EFA confirmed the validity of the questionnaire using factor loadings. However, It was found that two observed job control variables did not load significantly and were considered separate dimensions of job control. Reliability analysis of the questionnaire determined the value of Cronbach's  $\alpha$ , which was greater than 0.7. So, the questionnaire was found to be reliable.

First, the validity of the JDC and JDCS models was checked. Three dimensions of psychological stress visualised as 1) behavioural stress, 2) somatic stress and 3) cognitive stress and job satisfaction were considered as outcome variables. For this purpose, the job categories defined by Karasek (1979) were created using six different cut-off approaches. One-way ANOVA and Three-way ANOVA using six different cut-offs were used for the analysis. However, the results of ANOVA could not provide a concrete conclusion. So,

Structural Equation Modelling (SEM) was used to analyse the direct and indirect effect of workload, control and "support at work" on psychological stress and job satisfaction. The results showed no association of workload with psychological stress and job satisfaction. These results suggest that the MLMs of the case organisation can take additional responsibilities at the workplace. However, there is a need to confirm that the additional responsibilities are not overwhelming or create an unnecessary burden that would result in a situation of psychological stress and job dissatisfaction. The results showed partial support for the direct hypothesis of the JDCS model. Job control and "support at work" significantly affected psychological stress and job satisfaction, suggesting that increasing job control and "support at work" can reduce psychological stress and increase job satisfaction of the MLMs. The buffer hypothesis of the JDC model was supported for the MLMs of the case organisation. JDC and JDCS models only consider the "control over work" dimension of the job control. However, two separate dimensions of job control visualised as 1) "control over working hours" and 2) "control over working days" were identified during the EFA.

An effort was made to see the effect of all three dimensions of job control on psychological stress. For this purpose, Binary Logistics Regression (BLR) was used. Age, gender, experience in the organisation and experience in the current position were considered as control variables. The analysis showed that MLMs with low "control over work" and "control over working days" were at more risk of having psychological stress. However, for "control over working hours", MLMs in the high control group had more chances of psychological stress. The results suggest that providing more "control over work" and "control over working days" can reduce psychological stress. However, caution should be made before deciding on "control over working hours" as it negatively affects psychological well-being. It can be provided to employees with some conditions, such as

setting deadlines for work and timely reporting of a project/task progress or continuous "work progress" auditing.

The effect of workload, control, and age on the WMSDs was also analysed using SEM. The results suggested that workload did not affect WMSDs and psychological stress. As the job responsibilities of the MLMs of the present case organisation require low physical activity, a non-significant association of WMSDs with workload can be possible. The results of this SEM model also showed that "control over work" was the most critical factor affecting WMSDs and psychological stress. Age had a significant effect on the pain in the knee and upper back, but other WMSDs or psychological stress. This suggests that MLMs suffering from pain in the knees and back due to age may have good physical well-being by providing more control. This would help the organisation as these experienced MLMs can contribute much towards the growth and development of the organisation and can also mentor the younger generation of MLMs.

A comprehensive SEM model was developed to determine the effect of organisational factors, social factors, personal factors, WMSDs and psychological stress on work performance. The analysis showed that alcohol consumption and tobacco usage were positively associated with behavioural stress. Tobacco consumption was also significantly related to job satisfaction. Tobacco use reduces job satisfaction and increases behavioural stress, and vice-versa. The results showed that organisational factors were more significantly associated with work performance than social and personal factors. Work performance was significantly associated with job control but workload. Results suggested that increased "control over work" would improve work performance, increase job satisfaction, and decrease psychological stress and WMSDs. Similarly, more "control over working days" would increase work performance and decrease cognitive stress. However, "control over working hours" was negatively

associated with work performance suggesting a decrease in work performance with an increase in "control over working hours". These results of the SEM model were very similar to the results of the BLR model and verified the results of BLR. The negative effect of "control over working hours" can be reduced if it is provided with a possible restriction. For example, providing the option to choose between various reporting times of the day with fixed working hours. This will make employees feel of having control without overburdening, thus, resulting in better work performance and increased psychological well-being and job satisfaction.

The findings of the present work determine that job control is the most significant factor that is associated with psychological stress, WMSDs, job satisfaction and as well as with work performance for the case organisation. This suggests that workplace flexibility is the crucial factor that influences employees' well-being and job satisfaction and improves their work performance. However, increasing job control without analysing its dimensions can have a negative effect on well-being and work performance. So, job control should be provided with caution so that it will improve the psychological and physical health and work performance of employees and the organisation. The findings of this work are more suitable for male employees as 91% of respondents were male. Also, the finding of this research is more suitable for telecom organisations. The organisational structure of public and private organisations differ, so proper caution must be taken in implementing such findings.