

Factors affecting occupational stress of machine operators with special reference to XYZ garment factory in Balangoda

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Introduction

The human resources are the most imperative component that affects the productivity in an organization. In this modern era of rapid changes and complexities, employees are the competitive edge of any organization. But employees face various problems in their work environment due to those changes. That is, from stressful, depressed and dissatisfied employees, it would not be able to obtain the same quality level of work and productivity as those with low stress and high satisfaction (Elizabeth and Zakkariya, 2015). The experience of work related stress always produces some effects, or consequences (Ivancevich and Matteson, 1999). Many workers experience tension, anxiety and stress arising from the possible negative health consequences of working in their present job (Ivancevich and Matteson, 1993). Industrial enterprises in manufacturing garments, leather products, shoes, etc. employ large number of men and women sewing machine operators. The garment industry occupies the key position among them. The existing work practices, conditions of work and incompatible man-machine design exert varying amount of work stresses on the operators (Singleton, 1959, 1960).

The primary purpose of the present research was identifying the relationship between Organizational Factors (OFs) and occupational stress (OCS) with special reference to the machine operators in XYZ Garment Factory in Balangoda. XYZ Group was established in 1974 and is now recognized as a top manufacturing giant for garment manufacturing and wet processing in Sri Lanka. Recently they have identified a drop of total output of machine operators and a significant increment of quality defects. They have failed to made shipments on time resulting loss of major foreign buyers. The absenteeism and turnover ratio have rapidly increased disturbing to continue productions in the factory. There were symptoms in performance declined, turnover increased, health related absenteeism increased, engagement declined and late shipments. The problem identified in the organization is high occupational stress of machine operators. Though they are at the grass root level, they actually contribute lot to the organization in achieving its goals and objectives. So it is becoming vital to identify organizational stressors to maintain productive workforce both physically and mentally. Still sufficient attention is not made on that and if an association between OFs and OCS is identified, it will aid to address negative effects of OCS. Present study has taken into account Structure (STR), Management Style (MGT), Work Conditions (WC) as OFs in line with the literature (Luthans, 2008). Dependent variable of OCS refers to the condition or feeling experienced when a person perceives that demands exceed the personal and social resources the individual is able to mobilize (Lazarus, 2008). ST Refers how job tasks formally divided, grouped and coordinated (Robbins and Judge, 2007). MGT refers characteristic ways of making decisions and relating to subordinates (Robbins, 2003). Work environment stressors are often termed as blue-collar stressors (Ivancevich and Matteson, 1999). There are different sources of occupational stress. Cooper (1986) has identified six groups of primary work-related stressors. They include intrinsic factors, organizational roles, work relationships, career development, organizational factors and the home work interface. Stress can be caused by environmental, organizational and individual variables as well (Ivancevich and Matteson, 1999). Having to work under severe time to fulfill deadlines is an obvious stressor (Fincham and Rhodes, 2005). Management establish unrealistic pressure to perform in the short run, impose excessively tight controls and routinely fire employees who don't measure up (Robbins, 2003). Uncomfortable working conditions are another source of stress for groups and entire organizations (George and Jobes, 2002).

Methodology

Ninety of machine operators were selected as the sample of present study through simple random sampling method. The responses rate was 100%. The demographic profile of respondents is given in the Table 01.

Table 1: Demographic profile of the respondents

Features	Frequency	Percentage
Age (in years)15-20	12	13
21-30	48	53
31-40	28	31
above 40	2	2
Total	90	100
Marital status-Female	78	87
Male	12	13
Total	90	100
Experience (in years) less than 01	26	29
01-03	12	13
03-05	31	35
More than 05	21	23
Total	90	100

A standardized questionnaire was distributed to collect data. Job Control Questionnaire (Karasek & Theorell, 1990) was used to measure OFs and OCS. It consisted with 20 items to be measured on a five point likert scale from 1 to 5. The Cronbach's alpha value was between 0.72 and 0.79 for all variables in the present study.

Research data were analyzed through descriptive statistics(mean ,standard deviation) and Pearson's correlation analysis in order to estimate the relationship between OFs and OCS using SPSS version 21. Correlation coefficient in the present study has been interpreted based on the interpretation of correlation coefficient made by Vaus (2002) as, if correlation coefficient from 0.01 to 0.09 relationship is trivial, from 0.10 to 0.29 low to moderate, from 0.30 to 0.49 moderate to substantial, from 0.50 to 0.69 substantial to strong, from 0.70 to 0.90 very strong and from 0.90 to 0.99 there is a near perfect relationship.

Development of Hypothesis

Following hypotheses were developed in line with available literature.

Hypothesis 01: There is an association between STR and OCS

Hypothesis 02: There is an association between MGT and OCS

Hypothesis 03: There is an association between WC and OCS

Findings

The proposed associations in the research model were tested by using correlation analysis. The Table 02 shows the results.

Table 2: Correlation coefficients

		OCS	STR	MGT	WC
OCS	Pearson Correlation	1	.319**	.553**	.491**
	Sig. (2-tailed)		.002	.000	.000
	N	90	90	90	90

*. Correlation is significant at the 0.01 level (2-tailed).

Hypothesis 01: There is an association between ST and OCS

Dependent variable of OCS and STR were found moderately positively correlated to each other as the correlation coefficient is 0.319 at 0.01 level of significance. Accordingly, the structure of the organization slightly affects occupational stress of machine operators.

Hypothesis 02: There is an association between MGT and OCS

Dependent variable of OCS and MGT were found substantially positively correlated to each other as the correlation coefficient is 0.553 at 0.01 level of significance. Accordingly, it indicates that management style of the organization substantially affects occupational stress of machine operators.

Hypothesis 03: There is an association between WC and OCS

Dependent variable of OCS and WC were found moderately positively correlated to each other as the correlation coefficient is 0.319 at 0.01 level of significance. Accordingly, it indicates that work conditions of the organization slightly affects occupational stress of machine operators.

Conclusion

The Structure, Management style and Work Conditions recorded positive correlation with Occupational Stress. Accordingly some organizational arrangements are more likely to be experienced as stressful. Existence of job stress in organizations can result in negative effects like reduced efficiency, decreased capacity to perform, a lowered sense of self-esteem, depression, low motivation to work, dampened initiative and reduced interest in working, increased rigidity of thought, a lack of concern for the organization and colleagues and a loss of responsibility (Greenberg and Baron, 1995; Matteson and Ivancevich, 1982). Luthans (2008) in his model of macro level organizational stressors explained the relationship of STR and Work Conditions with Occupational Stress. The Basic OB Model by Robbins (2003) has stated the association of Management Style with Occupational Stress. The present study's evidences suggested the positive correlation between Organizational Factors and Occupational Stress. Therefore the present study supports the stress models developed by Luthans (2008) and Robbins (2003). Organizations can buffer the ill effects of stress by enhancing coping strategies. Such as increase employee involvement in decision making, enable formal communication, job restructuring, training sessions and likewise.

Findings of the present research might contribute to overcome negative effects of Occupational Stress because a workforce with strong mental and physical wellbeing will determine the organization's performance. It can be suggested for further researchers to investigate the association between social factors and occupational stress to further enhance the understanding of factors affecting occupational stress of employees.

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