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Impact of Occupational Stress on Turnover Intention of Machine Operators in Selected Apparel Manufacturing Companies in Sri Lanka

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Abstract

Area of the Study

This study has been conducted to identify the impact of occupational stress on turnover intention of machine operators in selected apparel manufacturing companies in Sri Lanka.

Problem of the Study

Due to the lack of empirical findings on the relationship between occupational stress on employee turnover intention, this study is aimed to investigate the relationship between occupational stress and turnover intention of machine operators.

Method of the study

The data were collected from machine operators in selected apparel manufacturing firms and the questionnaire which consisted of included 23 questions were used to gather primary data from 178 machine operators. Data were analyzed through SPSS package and it included univariate and bivariate analyses.

Findings of the Study

The finding of the study shows that there is a significant positive relationship between occupational stress and turnover intention among the sample. Furthermore results indicate that supervisory support, work overload, job autonomy, role conflict, role ambiguity and unfairness of reward have significant impact on turnover intention.

Conclusion of the Study

It is concluded that occupational stress is one of the significant factors that determine turnover intention of machine operators in the apparel sector organizations. Thus for the future success of the organization, it is advisable for apparel manufacturing firms to formulate strategies to manage the stress of machine operators in order to enhance employee retention.

Keywords: Occupational Stress, Turnover Intention, Supervisory Support, Work Overload, Job Autonomy, Role Conflict, Role Ambiguity, Unfairness of Reward

Introduction

Stress at work is considered as a new phenomenon of modern life styles (Anbazhagan, Rajan & Ravichandan 2013). Due to globalization organizational complexity increases and as a result of that majority of the employees have to cope with the stress. Occupational stress is now turn out to be a universal element and every persons have to face stress at least once in their work life (Qureshi et al., 2013). Either big or small the work place, stress exists in every firm (Ahmed & Ramzan 2013). Work place stress has considerable impact over job performance of employees and organizations are trying to cope with this scenario (Anderson

2003). Study of stress within organizational context will give an opportunity to identify various factors that affect to stress and thereby can take necessary actions to reduce those stressors.

Scholars defined the occupational stress as a feeling or a condition a someone experienced when that person perceives that job demands exceed the personal and social resources the individual is able to mobilize (Whitt & Wilson 2007). There are two main forms of stress. They are eustress and distress (Sheraz et al. 2014). Workers who feel eustress will be capable to fulfill job demands and it may support them to enhance the quality of their work life. Workers who feel distress will not capable to fulfill job demands and it may stimulate them to reduce the quality of the work life (Sheraz et al. 2014).

Turnover has been asignificant area of research in several disciplines such as psychology and organizational behavior (Ivanka 2013). It is an inevitable phenomenon in an organization's life cycle (Levin & Decker 2009), it involves redundant of monetary and non-monetary costs, particularly when efficient and experienced workers with considerable amounts of investments in their human capital (schooling, experience, skills, etc.), leave willingly (Weisberg 1994). Because of this voluntary turnover, managements are preoccupied with a continuous search to identify signals of potential labour turnover.

There are many negative consequences of stress (Nolen 2015) such as increased absenteeism, increased frequency of drinking and smoking, job dissatisfaction, reduce aspirations and self-esteem, lower productivity, reduce motivation, turnover, increased accidents and economic loss for both individual and the organization (Applebaum et al. 2010; Kaur et al. 2013). Hence it is very much essential to pay attention to reduce job related distress. Accordingly this study investigates the impact of occupational stress on turnover intention of machine operators in selected apparel manufacturing companies in Sri Lanka.

Problem Background and Problem of the Study

Apparel industry is considered as the largest foreign exchange earner and a key generator of employment opportunities in the Sri Lankan Economy. But the turnover among employees of apparel industry is high compared to other industries in Sri Lanka. It becomes a major challenge for organizations to retain employees within the organizations. There are many factors that caused to high turnover including job dissatisfaction, performance related problems, unmet job expectations, high degree of occupational stress and a lack of career progression opportunities. Among them, occupational stress considered as the major cause for high turnover among machine operators.

Prevalent literature emphasized a positive relationship between occupational stress and turnover intention where as high degree of occupational stress leads to greater turnover intention. Sheraz et al. (2014) proposed that when distress reaches to the level where someone cannot cope, then distress positively influence on turnover intention. Arshadi and Damri (2013) also found job stress relates positively to turnover intention.

Although considerable number of researches has been done in other countries it seems that there are quite less research on occupational stress in Sri Lankan context. This study is attempted to identify the impact of occupational stress on turnover intention of machine operators of Sri Lankan apparel industry.

Research Framework

The core purpose of the study is to identify the relationship among occupational stress and turnover intention. Independent variable of the study is occupational stress and dependent variable of the study is turnover intention. Independent variable has six dimensions, which are supervisory support, work overload, autonomy, role conflicts, role ambiguity and fairness of reward.

Considering the research framework in Figure 01 and reviewing the existing literature hypotheses of the study was developed as follows.

Occupational Stress and Turnover Intention

Generally stress is a condition of physiological and psychological unbalances which arises from the discrepancy between situational demand and capability or enthusiasm that the individuals have to cope with those demands (Sheraz et al. 2014). According to Bothma and Roodt cited in Mxenge et al. 2014) turnover intention is the employee's conscious and thoughtful willingness to leave the organization and it is considered as the last in a sequence of withdrawal cognitions. Previous researchers identify positive relationship between occupational stress and turnover intention (e.g. Sheraz et al. 2014; Arshadi and Damri, 2013; Liyanage et al. 2014; Qureshi et al. 2013; Chen et al. 2011). The first hypothesis of the study is developed as:

H1: Occupational stress is positively related to turnover intention.

Supervisory Support

Supervisor support describes the degree to which an employee's supervisor is sensitive to the worker's non-work responsibilities and willingness to support them when conflicting work and non-work demands arise (Carlson & Perrewe 1999). According to the study of Liyanage et al. (2014) supervisory support is a significant predictor of turnover intention. The second hypothesis of the study is developed as:

H2: Supervisory support impacts on turnover intention.

Work Overload

Work overload occurs when individual perceive that the cumulative demands have an inappropriate tedious magnitude and exceed their abilities and motivation to perform successfully the tasks related to their job (Singh 1998). According to the studies of Chen et al. (2011), Glaser, et al. (1999) and Qureshi et al. (2013) there is a positive relationship between work overload and turnover intention. Following is the third hypothesis of the study.

H3: Work overloads impacts on turnover intention.

Autonomy

Job autonomy or control over one's work refers to task authority, which involves an employee's independence to determine which techniques to use when performing that work and making a participation to decision making (Teas 1981[24]; Guterman & Jayarathne in 1994 cited in Chen et al. 2011) identified low job autonomy associated with high level of stress but Chen et al. (2011) identified that autonomy has no influence on job stress. The fourth hypothesis of the study is developed as:

H4: Job autonomy impacts on turnover intention.

Role Conflicts

Sheraz et al. (2014) defined role conflicts as occurrence of two or more sets of pressures at the same time such that compliance with one would make compliance with the other more difficult. According to the study of Chen et al. (2011) role conflict has a positive relationship with turnover intention and Sheraz et al. (2014) identified role conflict has a significant positive impact on occupational stress. The fifth hypothesis of the study developed is given below.

H5: Role conflict impacts on turnover intention.

Role Ambiguity

Sheraz et al. (2014) defined role ambiguity as the extent to which an individual is uncertain about the expectations of others as well as the degree of uncertainty linked with one's performance. According to the study of Chen et al. (2011) role ambiguity has a positive relationship with turnover intention and Sheraz et al. (2014) identified role ambiguity has a significant positive impact on occupational stress. But according to the study of Liyanage et al. (2014) role ambiguity did not significantly influenced on occupational stress. Following is the sixth hypothesis developed in this study.

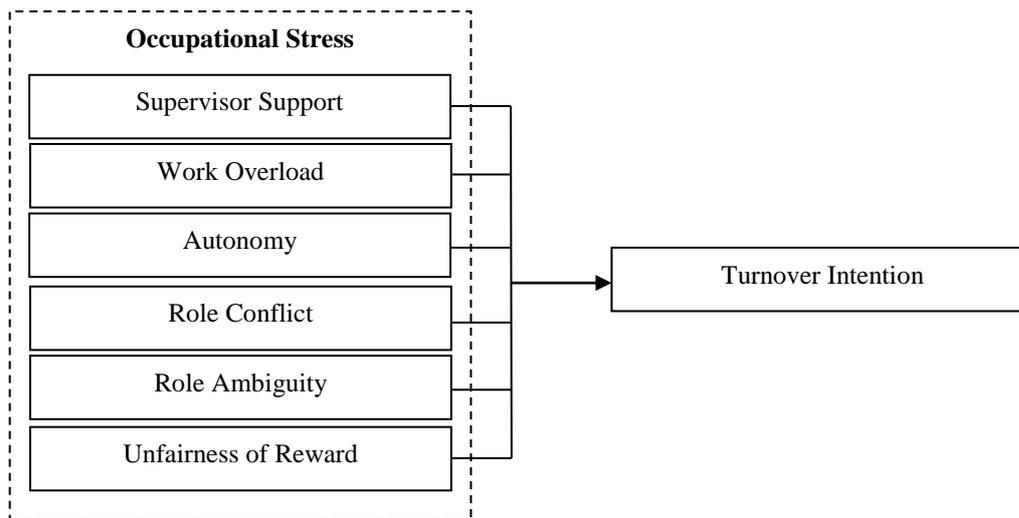
H6: Role ambiguity impacts on turnover intention.

Unfairness of Reward

According to Oxford Dictionary fairness of reward means the quality of treating people equally or in a way that is right or reasonable when giving rewards. According to Chen et al. (2011) fairness of reward is not an important determinant factor to turnover intention. According to Liyanage et al. (2014) salary did not significantly influence on occupational stress. The last hypothesis of the study is developed as:

H7: Fairness of reward impact on turnover intention

Figure 01: Conceptual Framework



Method

Study Design

The main objective of the study was to identify the impact of occupational stress on turnover intention of machine operators in apparel manufacturing companies in Sri Lanka. This study was conducted in natural environment where events normally occur, that is non – contrived setting. This study took over one month for the collection of data. The data for this study was collected within a particular period of time and there was no subsequent extension of the research contemplated. Hence this study was cross- sectional in nature. In this study data were gathered from machine operators in selected apparel manufacturing companies and treated each employee's response as an individual data source. Therefore this study, the unity of the analysis was individual. Data was gathered from machine operators of selected apparel manufacturing companies in Sri Lanka.

Randomly selected 178 machine operators of the selected apparel manufacturing companies in Sri Lanka were the sample of the study.

Measure

The independent variable of the study is the occupational stress of machine operators in selected apparel firm in Sri Lanka, which is measured by an instrument consisting of 14 statements developed by Caplan et al. (1975), Beehr et al. (1976), Mohr (1971), Hrebiniak (1974)[39], Rizzo et al. (1970) and Niehoff & Moorman (1993). The job stress of machine operators are measured in terms of six dimensions – Supervisory Support, Work Overload, Autonomy, Role Conflicts, Role Ambiguity and Fairness of Reward.

The dependent variable of the study is turnover intention of machine operators in selected apparel manufacturing companies in Sri Lanka, which is measured by an instrument consisting of 4 statements developed by Bluedorn (1982). The turnover intention of machine operators is measured in terms of two dimensions – Psychological Intention and Behavioral

Intention. The main variables in the research model were measured by the response to the questionnaire with five point Likert scales. Original questionnaire were adapted accordingly and translated to Sinhala language to suit to the local context since questionnaire is to be distributed among lower level employees.

Reliability and Validity of the Instruments

Cronbach's Alpha test is used as a measure of internal reliability, it measures how closely related set of items as a group. Table 01, shows the results of Cronbach's Alpha Test, it indicate that instruments used to measure Occupational Stress and Turnover intention are in a satisfactory level.

Table 01: Cronbach's Alpha Coefficients

	Instrument	Cronbach's Alpha
1	Occupational Stress	0.703
2	Turnover Intention	0.897

Techniques of Data Analysis

The data were collected from machine operators in two apparel manufacturing firms. The questionnaire which is included 23 questions were used to gather information from 200 machine operators and 178 of them have responded. Data were analyzed through SPSS package and it included univariate and bivariate analysis.

Results

Person correlation coefficient between occupational stress and turnover intention of the machine operators in selected apparel companies are given in Table 02.

Table 02: Correlation between Occupational Stress and Turnover Intention

Pearson Correlation	0.558**
Sig (2 Tailed)	0.000

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

According to Pearson's correlation shown in Table 02, correlation between independent variable and dependent variable is 0.558, which is positive. It implies that there is a positive relationship between occupational stress and turnover intention. The found relationship is statistically significant as correlation is significant at 0.01 levels (2- tailed). Thus, there is statistical evidence to claim that occupational stress and turnover intention of machine operators are positively related.

Table 3: Correlation between Dimensions of Occupational Stress and Turnover Intention

	Supervisory Support	Work Overload	Job Autonomy	Role Conflicts	Role Ambiguity	Unfairness of reward
Pearson Correlation	-0.274**	0.462**	0.164*	0.609**	0.329**	0.583**
Sig. (2-tailed)	0.000	0.000	0.029	0.000	0.000	0.000

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

* Correlation is significant at the 0.05 level (2-tailed)

According to Table 03, supervisory support is negatively related to turnover intention of machine operators. Correlation coefficient (-0.274) indicate that there is a weak negative relationship between supervisory support and turnover intention that is statistically significant at 99% confidence level ($p < 0.01$).

Pearson correlation between work overload and turnover intention is 0.462, which is positive. The found correlation is statistically significant as correlation is significant at 0.01 level (2-tailed). Job autonomy is positively related to turnover intention of machine operators. Correlation coefficient (0.164) reveals that there is a weak positive relationship that is statistically significant at 0.05 level (2-tailed).

Further, role conflict is positively related to turnover intention of machine operators. Correlation coefficient is 0.609, it indicates that there is approximately strong positive relationship between role conflict and turnover intention that is statistically significant at 99% confidence level. Pearson correlation between role ambiguity and turnover intention is 0.329, which is positive. And the correlation between role ambiguity and turnover intention of machine operators is statistically significant at 0.01 level (2-tailed).

Furthermore, unfairness of reward is positively related to turnover intention as correlation coefficient is 0.583 and there was approximately strong positive correlation between unfairness of reward and turnover intention which is statistically significant at 99% confidence level.

Table 04: Results of Regression Analysis

Variable	Occupational Stress
Method	Linear
R Square	.312
Adjusted R Square	.308
F	79.646
Significance	.000
B-Constant	-.316
b-Value	.558

As shown in Table 04, the b value, the gradient of the regression, is 0.558, which is significant at 1% (significant = 0.000). As indicated by R squared, 31.2% of the variance of the turnover intention is explained by occupational stress with the standardized beta of 0.558.

The F value is 79.646, which is significant at 1% ($p = 0.000$), which suggests that occupational stress have significantly explained 30.8% of the variance of the turnover intention.

Table 05: Results of Regression Analysis of each Dimensions of Occupational Stress

Dimension	Supervisory Support	Work Overload	Job Autonomy	Role Conflicts	Role Ambiguity	Unfairness of reward
Method	Linear	Linear	Linear	Linear	Linear	Linear
R Square	0.075	0.213	0.027	0.371	0.108	0.339
Adjusted R Square	0.070	0.209	0.021	0.367	0.103	0.336
F	14.299	47.653	4.836	103.741	21.330	90.413
Significance	0.000	0.000	0.029	0.000	0.000	0.000
B-Constant	4.287	1.031	2.752	1.502	2.195	1.293
b-Value	-0.274	0.462	0.164	0.609	0.329	0.583

As shown in Table 05, 7.5% of total variance in turnover intention is explained by supervisory support, 21.3% of total variance in turnover intention is explain by work overload, 2.7% total variance is explained by job autonomy, 37.5% of total variance of turnover intention is explained by role conflicts, 10.8% variance in turnover intention is explained by role ambiguity and 33.9% of total variance is explain by unfairness of reward.

Table 06: Results for Hypotheses

Hypotheses	Value	Results
H1: Supervisory Support → Turnover Intention	-0.274**	Supported
H1: Work Overload → Turnover Intention	0.462**	Supported
H1: Job Autonomy → Turnover Intention	0.164*	Supported
H1: Role Conflict → Turnover Intention	0.609**	Supported
H1: Role Ambiguity → Turnover Intention	0.329**	Supported
H1: Unfairness of Reward → Turnover Intention	0.583**	Supported
H1: Occupational Stress → Turnover Intention	0.558**	Supported

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

* . Correlation is significant at the 0.05 level (2-tailed).

Discussion and Conclusion

The main purpose of this study is to identify the degree of occupational stress of machine operators and to identify is there any impact of occupational stress on turnover intention of machine operators. The relationship between occupational stress and turnover intention is differed according to the group being observed and the stress factors that exist at the work place. This study focused the stress of machine operators in a specific work environment and highlighted stress factors such as supervisory support, work overload, job autonomy, role conflicts, role ambiguity and unfairness of reward.

This study found that there is a significant positive relationship between occupational stress and turnover intention of machine operators. According to the results of Pearson's Correlation Analysis, correlation between occupational stress and turnover intention is 0.558 which is significant at 0.000 level. This correlation was found to be strong as it is higher than the lower bound of strong correlation (0.5). According to the results of simple regression analysis, occupational stress was found to have a positive impact on occupational stress with strength of b value 0.558. Hence, occupational stress was found to be a predictor of turnover intention.

The positive relationship between occupational stress and turnover intention was empirically confirmed by the studies of Sherz et al. (2014), Chen et al. (2011), Choi et al. (2012), Weisberg (1994) and Arshadi and Damiri (2013)[47]. Furthermore, the study conducted by Mxenge et al. (2014) tested the relationship between organizational stress and employees' intention to quit among administrative personnel at University of Fort Hare, found a significant positive relationship between organizational stress and intention to quit. The study conducted by Liyanage et al. (2014) examined, is occupational stress a good predictor of turnover intention of leading garment manufacturing companies in Sri Lanka, also found a positive correlation between perceived occupational stress and turnover intention. Study conducted by Quershi et al. (2013) also found a significant positive association between job stressor and turnover intention.

Results of the study indicate that work overload, low job autonomy, role ambiguity, role conflict and unfairness of reward have significant positive impact to the turnover intention. Supervisory support has negative impact to the turnover intention. Chen et al. (2011) found that role conflict, work over load and role ambiguity positively related to turnover intention. Qureshi et al. (2013) found a positive relationship with work overload and turnover intention. Choi et al. (2012) highlighted that supervisor support is an important determinant because it can increase turnover intentions under depersonalization. According to the study of Choi et al. (2012) monetary reward is a significant determinant to turnover intention. But Chen et al. (2011) found that fairness of reward is not an important determinant factor to turnover intention. However the results of this study indicate that monetary rewards were effective in reducing turnover intention hence it is an important determinant to turnover intention in Sri Lankan context.

This study updates the available literature in order to many future researchers can use this study. This will help to conduct further researches in this field. Findings of the study do not represent all machine operators in apparel manufacturing firms in Sri Lanka. More research relating to occupational stress in Sri Lankan context is needed before generalizing the study findings. Future research also needs to explore the effects of dimensions that were not considered in the current study, which can directly or indirectly influence feelings of occupational stress such as job insecurity, time pressure, inequality at work, lack of promotion prospect, working conditions, lack of management and coworker support.

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