International Journal of Strategic Organization and Behavioural Science

Content

A Study on Impact of Stress on Work Performance of Textile Employees

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Abstract: The textile sector is fetching gradually competitive around the world and the level of product and service quality being offered to customer is latest and depends on quality of work done. Hence, the management adds more responsibilities on the shoulders of employees, resulting into a pressure on them, with increasing psychological problems like stress, strain, anxiety, depression, sleep disorders and so on. In textile sector, employees exposed to greater amount of stress due to work specific factors, management pressure, working background, personal grievances of employees, and group influences on the work performance. Apart from internal stress employees are affected highly because of external stress. In these study 100 samples has been selected through simple random sampling procedure. A structured, well-designed questionnaire has been administered to collect data from the respondents. The questionnaire consists of four sections like personal data, factors responsible for stress, internal sources of stress, and external sources of stress. Simple percentage analysis, factor analysis, multiple linear regression, chi-square test are the different statistical tools applied to analyze the data collected from the respondents. This study concluded that both the internal and external stress will have an impact on the work performance of the textile employees.

INTRODUCTION

Stress is an emotional and physical reaction to change. Everyone has stress, in today's changing and competitive work environment; stress level is increasing both in the workers as well as the executives. As a result of this work stress, more and more executives are showing signs of chronic fatigue and burnout. Many recent studies have concluded that stressed out managers are not good and it leads to reduced efficiency in even the best of individuals, which in turn lead to reduced productivity. Stress can be a result of both positive and negative experiences, and it is a part of our daily lives. From an evolutionary standpoint stress was necessary for survival and some stress continues to be a helpful part of our modern livers since it motivates us to accomplish tasks or make needed changes. We all feel the pressure of our environment during times of transition and in preparation for significant life events. Although response to stress is often adaptive, too much stress or an inability to cope with it can cause negative emotional and physical symptoms.

Stress is associated with constraints and demands. The former prevents an individual from doing what he or she desires. The latter refers to the loss of something desired. Aspiring to own a new car and not be to mobilize the necessary cash is a constraint. Desired to attend a social function but unable to attend because of pressing official work amounts to a demand. Both constraints and demands can lead to potential stress, if it coupled with uncertainty of the outcome and importance of the outcome, potential stress becomes actual stress. Stress is high when there is uncertainty of outcome, and the outcome is significant. Stress is highly individualistic in nature. Some people have high tolerance for stress and thrive well in face of several stressors in the environment. In fact, some individuals will not perform well unless they experience a level of stress, which activates and energizes them to put forth their best efforts. On the other hand, some people have very low level of tolerance for stress and they become paralyzed when they have to

interface with routine everyday factors that appear undesirable to them. In an optimum level of stress an employee will perform to full capacity of his own.

PROBLEM STATEMENT

Stress in the work place can affect the performance of employees' and at the same time indirectly affects the organization persistence because if employees decrease their work efficiency and can't work best for their organizations, so this situation couldn't be only affected the organizational performance but also lost strong potential in an progressively competitive market, and may even threaten their existence. It is for that reason, an indispensable assignment for management to deal efficiently and prevents employee anguish. It is the accountability of management to battle against the stress at work, to categorize the suitable course of action and solve them. Cultivating stress deterrence is a positive action that contributes to a better health of workers and constructs great organization efficiency and performance. Even though there are abundant work-related problems are being faced by employees in textile companies. On the other hand, stress is very common in textile employees due to multiple reasons, which demand the solution on the priority basis.

Generally textile industry consists of spinning, dyeing, processing, weaving, fabricating and merchandizing. This study based on the sample of spinning and weaving sector employees employed in Coimbatore district. There is several works and non-work related stresses are responsible for the poor work performance of the employees. The employees working in textile sectors are facing stiff occupational stress rather than any other industries. Also they are all facing respiratory diseases, skin allergies etc. Stress directly affects the work performance of the company. High absenteeism, conflict and dispute with co-workers, showing disrespect on the superior and management, whistle blowing about the company, showing non-interest to safeguard the assets of the company are the indications to stress of employees and this will cause for poor work performance. In addition to that personal complaints with pay related issues and promotion related issues might lead for stress among the employees. The employees are sometimes get disturbed by external factors. These external factors are causing illness, revenue fall, legal and prestige issues, difficult to balance work and life, impossibility to fulfill family needs and requirements are the different facets of external stress. Hence, this present study attempted to study the impact of stress on work performance of textile employees.

LITERATURE REVIEW

Several studies have been done to examine the effect of stress and organizational position on workers' job satisfaction, performance, and health. Stress is deliberated to be one of the foremost subjects in the research for last two decades and a substantial growth observe in researchers' interest as a concern to both employers and employees (Hochwarter et al. 2007, Cartwright, 2000). Stress is the destructive physical, mental and emotional reaction that transpires when there is a poor match between job demands and competencies or employees' resources to manage with job pressure. It is a condition ushered by suffering physical, mental, psychological or social problem that comes from individual feeling that doesn't be able to respond due to unexpected situations. The basic root cause of stress in the organization, when employees face difficulties and changes in his daily working routine but always avoid and this condition creates stress, anxiety, fears, worries, tension, etc. (Akinboye et al. 2002).Scott, Jusanne and Steven (2000) reported that working conditions associates with employees' job involvement and job satisfaction. Strong et

al. (1999) in a study observed that social, organizational and physical context serve as the impetus for tasks and activities, and considerably influence workers' performance and work output. Gardner (2005), investigated on the employees possessing emotional intelligent competencies succeed their negative emotions in the workplace and report fewer psychological problems with high levels of job satisfaction and organizational commitment. Another study by Bar-On (2000) examined the impact of emotional intelligence on police department officers and health-care professionals. They conclude that police officers have high emotional intelligence to respond the stress with better managing tactics and report less depression comparatively than health-care professionals having low emotional intelligence. Slaski et al.(2002), examined the emotional intelligence competencies generate the skill in individual to choose various courses of action to deal stress without collapsing, to be positive to solve a problem, and feel that one can control the situation. Rahim (2010), attempted his study with increasing psychological problems i.e. stress, strain, anxiety, depression, sleep disorders, etc. This situation, in which the employees have little or no sense of identification with their job, can cause an individual looking for another job or don't perform efficiently their own. Srivastava (2008), examined the effect of two constituents of work environment, that is, physical and psychosocial on employees' job satisfaction and performance, and organizational effectiveness. It revealed that participants who perceived their work environment as to be adequate and favorable scored comparatively higher on the measures of job satisfaction, performance, and perceived organizational effectiveness.

Clements et al. (2000) research has shown that crowded work places, job dissatisfaction and physical environment are the main factors affecting productivity. The data was produced and analyzed using occupational stress indicator in conjunction with the analytical hierarchical process. Devonport et al. (2008) recognized the sources of stress and suggested certain coping strategies among Lecturers. The study listed out three types of stress, namely, organizational stress, subject-linked stress and non-organizational stress that affect the sample population.

OBJECTIVES
The study was undertaken with the following objectives:
- To check the personal background of textile employees who exposed to stress.
- To analyze the factors responsible for stress in work place in the textile employees.
- To examine the internal sources of stress affecting on work performance of textile employees.
- To check the external sources of stress affecting on work performance of textile employees.
- To identify the relationship between personal background of employees and external sources of stress on work performance.

METHODOLOGY
Sample and Data
This study is based on the survey conducted with structured, non-disguised interview schedule is prepared for the purpose of collecting the data. The factors of the study are drawn out from the related studies and the statements of the schedule are framed representing the employees. These are given shape in consultation with the field experts. This study is confined to Coimbatore district textile employees and the primary data was collected from 100 respondents. In this study convenience sampling technique has been adopted for selecting samples. Primary data is collected from the textile employees by using questionnaire during the period from June 2011 to Au-

gust 2011. The questionnaire is pre-tested with 10 employees and revised in the light of the experience gained from the pretest conducted. For the purpose of data collection, the questionnaire has been divided into two sections. First section is designed with the questions to get personal information from the employees and second section is equipped with the questions to ask stress related issues and their suggestions to avoid stress in the workplace. Second section consists of four parts, first parts interprets reasons for stress, second part deals with internal sources of stress having impact on the work performance, third part discusses external sources of stress having impact on the work performance and fourth part deals with the remedial measures to overcome stress in the workplace. Apart from primary collected, this study collects fewer secondary data from books on stress management, journals on the field of management, reports and news from the dailies are also considered.

Data Analysis

The information acquired from second part of questionnaire in second section has been distinguished on five point Likert scale. Mark has been assigned 5 to 1, 5 is for 'Strongly Agree', 4 is for 'Agree', 3 is for 'Neutral', 2 is for 'Disagree' and 1 is for 'Strongly Disagree". Factor analysis, multiple linear regression, and chi-square test have been adopted to analyze the data collected from employees and get interpretations for this study. Large number of variables can be condensed into lesser dimensions by using Factor analysis, it is used to identify the significant internal source of stress influencing on work performance of the employees. Impact of external stress on the work performance has been checked with the multiple linear regression technique. External sources of stress are compared with the socio economic background of respondents and it is analyzed through chi-square test analysis. Demographic data of respondents is simply checked with the simple percentage analysis.

RESULTS AND DISCUSSIONS

Analysis of Demographic Data

Table 1 presents the distribution of prominent personal characteristics like gender, age, education, marital status, monthly income, experience and nativity of the respondents. Simple percentage analysis has been used to analysis.

Table 1 – Personal Background of Respondents

Background	Particulars	Percentage
Gender	Male	89%
	Female	11%
Age	18 – 25	19%
	26 – 35	23%
	36 – 45	28%
	46 – 55	21%
	56 & Above	9%
Education	Illiterate	12%
	Up to HSC	32%
	Diploma	26%
	Degree	30%
Monthly Salary	Below 5,000	24%
	5,001 – 10,000	21%
	10,001 – 15,000	19%
	15,001 – 25,000	22%
	Above 25,001	14%
Marital status	Married	62%
	Unmarried	38%
Experience	0 – 1 year	19%
	2 – 4 years	34%
	5 – 10 years	17%
	11 – 15 years	17%

	More than 15 years	13%
	Home-town	36%
Nativity	Stayed	42%
	Day-Scholar	22%

(Source: Primary Data)

It is evident from the table–1; the sample consists of 89% of male employees and 11% of female employees. The employee age is classified with five intervals; the first consists of 18-25 years, 19% of employees falling in this group, 23% of respondents are coming in the age group between 26-35 years, 28% of respondents are in the age group of 36-45 years, 21% or respondents are falling in the age of 46-55 years and the rest 9% employees are more than 56 years. The education of the employees are collected 12% are illiterate, 32% are having qualification of less than Higher Secondary, 26% employees are diploma candidates and rest 30% are degree holders. In order to check the monthly salary of the employees, the salary level is bifurcated into five proportions, 24% of respondents salary level is less than 5,000 per month. 21% of respondents' salary is falls fewer than 5,001 to 10,000 per month, 19% of respondents' earnings falls in 10,001 to 15,000, and 22% of respondents salary is up to 25,000 per month and rest 14% are earning a monthly salary of more than 25,000. Marital status of the respondents explains 62% are married and remaining 38% are unmarried. There is no employee coming under the category of divorced and widow and hence it is excluded. Respondents experience is checked with 5 dimensions and majority of 34% of respondents are having 2-4 years of experience. 17% of respondents are falling under 5-10 years and 10-15 years respectively. Fresh candidates are 19% of the sample collected. Then their nativity is checked, 36% are hometown area, 42% are stayed in hostel and nearby locations and rest 22% are day-scholars.

Factors Responsible for Stress

Work stress is caused both by factors in the internal working environment and its dimensions and external environment into the workplace. Both factors equally affect the work performance of the employees. Causes of stress vary from person to person. Some common causes of stress can be a death of a family member, illness, taking care of family, relationship changes, work, job change, moving and money. Even small things such as long waits or delays or traffic can cause stress. There are many ways that an employee may be challenged. Perhaps it related with the changing wayof life, like when getting a new job. Perhaps it related with the solution to a problem, or finishing a task within a short amount of time. Stress always comes with the challenges, these challenges are called stressors. Stressors come in all shapes and forms. Happenings of major events are one type of stressor. The list below shows some types of internal as well external stress related with an employee engaged in textile industry.

Table 2–Factors Responsible for Stress

External Factors	Internal Factors
Family Circumstances	Work/Occupational Stress
Daily Travel to workplace	Personal Complaints
Economic Conditions (Income loss)	Management influences
Quality of Life	Group influences
Physiological	Working conditions
Work-life Balance	
Social Disruptions	

(Source: Primary data)

Sources of Internal Stress Factors

Stress is a reality of work life of an individual. Likewise, stress experienced at home, work and non-work situations can be carried over to the work place, which might heighten and multiply the stresses experienced at work. Internal stress generated from four sources, like organizational

stress, group stress, superior stress, individual stress, and work stress. These factors are categorized with sub components and tabulated accordingly and presented in table 3.

Table 3 - Results of Factor Analysis

Factors	Components	Factor Loading	Eigen Value	% of Variance Explained
Work Stress	Mechanical Threats	0.829	6.965	23.492
	Physical Injuries	0.822		
	Chemical Dangers	0.711		
	Fire Problems	0.639		
	Respiratory Diseases	0.723		
	No Safety Instruments	0.732		
	Excess Workload	0.878		
	Rigid Schedule	0.672		
	Role Problems	0.824		
Management Influences	Excess Working hours	0.872	5.914	17.435
	Hostile Command	0.748		
	Oppressive Control	0.728		
	Low Employee Value	0.793		
	Lack of Recognition	0.816		
	Less Freedom & Autonomy	0.790		
	Torture Culture	0.819		
	Nuisance Operation	0.779		
Personal Complaints	Low Salary	0.876	5.103	13.216
	No Elevation	0.834		
	Less Job Security	0.635		
	Inadequate Leave	0.668		
	No In-job Training	0.624		
	Workmen Compensation	0.521		
	No Retiral Benefits	0.726		
Working Background	Frequent Transfers	0.818	4.134	10.352
	Low Ventilation	0.798		
	Dust and Fume	0.812		
	Inadequate Safety	0.795		
	Poor Lighting	0.723		
	Improper Layout	0.618		
	Defective Machines	0.801		
Group Influences	Group Cohesiveness	0.788	3.248	5.189
	Disrespect	0.833		
	Politics	0.846		
	Conflict	0.592		
	Association Dispute	0.587		

(Source: Primary data)

Factor analysis narrates five factors on internal sources of stress. Generally employees in an organization is exposed to several stress, these are all included in the five categories like, work stress, management influences, personal complains, working background and group influences are the different paradigms in stress sources. Put together all these five factors explain 69.684% of variations in data. Following are the brief explanation from the factor analysis. At the outset, work stress is the most essential factor in stress and it is resulted because of inappropriate work systems in the factory. Work Stress loaded with nine components and it explains 23.492% of variance with the Eigen value of 6.965. Excess workload is the highest loading factor in this category. Secondly, management influences are analyzed, it causes for stress in the work place. It compacts with the eight components and it has Eigen value of 5.914 and explains 17.435% of variance. Excessive working hours possess highest factor loading among the eight components considered. Thirdly, Personal complaints are directly connected with the delivery of the financial and non-financial benefits to the employees. It has Eigen value of 5.103 and explains 13.216%

variance. Fourthly, working background investigated with seven factors, which are all directly related with the rendering of services to the company. It has Eigen value of 4.134 and 10.352% of variance explained. Group influences in the work place are creating stress; it is caused with the co-workers and superiors. It has Eigen value of 3.248 and explains 5.189% variance.

Sources of External Stress Factors

Job stress is not restricted to effects that happen inside the organization during the working hours. Apart from internal stress, the employees are getting stress through external sources. This stress may be in the form of political influence, economic factors, technological factors, personal non-work related factors, family factors and so on. Here seven important external stresses are explained. Family situation plays a vital role in external stress; the employees are disturbed in large extent due to bad family situations. Daily travel to work place affect the performance of the work, poor economic conditions may create income less conditions, likely quality of work life depends on the earnings, hence if the earnings is insufficient the employees get stress. Similarly physiological problems, work-life imbalance problems and social disruptions may crease stress to the employees. These factors are listed in Table-3 and it describes the results of multiple regression analysis of the respondents in the textile industries in terms of R (Multiple Correlation Co-efficient), R^2 (co-efficient determination) and the incremental value of R^2.

Table 4- Result of Multiple Regression Analysis

Variable	R	R^2	Incremental Value R^2
Family Circumstances	0.623	0.388	0.405
Daily Travel to Workplace	0.658	0.433	0.045
Economy Conditions	0.726	0.527	0.094
Quality of Life	0.768	0.590	0.063
Physiological	0.889	0.790	0.200
Work-Life Imbalance	0.964	0.929	0.139
Social Disruption	1.000	1.000	0.071

(Source: Primary data)

It is found from the above multiple regression analysis reveals that among the seven factors, the family circumstances explains 40.5% of the total stress. Daily travel to work place accounts for 4.5%. Economic condition explains 9.4%, quality of life accounts for 6.3%, physiological stress occupies 20% on total external stress, and work-life imbalance responsible for 13.9% and social disruption capture 7.1% on total external stress.

Testing of Hypothesis

Chi-square test is carried out to check the relationship between the personal background of the respondents and their external source of stress in the company. Here, the null hypothesis (H_0) states there is no significant relationship between the personal background of respondents with the external source of stress on the work performance. Contrary to that alternate hypothesis (H_1) states there isa significant relationship between the personal background of respondents with the external source of stress on the work performance. Its analysis is presented in table 5.

Table 5 – Chi-square Analysis

No relationship between	Degrees of freedom	Table Value	Calculated Value	Result
Gender and External Source of Stress on Work Performance	6	12.592	6.368	Accepted
Age and External Source of Stress on Work Performance	24	36.415	23.693	Accepted
Education and External Source of Stress on Work Performance	18	28.869	31.257	Rejected

Monthly Salary and External Source of Stress on Work Performance	24	36.415	22.564	Accepted
Marital Status and External Source of Stress on Work Performance	6	12.592	15.643	Rejected
Experience and External Source of Stress on Work Performance	24	36.415	38.947	Rejected
Nativity and External Source of Stress on Work Performance	12	21.026	11.636	Accepted

(Source: Primary Data)

It possibly will be well-known from the table 5 that the calculated chi-square value is more than table value at 5% level of significant and the null hypothesis is rejects the relationship between education and external source of stress on work performance, marital status and external source of stress on work performance and experience and external source of stress on work performance. Hence there is no significant relationship between the personal background of respondents with the external source of stress on the work performance. In contrary to that the null hypothesis is accepts the relationship between gender and external source of stress on work performance, age and external source of stress on work performance, monthly salary and external source of stress on work performance, and nativity and external source of stress on work performance.

CONCLUSION

Stress is the way to person reacts to something that is out of the ordinary, dangerous, unknown or disturbing. Stress can be avoided by giving adequate stimulus with a view to overcome the stressed situation. Employees working in textile mills are exposed to greater amount of stress, hence this study has been made to test the impact of stress on work performance of employees. In this study from the sample 100 employees inspected, 89% of respondents are male, 28% of respondents are falling in the age group between 36-45 years. Education background of employees shows 32% having less than HSC qualification. 24% of respondents' monthly salary falls in the category of below Rs. 5,000. Marital status of the employees shows 62% belongs to married category. Experience clearly shows that 34% belongs to 2-4 years. 42% of respondents stayed in hostels and nearby areas. There are two sources cause stress to employees; these can be classified into internal stress and external stress. Family circumstances, daily travel, economic conditions, quality of life, physiological problems, balance between work and life, social disruptions are the sources, which create stress to employees. Work stress, personal complaints, management influences, group influences, working conditions and its multiple dimensions are the input of internal stress. Both factors are analyzed with the appropriate statistical techniques. At first, internal stress is analyzed through factor analysis, work stress discusses nine components, and excess work load is highest loading factor in this category and has Eigen value of 6.965 and explains 23.492% of variance. Management influences loaded with eight components, excess working hours is the highest loaded factor in this group. Similarly, low salary is highest loaded factor in personal complaints, frequent transfers in working background and unhealthy politics in group influences are the highest factor loading among its components. It clearly indicates the different facets of stress in internal environment. External stress can be analyzed through multiple linear regressions; among the seven factors investigated family circumstances has the highest incremental value. In addition to check the relationship between personal background and external working conditions, chi-square test has been utilized. Null hypothesis is accepted to the relationship between gender and external stress, age and external stress, monthly salary and external stress, and nativity and external stress. Remaining external factors like education, marital status,

experience are rejects its null hypothesis. Hence this study is concludes that both stress can have impact on work performance of employees.

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