

Assessing the Influence of Emotional Intelligence on Occupation Stress in a Manufacturing Organization

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Abstract

Though current occupational stress at workplace is quite common, it was found relevant to identify, if the employee's EQ Levels help them to handle Occupational stress in a better way. The major variables causing /defining occupational stress and variables defining emotional intelligence were identified and measured by conducting a survey through a structured questionnaire. The questionnaire had three sections each for measuring occupational stress, factors causing stress at workplace and emotional quotient. The population for this research comprised of 482 corporate employees from 14 departments of a manufacturing organization in Tamil Nadu. A sample size of 115 was determined at 95% confidence level and with confidence interval of 8. The valid response rate was 90% and it was analyzed using various statistical analysis tools. Though it was observed through percentage analysis that very meager percentage of employees had high stress at workplace and majority had high Emotional Quotient but subsequent analysis using other statistical tools revealed that there wasn't any noteworthy association between Occupational Stress and Emotional Intelligence Quotient as far as the study sample is concerned. However, the Department Cluster did show an association with the Occupational Stress Levels.

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I. INTRODUCTION

Today recruiters are weighing Emotional Quotient of a person greater than Intelligence Quotient. If knowledge, skills and ability (KSA) of a person could be looked at as criteria for assessing the person's fit for performing the job role, then Emotional Quotient could be considered as an instrument to sharpen the existing skills and traits and create a competitive advantage out of the human resources (Krishnaveni and Deepa, 2011). Not only during the stage of selection and placement of a candidate does EQ come into picture but also at each and every stage of personal and professional career of a person EQ has been observed to play an important role. At micro level EQ has its role in day-to-day life of every individual in a very subtle way (Monica Bedi and Kirandeep Bedi, 2017). This

capability to recognize, perceive and use emotions appropriately to handle different situations is known as Emotional Intelligence. Individuals spend more than half of their time at their workplaces, therefore occupational stress has been given more attention in the research by Monika Bedi (Monica Bedi and Kirandeep Bedi, 2017). Occupational Stress happens because of the constraints implemented by the organization, personality conflict, and the work environment V Marc A. Brackett & Glenn Geher aimed to identify the association between emotional abilities of the individuals and their reasoning capacity. Surveys that were aimed at identifying the various factors causing Occupational stress were reviewed by Eliza (to extract certain variables acting as the major stressors. Those variables were used as the metrics to measure occupational Stress

level.(Eliza Sharma, 2015; Aidan Kenny, 2015;Michie S, 2002;Lech Wisniewski and Richard M. Gargiulo, 1997). Research was done to know as to how Emotional Intelligence acts as a competitive advantage in an organization .and its impact on factors like workplace behavior,(SimarjeetMakkar and SriparnaBasu),job performance (Bulbul Kar and Biswadeep Mishra, 2016; Keri A. Pekaar, Dimitri van der Linden, Arnold B. Bakker and Marise Ph. Born, 2017 and MojtabaRafieea, HojatKazemib and Mustafa Alimiric, 2013), job satisfaction (Brandy Cobb, 2004 and NehaPandey and M K Sharma, 2016), individual and group performance (John W. Whiteoak and Rana L. Manning, 2012), work-life balance (SathyaKumar.J and VidyaRajaramIyer, 2012) and employee performance (JayadevBabuDivakar, 2015) Some researchers have used EI as the moderating variable to identify the strength of association between Job Experience and turnover intention of employees. (Yuntao Dong, Myeong-GuSeo and Kathryn M.Bartol, 2014). Kumar Sunil have demonstrated the association between Emotional Quotient and Stress & Anxiety (Kumar Sunil and Rooprai K.Y., 2009). BinduChhabra highlighted that Occupational stress and Emotional Intelligence (EI) are negatively correlated (BinduChhabra& R.P. Mohanty, 2018).

II. RESEARCH METHODOLOGY

This research has been undertaken to re-emphasize the value of Emotional Intelligence in the workplace. Though current occupational stress at workplace is quite common, it was found relevant to study, if the employee's EQ Levels help them to handle Occupational stress in a better way. The major variables causing occupational stress and variables defining emotional intelligence were identified and measured by conducting a survey through a structured questionnaire. The questionnaire had three sections each for measuring occupational stress, factors causing stress at workplace and emotional quotient. The population for this research comprised of 482 corporate

employees from 14 departments of a manufacturing organization in Tamil Nadu. A sample size of 115 was used for the research at 95% confidence level. The response rate was 90% and the data was analyzed using various statistical analysis tools. The main focus of the research is to identify the impact of Emotional Intelligence on Occupational Stress on the employees. The research also has the following objectives:

To know the stress level of employees and to ascertain the factors causing occupational stress.

To identify the Emotional Intelligence quotient of the employees.

To find the correlation between Emotional Quotient level and the Occupational Stress level of employees.

To provide suggestions for improving Emotional Intelligence of the employees.

The research is confined only to the permanent employees who are in Supervisory grade (Grade 8 to 11) and Middle level managerial grade (Grade 12 to 15). The research does not include the roles of Workmen, Graduate/Diploma Trainees, Apprentice, Contract workers and Senior Level Managers. Structured questionnaire which comprised of three sections was designed to measure Occupational Stress, factors causing stress at workplace and Emotional Quotient.

The American Psychological Association's Workplace Stress Survey Questionnaire and Self-Rated Emotional Intelligence Scale (SREIS) were used to collect the data using 5 point Likert Scale. To check the reliability of the questionnaire, a pilot study was done on 12 employees. Since these questionnaires were standard instruments, they possessed a good level of reliability as shown in the table 1

Table 1

Reliability Statistics		
	Cronbach's Alpha	N of Items
Occupational Stress (WSS)	0.794	10
Emotional Intelligence (EI)	0.839	19

We could infer that the Alpha value of 0.794, and 0.839 for the Occupational Stress questionnaire and Emotional Intelligence questionnaire were all higher than 0.7, confirming their reliability.

III. DATA ANALYSIS AND INTERPRETATION

Demographic Profile

Department Cluster

Maximum Responses were obtained from the respondents belonging to the Grade 9, followed by Grade 13 from the Quality Assurance and P&HR Departments, followed by Manufacturing System Engineering and Information systems Department from respondents. Majority of the Respondents had a service experience of 10 to 15 years at the organization.

TABLE 2

Demography	Data (in %)	
Gender	Male- 84.62% Female- 15.38%	Male Respondents were greater than Female respondents
Age Group	Below 25 years- 17.31% 25-35 years- 30.77% 35-45 years- 34.62% 45-55 years- 13.46% Above 55 years- 3.85%	Maximum Respondents were in the age group of 35 to 45, followed by 25 to 35
Educational Qualification	Diploma- 3.85% UG- 39.42% PG- 56.73%	Maximum Respondents were Post Graduates.
Marital Status	Married- 78.85% Unmarried- 21.15%	Slightly more than 3/4 th of the Respondents were Married.
Family Type	Nuclear Family- 70.19% Joint Family- 29.81%	Maximum Respondents live in Nuclear Family.
Number of Dependents	Less than 4- 67.31% 4 to 5- 26.92% More than 5- 5.77%	Maximum Respondents had less than 4 Dependents.

Percentage Analysis

Table No: 3	
Variables of stress	Average score
Work-Environment	2.04

Control	2.38
Relationship	2.38
Demand	2.71
Autonomy	2.75
Rewards and Recognition	3.23

From Table No 3, it is inferred that (3.23%) of the respondents were not satisfied with the rewards and recognition initiatives in the organization.

Table No: 4

Variables EI	Avg Score
Use of Emotion	3.22
Understanding Emotions	3.36
Managing Emotion (self)	3.55
Perceiving Emotions	3.58
Social Management	3.59

From Table No 4, it is inferred that respondents (3.59%) are good at Social Management skills followed by ability to Perceive Emotions.

Table No: 5 Categories of Stress Levels

Stress / EQ Levels	% of Respondents (Stress Level)	% of Respondents (EQ Level)
Low	48.08	38.46
Moderate	46.15	4.81
High	5.77	56.73

From Table No5, it can be observed that majority of the respondents have Low Stress Levels and high EQ Levels.

Correlation Analysis

Occupational Stress Vs Emotional Quotient

Null Hypothesis

H₀: There is no correlation between Average Occupational Stress Scores and the EQ Scores.

Alternate Hypothesis

H₁: There is correlation between Average Occupational Stress Scores and the EQ Scores.

Correlation		Average Stress Score	EQ Score
Average Stress Score	Pearson Correlation	1	0.042
	Sig. (2-tailed)		0.669
	N	104	104
EQ Score	Pearson Correlation	0.042	1
	Sig. (2-tailed)	0.669	
	N	104	104

From Table No 6, it is inferred that the Pearson's Correlation value (r) = 0.042. Since p value (i.e., sig value) = 0.669 is greater than assumed significance value of 0.05, null hypothesis is accepted. So, it is concluded that there is no correlation between average occupational stress scores and the EQ scores.

Chi-Square Analysis

Occupational Stress and Emotional Quotient

Null Hypothesis

H_0 : There is no positive correlation between Occupational Stress and EQ Level of the respondents.

Alternate Hypothesis

H_1 : There is a positive correlation between Occupational Stress and EQ Level of the respondents.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.552	4	0.109

From table no7, it is observed that the Pearson's Chi-Square value is 7.552. Hence we conclude that at 95% Confidence Level there is no positive correlation between Occupational Stress Level and EQ Level for the target sample

Gender and Occupational Stress Level

Null Hypothesis

H_0 : There is no positive correlation between Gender and Occupational Stress of the respondents.

Alternate Hypothesis

H_1 : There is a positive correlation between Gender and Occupational Stress of the sample.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	0.046	2	0.977

From Table No 8, it is observed that the Pearson's Chi-Square value is 0.046. Hence we can conclude that at 95% Confidence Level there is no positive correlation between Gender and Occupational Stress for the target sample.

Department Cluster and Occupational Stress Level

Null Hypothesis

H_0 : There is no positive correlation between Department Cluster and Occupational Stress of the respondents.

Alternate Hypothesis

H_1 : There is a positive correlation between Department Cluster and Occupational Stress of the sample respondents.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.396 ^a	20	0.039

From Table No 9 it is inferred that the Pearson's Chi-Square value is 32.396. Hence we can conclude that at 95% Confidence Level, there is positive

correlation between Department Cluster and Occupational Stress of the respondents.

Gender and EQ Level

Null Hypothesis

H₀: There is no positive correlation between Gender and EQ Level of the respondents.

Alternate Hypothesis

H₁: There is a positive correlation between Gender and EQ Level of the respondents.

Table No: 10 Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.715 ^a	2	0.424

From Table No 10 it is observed that the Pearson's Chi-Square value is 1.715. Hence we can conclude that at 95% Confidence Level there is no positive correlation between Gender and EQ Level for the respondents.

Age Group and EQ Level

Null Hypothesis

H₀: There is no positive association between Age Group and EQ Level of the respondents.

Alternate Hypothesis

H₁: There is a positive association between Age Group and EQ Level of the respondents.

Table No: 11 Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.057 ^a	8	0.110

From Table No. 11 it is observed the Pearson's Chi-Square value is 13.057. Hence we can conclude that at 95% Confidence Level there is no positive

association between Age Group and EQ Level for the respondents.

Educational Qualification and EQ Level

Null Hypothesis

H₀: There is no positive association between Educational Qualification and EQ Level of the sample respondents.

Alternate Hypothesis

H₁: There is a positive association between Educational Qualification and EQ Level of the sample respondents.

Table No:12 Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.190	4	0.381

From Table no. 12 it is observed that the Pearson's Chi-Square value is 4.190. Hence we can conclude that at 95% Confidence Level there is no positive association between Educational Qualification and EQ Level of the respondents.

Factors identified as causing occupational stress

Majority of the Respondents felt there was lack of Rewards & Recognition and were quite dissatisfied about it. Major Factor causing Stress is Time Pressure & Deadlines, followed by Repetitive & Boring work and Heavy Workload. Difficulties in having a good working relationship as a team is mainly due to power & politics, excessive interruptions and dysfunctional conflicts. Apart from that on a positive note, 30 respondents out of 104 respondents do not feel overloaded at work. However a reasonable number of respondents have expressed the reason of feeling overloaded at work to be continuous and chaotic job demands, shortage of required resources & more administrative and paper work. Major Programs and facilities offered by the company for managing stress are Job Redesign and Job Rotation, Health Awareness

Programs and Recreation Centre. Major Practices in self-management of stress are sleep, entertainment and go on a tour with family, friends, relatives and neighbours.

Majority (over half) of the respondents were often able to plan their own work and often had control over the pace and content of their work..

IMPLICATIONS FOR PRACTICE

Recognition and Rewards must be given then and there, at a greater frequency for the concerned employee. Employees must have better role clarity in order to plan and prioritize their work, so that they can manage time pressures in a better way. In addition, a common data repository will also facilitate knowledge management. The extent of administrative and paper work can be reduced by increasing the use of information technology aided advanced software applications which will reduce the time taken for doing a particular job and optimize the usage of space in the office premises. Employees who have been associated with the organization for less than 5 years are not aware of the Stress management facilities and programs offered by the organization. So, during the phase of induction, new joiners can be made aware of various stress management programs and facilities provided by the organization. Though employees are good at perceiving emotions and social management but they must be trained as to how appropriately the perceived emotions can be used in building good rapport with various stakeholders of the organization. Finance Department and P&HR has been experiencing relatively Higher Stress Level and Medium Stress Level respectively. Hence these departments need attention to address the reasons for stress.

CONCLUSION

In the present day scenario, it is the psychological ailments that has become a greater threat than physical ailments in holding back the employees from performing to their best. Especially, Stress has

been a common word used by people to describe their mental state of displeasure, dissatisfaction and distress. Nevertheless, on the other hand Emotional Intelligence (EI) is being considered as a soft tool, to not only handle and manage occupational stress, but also to enhance the competencies of employees. The findings have been interpreted and suggestions have been given for the welfare and betterment of the organization. This research is confined only to determine, if there is any association between Emotional Intelligence, Occupational Stress and selective Demographic factors from the data collected in a specific manufacturing organization. Apart from the variables determined and used in the study, there are other variables that could moderate this relationship between emotional intelligence and workplace Stress, which have not been considered in this research. Such variables can be considered as an inclusion for further study purpose.

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