

**Analysis of the Relationship between Emotional Intelligence and Occupational Stress:  
An Empirical Study**

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**Abstract**

The knowledge of employees' level of occupational stress and emotional intelligence (EI) helps employers to make superior workforce. The aim of the present study is to investigate the relation between emotional intelligence of healthcare professionals and their occupational stress (OS). The study uses LINAC EI scale and Srivastava's occupational scale to ascertain emotional intelligence and occupational stress levels of the respondents. The data for the purpose of the study are collected from doctors who are working in medical college of North Bengal. The study showed that emotionally intelligent doctors have low level of occupational stress.

**Key Words:** healthcare, professionals, stress, emotional intelligence and relation

Today's work life is challenging and complex which bring stress in our life. A certain level of stress is good, it motivate employees and increases work performance; but too much stress is harmful and causes ill health (logendran Mayuran, 2013). Frequent feeling of stress disturbs the quality of life and increases the dissatisfaction with life and then again unhappiness often simply added stress. The quality of life negatively influenced by stress and impacts individuals' physical and mental health (Miller, G. E., & Blackwell, E., 2006).

Intelligence especially EI plays an important role in managing stress. Emotion and strain are innate in the medical profession which may perhaps increase stress of doctors. Goleman (2008) stated that emotional intelligence raise employee's abilities and this could assist to reduce environmental strains (Azman ismail, 2010). Research shows that success and happiness in all sphere of our life is determined better by emotional intelligence than IQ and the ability to manage the feeling of own and others.

Emotionally intelligent people are able to control workplace stress and behave with co-workers properly. All these qualities help to increase satisfaction, performance, mental health, relation with work groups and organizational success. These qualities also help to control stress and direct to build up adaptation ability, decreases hopelessness and moderates depression and suicidal ideation (Reshoot Agarwal et.al, 2015).

In health care sector doctors services are most valuable. So, analysis of doctor's occupational stress and its relation with EI is essential to know how to reduce stress and increase happiness, by enhancing EI in them and to improve health care delivery system by adopting proper EI development strategies.

**Literature Review:** NINA OGIŃSKA-BULIK (2005) explored effects of emotional intelligence on occupational stress in human service workers. Results showed that employees with higher emotional intelligence perceived a lower level of stress and suffered less from

negative health consequences. Ability to manage emotion assist employees in coping with occupational stress in the workplace and training of stress management would help in this direction.

Hassan Darvish and Ali Akbar Nasrollahi (2011) explored and described the relationship between emotional intelligence and occupational stress and examined the influence of these variables on the job performance of employees who worked in the center of Payame Noor University. A significant relationship was reported between components of emotional intelligence and emotional stress. They demonstrated that others' emotions and feelings were related positively with emotional intelligence and role overload component of stress was also significantly related with stress. Effective management of emotional intelligence could play a vital role in reducing occupational stress.

According to Hassan Jorfi et.al. (2011), communication effectiveness was a crucial factor for organization's performance and growth. It plays an important role in stress management, and job satisfaction of today's competitive organizations. The study revealed that communication effectiveness could moderate the relation between stress management with job satisfaction of Agriculture Bank employees and educational administrations of Iran. Findings showed that stress management of emotional intelligence had a positive relationship with communication effectiveness and also communication effectiveness played a key role in job satisfaction.

The purpose of Zeynep Kalyoncu et. Al. (2012) study was to investigate the relationship between the emotional intelligence and work stress of private and

Government hospital nurses' of Arkana province. They observed that relationship between emotional intelligence and job stress was statistically significant. An individual with a higher emotional intelligence level had a lower level of job stress. Further, according to genders marriage, age and education, there were no significant differences reported between the emotional intelligence and the stress levels of the nurses. Work experience had the positive relation between emotional intelligence and stress was negatively related to education and wage.

Mohammadbagher Gorji and Narges Moghim (2012) found out the relationship between job stressors and emotional intelligence of nurses. Their study also compare the results of emergency department with hospitalize sections in our country. The results of the statistic analysis showed that there was a meaningful relationship between stressors and emotional intelligence of nurses in emergency departments. In case of the inpatient center they did not find any such relationship.

Logendran Mayuran (2013) examined the impact of emotional intelligence on the stress of school teacher and bank staff. The study revealed that components of emotional intelligence were a significant determinant of stress management of school teachers. The weak positive relation was found between emotional intelligence and stress of bank staff. The ability of stress management of school teachers and bank staff was moderate.

In their cross sectional study, Maryam Khaniyan et.al. (2013) established the relationship between emotional intelligence and occupational stress of Tehran training hospital rehabilitation staffs. They reported that the relationship

between emotional intelligence, components of emotional intelligence and occupational stress were negative and significant. Two component of emotional intelligence understanding others' emotion and social skills could be the predictor of occupational stress.

Deepa Mohan and Sudarsan (2014) reported a very weak relationship between Emotional Intelligence and Organizational role stress among employees of IT sector.

Finding of Semih Soran et.al (2014) exhibited that job stress and emotional intelligence meaningfully correlated with performance. Further, emotional intelligence had a mediating effect on the relationship between job stress and performance of banking employees from small-medium enterprises in Turkey.

DR. R. Krishnakumar and S. Lalitha (2014) stated that there was a link between emotional intelligence and occupational stress. Emotional intelligence helps to understand work environment in a better way which in turn help to reduce occupational stress. They tried to find this link with the respondent who worked in publishing and digital solutions located in Pondicherry, South India. Their study exposed that there was the positive relationship between emotional intelligence and occupational stress.

Reshu Agarwal and Pradeep Sharma (2015) stated that workplace environment of colleges had become highly stressed. To cope with stressed personnel worked there need certain special competencies to manage their effectiveness. In this direction, they examined the relation between faculty effectiveness, occupational stress, and emotional intelligence and found that by increasing emotional intelligence one was able to

reduce his/her stress level and to increase their work efficiency.

Very little number of studies has been found to identify the relation between OS and EI of medical doctors. There is a dearth of such type of study in the context of West Bengal. In this direction, the present study may contribute some knowledge in OS and EI research.

**Occupational stress:** Stress is a complex relation between a person and his/her work environment. It refers to the circumstances at which a person's skills and ability do not match with the work demands and requirements, and/or when the employees' needs are not fulfilled by the job environment (Ramirez et al., 1996). Stress is a self-motivated state in which the individual is confronted with an option, self-control, or demand associated to what he or she desires and for which the result is supposed to be both uncertain and important.

**Emotional Intelligence:** Daniel Goleman's book (1995), Emotional Intelligence: Why it can matter more than IQ popularized the term EI among researchers. He stated that EI predicts workplace success better than IQ. "EI involves a combination of competencies which allow a person to be aware of, to understand and to be in control of their own emotion, to recognize and understand the emotion of others, and to use this knowledge to foster their success and the success of others" (Goleman).

#### **Objective of the study**

1. To assess the EI level of the medical doctors.
2. To assess the occupational stress level of the medical doctors.

3. To find out the relationship between EI and OS of the medical doctors.

**Hypothesis**

1. H0: The EI level of medical doctors is low.
2. H0: The OS level of medical doctors is high.
3. H0: There is significant difference in stress on the basis of EI
4. H0: There is relation between OS and EI, and the factors of EI.

**Methodology**

**Methodology:** The study is quantitative and descriptive in its nature. For the purpose of the study, primary data have been collected with the help of two structured and closed - ended questionnaire from randomly selected hundred two doctors working in West Bengal medical college.

**Findings**

**Level of Stress and Emotional Intelligence:** The following table shows frequency and percentages of Srivastava’s stress questionnaire and LINPAC’s emotional intelligence questionnaire of doctors .29% doctors have high level of

The questioner contains demographic variables, questions for EI and OS. Data for OS are collected by using 13 items occupational stress scale of A.K. Srivastava. It is a five –point Likert scale; ranging from “Absolutely true” (value 5) to “Absolutely false” (value 1). The Cronbach’s alpha of this scale is .793.

To collect data on EI the study applied 50 items EI scale of Linac. Linac EI scale has five subscales and each scale has ten items. It is a five –point Likert scale, ranging from “Always” (value 10) to “Rarely” (value 2). The Cronbach’s alpha of this scale is .880.

The collected data are analyzed with the help of statistical tools of descriptive statistics, One- way ANOVA, Pearson correlation, and Regression.

EI and 16% doctors have the high level of stress .only three doctors have the low level of EI. In this survey, maximum doctors have medium level of stress and EI.

**Table-1 Frequency and Percentages of Level of Stress and Emotional Intelligence of Doctors**

Variables	Low	Medium	High
Stress	13.72% (14)	69.62% (71)	16.66% (17)
Emotional Intelligence	2.94% (3)	67.64% (69)	29.42% (30)

**Hypothesis testing**

**Table 2: The Summary of Single Group T-test**

T value= 38 for stress and 350.5 for EI										
95% Confidence interval of the difference										
	LOWE R	Upp er	Mean differen ce	Sig.( 2 tai- led)	Df	t	Std.Err or differen ce	Mea n	S.D	N
STRESS	-.9618	2.314 7	.67647	.415	10 1	.819	.82585	38.6 7	8.34	1 0 2
EI	24.94	38.85 4	31.90	.000	10 1	9.10 2	3.50	381. 902	35.3 9	1 0 2

In table-2, we see that obtained mean for stress (38.67) is almost equal to the assumed (38) mean. The obtained t is not significant,  $t(101) = .819, p = .415$  (table -2). Since the  $p$ -value is greater than .05, we can say that population mean is almost equal to sample mean, hence the research hypothesis which states that the OS level of medical doctors is high; is rejected. It means that West Bengal's medical Doctors have a moderate level of OS.

Table-2 reveals that mean of EI 381.90 is higher than assumed (350.5) mean. The obtained t is significant,  $t(101) = 9.102, p = .000$  (table -2). Since the  $p$ -value is less than .05, we can say that population mean is not equal sample to mean, hence the research hypothesis which states that the EI level of medical doctors is high; is accepted. The result shows that medical Doctors have a moderate to high level of EI.

**Table -3 Summary of Anova Test**

	Mean	Std. Deviation	Std. Error	F	Sig
Low	50.6667	.57735	.33333	9.562	.000
Medium	40.0580	6.98503	.84090		
High	34.3000	9.41441	1.71883		

In table -3 we find that, mean of stress those who have low EI is 50.66, those who have medium EI is 40.05 and those who have high EI is 34.33. At 95% level

of significance this difference is significant. Since the calculate  $p(.000)$  is less than Alpha .05 we accept the hypothesis that there is a significant

difference in stress among doctors on the basis of EI.

**Table 4: Correlation and Regression Results of Stress and EI**

Happiness/QWL	EI	Self Awareness	Self Regulation	Self Motivation	Social Awareness	Social Skills
Pearson correlation	<b>-.520</b>	<b>-.414</b>	<b>-.330</b>	<b>-.409</b>	<b>-.367</b>	<b>-.381</b>
SING.(2-tailed)	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>
<b>R Square</b>	<b>.263</b>	<b>.163</b>	<b>.088</b>	<b>.159</b>	<b>.126</b>	<b>.137</b>
<b>Sig</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>

To investigate the association and to analysis variance between OS and EI of West Bengal's medical college doctors', Pearson correlation coefficient and regression are used. The OS of doctors is taken as the dependent variable while the EI and its five factors are taken as the independent variables.

Considering the significance level of .000, it can be concluded that correlations are significant. The obtained value is negative (table-4), thus the study hypothesis four is accepted .It can be concluded that the relationship between OS and EI, and its components are negative. The above table also shows that regression is significant (p=.000) and it means that there is a significant relationship between OS and EI. The coefficient of determination suggests that 26% of the overall OS of the doctors influenced by EI (table-4).

Pearson correlation coefficient result of five components of EI indicates that there is a significant and negative relationship between OS and components of EI of the medical doctors (p values are .000, which are equal to an alpha value). The strengths of the correlation are between  $r = -.414$  to  $r = -.330$ . In behavioral sciences correlation coefficients of  $r = .10$ ,  $r = .30$  and  $r = .50$  are considered as small, medium and large coefficients respectively [Cohen (1988) Gravetter & Forzano (2009) and Green & Salkind (2003) in Kathungu Beatrice Mwathi (2010)]. Since the alpha values are .000 we can accept the hypothesis and we conclude that our experiment provides evidence that EI and all the factors of EI are negatively related to OS. The strength of association indicates that EI and all these five factors have moderate to high association with OS.

**Table 5** Coefficient of Multiple Regression

Variable	B	Beta	T	Sig
Self Awareness	-2.966	-.261	-2.689	.008
Self Motivation	-.487	-.062	-.624	.534
Self Regulation	-1.197	-.160	-1.513	.134

Social Awareness	-.771	-.090	-.813	.418
Social Skills	-1.446	-.177	-1.622	.108

Table 5 shows the coefficient of multiple regressions where occupational stress is the dependant variable and components of EI are predictors. The obtained t is significant,  $t(101) = -2.689, p = .008$  (table 6.16), for self awareness. Among the five components of EI only for SA (Self-Awareness), the  $p$  value is less than .05 and it is the significant predictor of occupational stress.

**Discussion:** The objective of this paper is to explore the relationship between occupational stress and EI of medical doctors. The study finds that medical doctors have a medium level of stress. This finding do not support Jens Klein et.al.'s (2011) result, who noted that clinicians had high levels of job stress and this could be account for physicians' and patients' health. Health care professionals compare to other professional possessed higher levels of pressure within their workplace (Rees, D. W. and Cooper, 1992). Hassan Danial Aslam et.al. also reported a high level of stress among private and public hospital's doctors in Pakistan. Hussain and Singh (2002) noted that gynecologists and surgeons had significantly higher perceived stress than the Ophthalmologists. The findings of Ramirez et al (1996) support this view. Saini NK et.al (2010) and Aarti G Sahasrabuddhe et.al (2015) in their study on resident doctors observed high- stress level among them.

The result of ANOVA analysis shows that there is the significant difference in the stress level of doctors' according to their level of EI. This result of the study is in line with Jude's observation. He found that EI had the significant impact on perceived occupational stress and among school

teachers, there was the significant difference between occupational stress with the level (high, medium and low) of EI.

Results of correlation and regression reveal that EI and its five dimensions (Self-awareness, Self-regulation, Motivation, Social-awareness, and Social-skill) are negatively related to occupational stress and have the significant impact on occupational stress. It can be concluded that higher level of EI is related to lower levels of occupational stress. The finding that there is negative relation between EI and occupational stress supports the result of Sunil (2009), NINA OGINSKA-BULIK (2005), Zeynep Kalyoncu (2012) and Maryam Khaniyan et.al (2013) but contradicted the finding of Brand's(2007) and DR. R. Krishnakumar1 and S. Lalitha2( 2014). The study of Deepa Mohan and Sugarcane (2014) also not support the result. They found that stress related to the organization were not influenced by EI and any action taken to enhance EI by the organization to minimize stress would not be materialized. S. K. Singh (2008) found the negative relation between EI and stress for both the genders of medical professionals.

The result pointed that Self Awareness is the significant predictor of occupational stress. This result is consistent with the result of Shojaei (2011), who stated that self-control, cooperation, and self-awareness explained significant variance in occupational stress.

**Conclusion:** Due to the complexity of the nature of work employees have to play multi- facet role, which leads to increased stress among them. In health care delivery

system mental and physical effort of employees are required to run the health care institution. Researches on EI revealed that emotionally intelligent people do extremely well in the workplace (DR. R. Krishnakumar and S. Lalitha, 2014). EI plays a key role in professional and life success. In this regard, the present study seeks to explore the relationship between EI and OS of doctors of West Bengal. The study finds that West Bengal doctors have high medium level of EI and the moderate level of OS. There is the significant negative relation between OS and EI, and its five components. EI and its components have the significant impact on OS. The EI component, Social awareness is the significant predictor of OS of doctors.

The knowledge of the relation between EI and OS help doctors to know their strength and weakness and helps the authority to take stress management strategies to reduce stress/to manage stress level. Every health institution should do

stress audit to plan the stress coping strategy because patients' lives depend on doctor's service if he/she is stressed and depressed than patients life suffer. By proper training and education programme level of EI can be improved, which helps the doctors to manage emotional work better and reduce job stress This, in turn, will help to improve relationships with co-workers, patients, and superior authority.

This study has certain limitation. Due to the small sample size I; it may not possible to get the clear picture of doctors OS and EI relation. The data are collected from one medical college only; hence the result may not be fully generalized.

Occupational stress is an unavoidable part of work life and EI increases performance and efficiency. Future study may be carried out to compare the same relation of doctors of different medical colleges and public and private hospitals. Also, future studies may include other health workers to expand sample. These procedures will add to generalizability of the results.

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