

## **Chapter - Seven**

### **Analysis of Relationship between Occupational Stress, Emotional Intelligence, Locus of Control and Workplace Happiness**

#### **7.1 Introduction**

Today's work life is challenging and complex which brings stress to our life. A certain level of stress is good, it motivates 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 in life and then again unhappiness often added stress also. Quality of life negatively influenced by stress and impacts individuals' physical and mental health (Miller, G. E., & Blackwell, E., 2006).

Research studies show that happiness has multifaceted benefit in our life. It increases social relationship and knowledge (Fredrickson, 1998); performance, salaries, and health (Lyubomirsky et.al. 2005). It is our common belief that stress reduces happiness. If it is true, then to increase happiness it is utmost necessary to reduce the stress level of the individual. There is lack of studies which show that stress management strategies increase happiness. Happiness and stress are opposite dimensions which an individual can feel simultaneously (Schiffrin et.al. 2010). Intelligence especially emotional intelligence plays an important role in managing stress. Stress and strain are innate in the medical profession which may perhaps decrease the happiness of doctors. Goleman (2008) stated that emotional intelligence raised employee's abilities and this could assist to reduce environmental strains (Azman Ismail, 2010). Research shows that success and happiness in all spheres of our lives are determined better by emotional intelligence, than IQ and the ability to manage the felling of own and others. Emotionally intelligent people are able to control workplace stress and behave with co-workers properly. The qualities to control emotion help to increase satisfaction, performance, mental health, relation to workgroups and organizational success. Emotional intelligence helps to control stress and direct to enhance adaptation. It also helps to control hopelessness, moderates depression and suicidal ideation (Reshu Agarwal et.al, 2015).

In healthcare service doctors services are most valuable. So, analysis of doctors' occupational stress and its relation to workplace happiness and emotional intelligence is essential. To know what causes stress and reduce happiness in them is important to improve healthcare delivery system and to adopt proper strategies for stress management.

## **7.2 Primary Objective**

5. To assess the relationship between Locus of Control, Emotional Intelligence, Workplace Happiness and Occupational Stress.

### **7.2.1 Sub- Objectives**

1. To Study the Occupational Stress level of Medical Doctors
2. To identify the relationship between Occupational Stress and Demographic Variables.
3. To identify the relationship between Occupational Stress and Workplace Happiness.
4. To study the relationship between Stressors and Workplace Happiness
5. To study the relationship between Occupational Stress and Emotional Intelligence and its different components.
6. To study the moderator role of Emotional Intelligence on the relationship between Occupational Stress and Workplace Happiness.
7. To study the relationship between Occupational Stress and Locus of Control ((i.e. Internal or External) of medical doctors of North Bengal

## **7.3 Research Hypothesis**

H<sub>05</sub>: There is a negative relation between Occupational Stress, Locus of Control, Emotional Intelligence, and Workplace Happiness.

### **7.3.1 Sub Hypotheses**

The following statistical hypotheses (sub) have been considered for analysis in this chapter:-

#### **7.3.1 .1 Related to Occupational Stress and Workplace Happiness**

- 1: Doctors' have a high level of Occupational Stress.
- 2: There is a significant difference in Occupational Stress level on the basis of Demographic Variables of medical doctors of North Bengal.

3: There is a significant difference in Workplace Happiness on the basis of Occupational Stress.

4: There is a negative relationship between Occupational Stress and Workplace Happiness, and occupational Stress has a significant impact on Workplace Happiness.

5. There is a negative relationship between Stressors and Workplace Happiness

#### **7.3.1.2 Sub Hypotheses Related to Occupational Stress and Emotional Intelligence**

1. There is a significant difference in Occupational Stress on the basis of levels of Emotional Intelligence

2. There is a negative relationship between Occupational Stress and Emotional Intelligence and Emotional Intelligence has a significant impact on Occupational Stress

3. There is a negative relationship between Occupational Stress and Self- Awareness and Self -Awareness has a significant impact on Occupational Stress.

4. There is a negative relationship between Occupational Stress and Self -Regulation and Self- Regulation has a significant impact on Occupational Stress.

5 There is a negative relationship between Occupational Stress and Self- Motivation and Self- Motivation has a significant impact on Occupational Stress.

6. There is a negative relationship between Occupational Stress and Social - Awareness and Social -Awareness has a significant impact on Occupational Stress.

7. There is a negative relationship between Occupational Stress and Social -Skills and Social Skills has a significant impact on Occupational Stress.

8. There is a negative relationship between factors of Emotional Intelligence and Occupational Stress.

9. Emotional Intelligence moderates the relation between Job Stress and Workplace Happiness.

#### **7.3.1. 3 Sub Hypotheses Related to Occupational Stress and Locus of Control**

1: There is a significant difference in Occupational Stress level on the basis of Locus of Control (internal and external)

2: There is a negative relationship between Occupational Stress and Locus of Control (internal & external).

3. Internal Locus of Control moderates the relation between Workplace Happiness and Occupational Stress.

#### **7.4 Findings Related to the Analysis of Relationship between Occupational Stress and Workplace Happiness**

This section deals with the analysis and interpretations related to the objectives and the hypotheses of the relationship between occupational stress and workplace happiness.

##### **7.4.1 Level of Occupational Stress**

**Table 7.1 Level of OS and Interpretation**

<b>Class interval of the score</b>	<b>Upto 30</b>	<b>31-45</b>	<b>46- 65</b>
<b>Interpretation of the score</b>	<b>Low</b>	<b>Moderate</b>	<b>High</b>

**Source: Compiled from survey data**

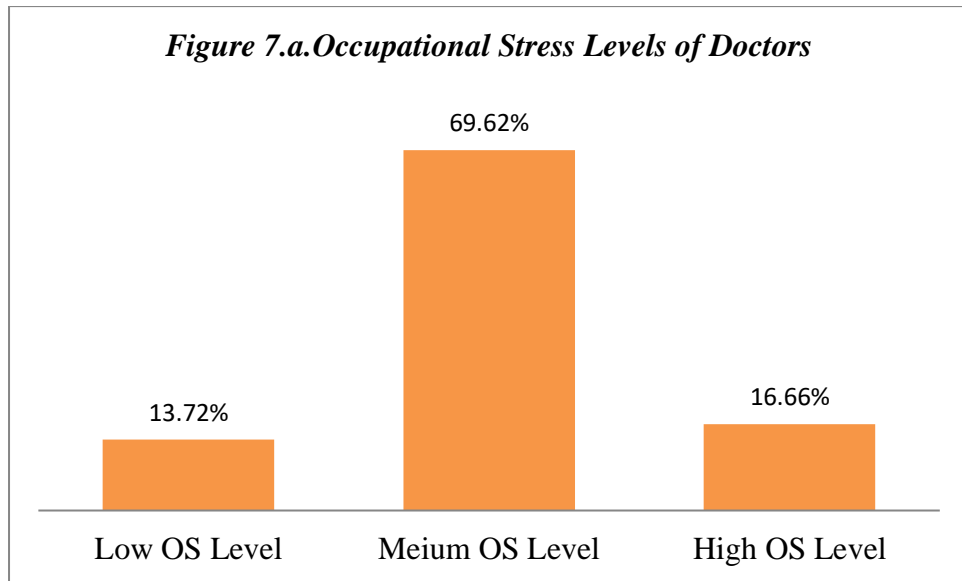
Srivastava's Occupational Stress scale measures stress which uses a 65 point scoring scale. The maximum one respondent can score is 65 and the minimum possible score is 13. Up to 30 scores are considered as low and above 45 are considered as high and 31 to 45 as a medium level of Stress.

**Table - 7.2 Frequency and percentage of Level of OS of Doctors**

<b>OS Level</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
<b>Frequency/Percentage</b>	13.72% (14)	69.62% (71)	16.66% (17)
<b>Mean</b>	<b>24.4286</b>	<b>38.8028</b>	<b>48.8824</b>
<b>SD</b>	<b>4.36268</b>	<b>4.55324</b>	<b>4.67550</b>

**Source: Compiled from survey data**

The table 7.2 reveals that out of 102 respondents 17 (16.66%) have a high level of occupational stress, 70% have a medium level and 14(13.72%) have a low level of occupational stress. A good number of respondents have the medium level of occupational stress. Doctors with high OS have a mean score of 48.88 with a standard deviation of 4.67. Fourteen doctors have low occupational stress with a mean value of 24.42 and standard deviation of 4.36.



### Hypotheses Testing

**Sub-hypothesis one:** Medical doctors have a high level of Occupational Stress

**Table 7.3 One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean	Skewness	Kurtosis
OS	102	38.6765	8.34072	.82585	-.283	.488

**Source: Compiled from survey data**

From the table- 7.3, it can be observed that mean of medical doctors' occupational stress scores is 38.7665. At 95% confidence interval, the upper limit of the occupational stress of this population is 2.3147 and the lower limit is -.9618 (table 7.4).

**Table 7.4 One-Sample Test**

	Test Value = 38					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
OS	.819	101	.415	.67647	-.9618	2.3147

**Source: Compiled from survey data**

To test the hypothesis that medical doctors have a high level of occupational stress, one sample t- test is used. The obtained t is not significant,  $t(101) = .819$ ,  $p = .415$  (table 7.4). Since the  $p$ -value is greater than .05, we can say that population mean is equal to the sample mean; hence the sub- hypothesis one is rejected.

**Inference:** In table 7.4 we see that obtained mean for occupational stress (38.67) is not higher than assumed mean and sig. value is greater than alpha value. It means that doctors of North Bengal medical college do not have a high level of occupational stress and the hypothesis one which postulates that doctors expressed a high level of occupational stress is rejected.

#### 7.4.2 Demographic Variables and Occupational Stress

The table -7. 5 reveals that out of seventeen highly stressed doctors, 30% are female and 70% are male .Among the male doctors, 14% have high- stress level and 31% of female doctors have a high level of stress. The percentage (67%) of low occupational stress level is higher among male doctors.

The table-7.5 shows that among the youngest doctors 2% (out of 62) have a high-stress level and in the survey, there are no aged doctors who have a high occupational stress level. Doctors in the age range 41-50 (40%) are highly stressed. Most of the young doctors have a medium level of stress.

**Table 7.5 Frequency and Percentage Analysis of occupational Stress of Doctors Based on Demographic Variables**

Variables	Low	Medium	High
<b>Gender:</b>			
Female	2(14%)	9(13%)	5(30%)
Male	12(86%)	62(87%)	12(70%)
<b>Age Range:</b>			
25-30	5(36%)	47(66%)	10(59%)
31-40	4(29%)	14(20%)	1(6%)
41-50	4(29%)	5(7%)	6(35%)
>50	1(6%)	5(7%)	Nil
<b>Education Standard:</b>			
Bachelor(Graduate)	6(43%)	31(44%)	5(30%)
Master (Post Graduate)	8(57%)	40(56%)	12(70%)
<b>Experience</b>			
1-3	6(44%)	46(65%)	9(53%)
4-7	2(14%)	9(13%)	3(18%)
8-11	2(14%)	5(7%)	1(6%)
>11	4(28%)	11(15%)	4(24%)

Source: Compiled from survey data

Out of 17 highly stressed doctors, 30% (table-7.5) have a bachelor degree and 70% doctors have a master degree. Among the postgraduate doctors, 20% have a high-stress level and 12% of graduate doctors have a high level of occupational stress. The percentage (14%) of a low level of occupational stress is high among graduate doctors.

Among the highly stressed doctors, 53% have one to three years of experience in service and 6% have experience of eight to eleven years. Junior doctors are dominant in all three stress groups. It may be that in the survey a maximum number of respondents have experience in service one to three years.

**Sub-hypothesis two;** There is a significant difference in OS level on the basis of demographic variables of Medical Doctors of North Bengal.

#### 7.4.2. 1 Variance in Occupational Stress of Doctors' Based on Gender

**Table 7.6 Mean of Stress of Doctors Based on Gender**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Female	16	41.0000	10.16530	2.54133	35.5833	46.4167	23.00	62.00
Male	86	38.2442	7.95123	.85740	36.5394	39.9489	13.00	54.00
Total	102	38.6765	8.34072	.82585	37.0382	40.3147	13.00	62.00

Source: Compiled from survey data

The table 7.6 shows that in the sample mean of occupational stress scores of female and male doctors are 41 and 38.24 respectively. At 95% confidence interval, in the population, the upper limit of the mean of occupational stress scores of female doctors is 46 and of male doctors is 39. In the population, the lower limit of the mean of occupational stress scores of female medical doctors is 35.58 and the mean of occupational stress scores of male medical doctors is 36.

**Table 7.7 ANOVA Analysis Based on Gender Variation**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	102.451	1	102.451	1.480	.227
Within Groups	6923.872	100	69.239		
Total	7026.324	101			

Source: Compiled from survey data

In the table 7.7, we find that the probability calculated ( $p=.227$ ) is greater than  $ALFA=0.05$ . Hence, we conclude that our experiment does not provide evidence that the difference between the level of occupational stress of female and male medical doctors is statistically significant in the population.

#### 7.4.2.2 Variance in Occupational Stress of Doctors' Based on Age

**Table 7.8 Mean of OS of Doctors Based on Age**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
25-30	62	38.1774	6.94126	.88154	36.4147	39.9402	23.00	54.00
31-40	19	39.5263	7.19852	1.65145	36.0567	42.9959	22.00	50.00
41-50	15	41.8000	12.38201	3.19702	34.9431	48.6569	19.00	62.00
>50	6	33.3333	11.50072	4.69515	21.2641	45.4026	13.00	44.00
Total	102	38.6765	8.34072	.82585	37.0382	40.3147	13.00	62.00

Source: Compiled from survey data

In table 7.8, we find that in the sample doctors who are under age group of 25-30 years, mean of occupational stress scores of that group is 38.17, the upper and lower limit (at 95% confidence limit) of the mean is 39.94 and 36.41 respectively. The mean of occupational stress of those who are under age group of 31-40 is 39.52. The upper and lower limit (at 95% confidence limit) of this mean is 42.99 and 36 respectively. The mean of occupational stress of those who are under age of 41-50 years is 41.80. The upper and lower limit (at 95% confidence limit) of this mean is 48.65 and 34.94 respectively. The mean of occupational stress of those who are above 50 years is 33.33. The upper and lower limit (at 95% confidence limit) of this mean is 45.40 and 21.26 respectively.

From the table- 7.9, it can be concluded that there is no significant difference in the mean score of occupational stress of medical doctors having a different age group in the profession. This is because significant value calculated ( $p=.173$ ) is greater than  $ALFA=0.05$ .



**Table 7.9 ANOVA Analysis Based on Age Variation**

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	<b>346.805</b>	<b>3</b>	<b>115.602</b>	<b>1.696</b>	<b>.173</b>
<b>Within Groups</b>	<b>6679.519</b>	<b>98</b>	<b>68.158</b>		
<b>Total</b>	<b>7026.324</b>	<b>101</b>			

Source: Compiled from survey data

**7.4.2.3 Variance in Occupational Stress of Doctors' Based on Education Standard**

**Table 7.10 Mean of OS of Doctors Based on Education**

	No.	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
<b>Graduate</b>	<b>42</b>	<b>37.8333</b>	<b>7.19728</b>	<b>1.11056</b>	<b>35.5905</b>	<b>40.0762</b>	<b>24.00</b>	<b>54.00</b>
<b>Post Graduate</b>	<b>60</b>	<b>39.2667</b>	<b>9.06823</b>	<b>1.17070</b>	<b>36.9241</b>	<b>41.6092</b>	<b>13.00</b>	<b>62.00</b>
<b>Total</b>	<b>102</b>	<b>38.6765</b>	<b>8.34072</b>	<b>.82585</b>	<b>37.0382</b>	<b>40.3147</b>	<b>13.00</b>	<b>62.00</b>

Source: Compiled from survey data

As recorded in the table -7.10, in the sample, it is observed that medical doctors who have post graduation degree have a high level of occupational stress. The mean of occupational stress of those who have post graduation degree in medical science is 39.26. The upper and lower limit (at 95% confidence limit) of this mean is 41.60 and 36.92 respectively. The mean level of OS of those who have a bachelor degree in medical science is 37.83. The upper and lower limit (at 95% confidence limit) of this mean is 40 and 35.59 respectively.

**Table 7.11 ANOVA Analysis Based on Education Variation**

	Sum of Squares	Df	Mean Square	F	Sig.
<b>Between Groups</b>	<b>50.757</b>	<b>1</b>	<b>50.757</b>	<b>.728</b>	<b>.396</b>
<b>Within Groups</b>	<b>6975.567</b>	<b>100</b>	<b>69.756</b>		
<b>Total</b>	<b>7026.324</b>	<b>101</b>			

Source: Compiled from survey data

From the table 7.11, it can be concluded that there is no significant difference in the mean score of the occupational stress of medical doctors having a different educational qualification. This is because significant value calculated ( $p=.396$ ) is greater than  $ALFA=0.05$ .

#### 7.4.2.4 Variance in Occupational Stress of Doctors' based on Experience in Service

**Table 7.12 Mean of Stress of Doctors Based on Experience**

	No.	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1-3	61	38.8525	6.73012	.86170	37.1288	40.5761	23.00	54.00
4-7	14	39.2857	8.11863	2.16979	34.5982	43.9733	22.00	53.00
8-11	8	36.2500	8.43039	2.98059	29.2020	43.2980	24.00	48.00
>11	19	38.6842	12.69319	2.91202	32.5663	44.8021	13.00	62.00
<b>Total</b>	<b>102</b>	<b>38.6765</b>	<b>8.34072</b>	<b>.82585</b>	<b>37.0382</b>	<b>40.3147</b>	<b>13.00</b>	<b>62.00</b>

Source: Compiled from survey data

From the table -7.12, we find that, mean of occupational stress of those who have 1 to 3 years of service experience is 38.85. The upper and lower limit (at 95% confidence limit) of this mean is 40.57 and 37.12 respectively. The mean of occupational stress of those who have 4 to 7 years of service experience is 39.285. The upper and lower limit (at 95% confidence limit) of this mean is 43.97 and 34.59 respectively. The mean of the occupational stress of those who have 8 to 11 years of service experience is 36.25. The upper and lower limit (at 95% confidence limit) of this mean is 43.97 and 34.59 respectively. The mean score of occupational stress of those who have above 11 years of service experience is 38.68. The upper and lower limit (at 95% confidence limit) of this mean is 44.80 and 37.03 respectively.

**Table 7.13 ANOVA Analysis Based on Experience Variation**

	Sum of Squares	Df	Mean Square	F	Sig.
<b>Between Groups</b>	<b>54.189</b>	<b>3</b>	<b>18.063</b>	<b>.254</b>	<b>.858</b>
<b>Within Groups</b>	<b>6972.135</b>	<b>98</b>	<b>71.144</b>		
<b>Total</b>	<b>7026.324</b>	<b>101</b>			

Source: Compiled from survey data

From table -7.13, it can be concluded that there is no significant difference in the mean score of occupational stress of medical doctors having different years of

service in the profession. This is because significant value calculated ( $p=.858$ ) is greater than  $ALFA=0.05$ .

**Inference:** We conclude that our experiment does not provide evidence that the difference in occupational stress on the basis of demographic variables is statistically significant in the population. Thus we reject the hypothesis that there is a significant difference in occupational stress on the basis of demographic variables (Gender, age education, and experience) of Medical Doctors of North Bengal.

#### 7.4.3 Variance in Workplace Happiness on the Basis of Occupational Stress

**Sub-hypothesis three:** There is a significant difference in Workplace Happiness on the basis of Occupational Stress.

**Table 7.14 Workplace Happiness Profiles of Doctors on the Basis of OS**

OS/Workplace Happiness	Low	Medium	High
Very unhappy	Nil	Nil	8
Unhappy	Nil	9	1
Moderate	Nil	30	3
Happy	5	31	5
Very Happy	9	1	Nil

**Source: Compiled from survey data**

The table -7.14 reveals that all the doctors of the low occupational stress of the survey belong to the happy group and all the very unhappy doctors have a high occupational stress level .Five doctors who are happy, are also highly stressed.

**Table 7.15 Mean of Workplace Happiness of Doctors Based on OS**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Low	14	79.4171	14.62475	3.90863	70.9731	87.8612	44.59	99.15
Medium	71	58.9723	13.70136	1.62605	55.7292	62.2153	28.92	80.02
High	17	32.8671	27.48315	6.66564	18.7365	46.9976	1.56	73.77
Total	102	57.4275	21.15484	2.09464	53.2723	61.5828	1.56	99.15

**Source: Compiled from survey data**

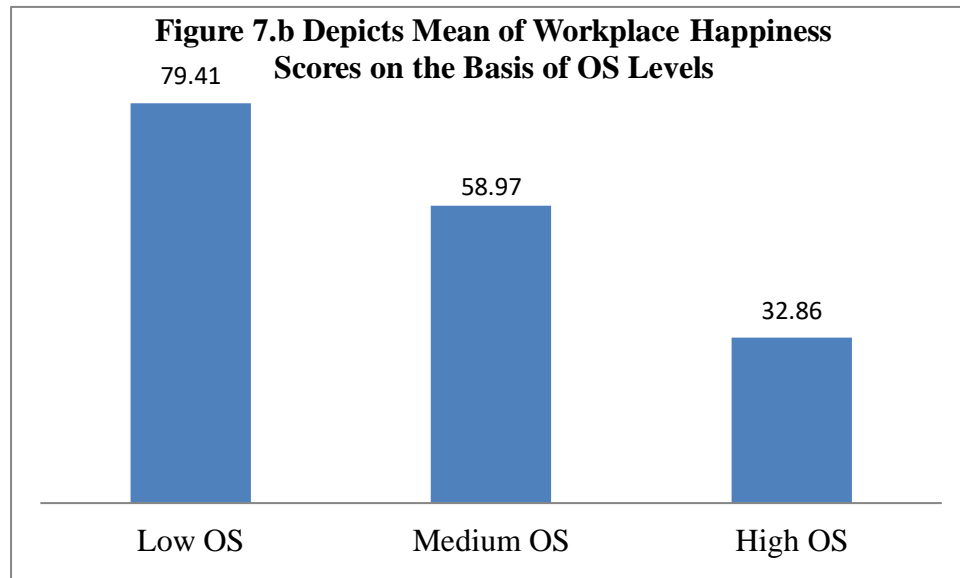


Table 7.15 indicates that, mean of happiness of those who have a low occupational stress level is 79.41 with SD 14.62. The upper and lower limit (at 95% confidence limit) of this mean is 87.86 and 70.97 respectively. The mean of workplace happiness of those who have a medium occupational stress is 58.97 and SD is 13.70. The upper and lower limit (at 95% confidence limit) of this mean is 62.21 and 55.72 respectively. The mean of workplace happiness of those who have a high occupational stress is 32.86 and SD is 27.48. The upper and lower limit (at 95% confidence limit) of this mean is 46.99 and 18.73 respectively.

**Table 7.16 Anova Analysis Based on stress of Doctors**

	Sum of Squares	Df	Mean Square	F	Sig.
<b>Between Groups</b>	<b>17193.706</b>	<b>2</b>	<b>8596.853</b>	<b>30.389</b>	<b>.000</b>
<b>Within Groups</b>	<b>28006.558</b>	<b>99</b>	<b>282.895</b>		
<b>Total</b>	<b>45200.264</b>	<b>101</b>			

**Source: Compiled from survey data**

In the table- 7.16 we see that the probability calculated ( $p = .000$ ) is less than  $ALFA = 0.05$ . Hence, we conclude that our experiment does provide evidence that the difference between the levels of happiness on the basis of occupational stress among doctors is statistically significant in the population.

**Inference:** Thus we accept the null hypothesis and conclude that there is a significant difference in happiness among doctors on the basis of occupational stress or we can say that happy medical doctors are less stressed.

**Sub-hypothesis four:** There is a negative relation between Occupational Stress and Workplace Happiness, and Occupational Stress has a significant impact on Workplace Happiness.

**Table 7.17 Summary of Regression Analysis**

Model summary		Annova		Regression coefficient		Dubin-watson	Vif
R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig	R	Sig	2.01	1
.410	.404	69.418	.000	-.640	.000		

**Source: Compiled from survey data, Dependent variable happy**

To test the relationship between workplace happiness and occupational stress we used regression analysis. The summary of regression analysis (table -. 7.17) shows that the R<sup>2</sup> value is .410 which means that 41% of the variance in workplace happiness is caused by the occupational stress of the doctors. The F statistics in the table (7.17) also indicates that the significance level is less than .05. It proves the hypothesis that occupational stress has a strong impact on workplace happiness.

The regression coefficient between workplace happiness and occupational stress is -.640 (table 7.17). Since the value of r (-.640) is greater than r=.5 and sig. value (p) is less than .05, we shall accept the null hypothesis. At the Alpha = 0.05 level of significance, there exists adequate proof to infer that occupational stress has a negative impact on workplace happiness.

**Inference Drawn:** We can conclude that our experiment does provide evidence that occupational stress is negatively related to workplace happiness is statistically significant and it has an impact on the workplace happiness of the medical doctors.

#### **7.4.4 Relation between Workplace Happiness and Occupational Stress**

**Sub-hypothesis five:** There is a negative relation between Stressors and Workplace Happiness.

Table- 7.18 shows the factors of occupational stress and their mean and standard deviation. According to the responses of respondents' calculated mean is used to rank the factors of stress. The five most important factors of stress are workload, peer-relation, time, work-overload and work- life balance. The table also

reveals that 37% of respondents have a high occupational stress on workload, peer-relation is the factor of high occupational stress stressor of 30% doctors ; 25% doctors reported that time management causes them high occupational stress . Only 25% respondent informed that they were stressed in explaining responsibilities to a new employee.

**Table -7.18 Descriptive Statistics of Stressors**

Stressor	MEAN	SD	RANK	Response as high
I am delegated some extra responsibilities in addition to my prescribed ones	4.0196	.96452	1	37%
I get irritated in explaining to new personnel about their work and responsibilities	2.1765	1.08465	12	2%
I feel that I am not fully capable and competent to bear out my job responsibilities effectively.	1.9706	1.12096	13	4%
I have to give extra time due to excessive work load	3.5980	1.11923	3	25%
I am to do some such tasks as ought to be done by others	3.3431	1.03880	4	12%
It becomes very difficult for me satisfy everyone in distribution of work and responsibilities	3.7059	1.11327	2	30%
It becomes difficult and dubious for me to take decision in crucial matters pertaining to subordinates' service	3.0490	1.06592	6	8%
A big burden of supervision and control of a number of employees is on me	2.5196	1.6662	10	7%
I have to be ultimately responsible for the performance of a number of employees.	2.8687	1.34267	8	15%
I have given major responsibility of formulation and/or implementation of important policies.	2.8431	1.34050	9	14%
Having excessive job responsibilities, I find it difficult to give sufficient time to my family and friend circle.	3.1078	1.42750	5	24%
I have to take crucial decisions in the matter of employees' grievances, transfers and/or promotions.	2.4706	1.39806	11	10%
I am given responsibilities of solving crucial/emergent problems of the department/ organization	3.0098	1.27811	7	14%

Sources: Compiled from survey data

**Table- 7.19 Correlation coefficients between doctors' workplace happiness and stressors**

Stressor	Pearson correlation	Sig.
I am delegated some extra responsibilities in addition to my prescribed ones	-.322**	.001
I get irritated in explaining to new personnel about their work and responsibilities	-.174	.080
I feel that I am not fully capable and competent to bear out my job responsibilities effectively.	-.294**	.003
I have to give extra time due to excessive work load	-.356**	.000
I am to do some such tasks as ought to be done by others	-.441**	.000
It becomes very difficult for me satisfy everyone in distribution of work and responsibilities	-.386**	.000
It becomes difficult and dubious for me to take decision in crucial matters pertaining to subordinates' service	-.411**	.000
A big burden of supervision and control of a number of employees is on me	-.340**	.000
I have to be ultimately responsible for the performance of a number of employees.	-.347**	.000
I have given major responsibility of formulation and/or implementation of important policies.	-.374**	.000
Having excessive job responsibilities, I find it difficult to give sufficient time to my family and friend circle.	-.375**	.000
I have to take crucial decisions in the matter of employees' grievances, transfers and/or promotions.	-.354**	.000
I am given responsibilities of solving crucial/emergent problems of the department/ organization	-.329**	.001

Sources: Compiled from Survey data; Dependant Variable Workplace Happiness; \*\*Correlation is significant at 0.01 level (2 tailed)

The results of the Pearson correlation test presented in table 7.19 depicts that out of thirteen factors of occupational stress twelve factors are negatively and significantly related to workplace happiness. The strengths of the correlation are between  $r = -.329$  to  $r = -.411$ . Since the alpha values are less than .01 we can accept the null hypothesis and reject alternative hypothesis.

**Interference:** We conclude that our experiment provides evidence that all the factors of stress/stressors, except one, are negatively related to workplace happiness. The strength of association indicates that all these twelve factors have medium to high impact to reduce job happiness among medical doctors.

#### **7.4.5 Discussion**

The objectives of this section of the research are to explore the relationship between occupational stress and workplace happiness of medical doctors. The one sample t- test's result reveals that doctors of North Bengal medical college do not have a high level of occupational stress. They have a medium level of occupational stress. This finding does not support Jens Klein et.al. (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 hospitals 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.

Data on occupational stress across gender indicates that female have higher mean score than male but this difference statically is not significant. This finding is consistent with the result of Zeynep Kalyoncu et.al (2012) and the study of HIRAK Dasgupta and Suresh Kumar (2009) .They also found that there was no difference between the stress levels of male and female doctors. The finding contradicts the result of Abbas Sadeghi1 et.al.(2016) and Irfana Baba (2012). Their descriptive statistics result showed that compare to female teacher male teacher had higher job stress. Rashmi Gupta and Dr. Vilas Chopde (2011) observed significant positive relationships between respondents gender and work stress.

The result of ANOVA analysis of occupational stress based on age reveals that there is no significant difference among the mean of occupational stress on the basis of age groups. This finding do not support the result of Dragana MILUTINOVIĆ et.al (2012) and Zeynep Kalyoncu, et.al. (2012) who found significant differences between occupational stress and age range. They reported that compare to older people younger people had a high-stress level.

The results of ANOVA analysis of occupational stress based on educational qualification and experience in service reveal that there is no significant difference



between the mean of occupational stress of having different educational levels and experience in service. The present study does not support the result of Zeynep Kalyoncu, et.al. (2012 ) that education significantly affects the perception of stress.

A British Medical Association (BMA) report (2000) suggested that many senior doctors suffered high level of stress as a result of their work which directly hampered their ability to provide high-quality care to patients. Spurgeon et. al (2005) in a study on stress among Government hospitals found that older medical practitioners were more stressed by the new contract demands in comparison to younger doctors, and among younger doctors impractical demands of patients raised their stress level.

In the present study, the non-significant differences in the demographic variables (Gender, age, educational qualification and experience in service) observed, it is possibly due to the score of occupational stress . If the item of occupational stress differ it is possible that some significant result may get. The small sample size may also be the reason for the non-significance of the variance.

The result of ANOVA analysis shows that there is a significant difference in the mean of workplace happiness of doctors' according to their levels of occupational stress. Results of regression and correlation reveal that occupational stress and its factors are negatively related to workplace happiness and occupational stress have a significant impact on workplace happiness. It can be concluded that higher level of occupational stress is related to lower level of workplace happiness. The finding that there is the inverse relationship between workplace happiness and occupational stress supports the result of Abdullah Omidi Hossein Akbari, Mehrdad Mahdian (2010), Schiffrin & Nelson (2010) and Blanchflower DG, Oswald AJ (2008). Findings of the present research show that those who fell very unhappy are highly stressed and the occupational level is low among the very happy individual. Hussain (2001) noticed that the stress effects associated with stressful situations did not influence the psychological well being among surgeons.

The present study has identified that workload, peer-relation, time, work-overload and work-life balance are the five most important sources of the stress of medical doctors. This result is in line with most of the previous researches findings (such as Burbeck et. al 2002 and Schattner et. al 1998 ). Research studies stated that

there were many causes correlated with the occupational stress of doctors/general practitioners.

## 7.5 Findings Related to the Relationship between Occupational Stress and Emotional Intelligence

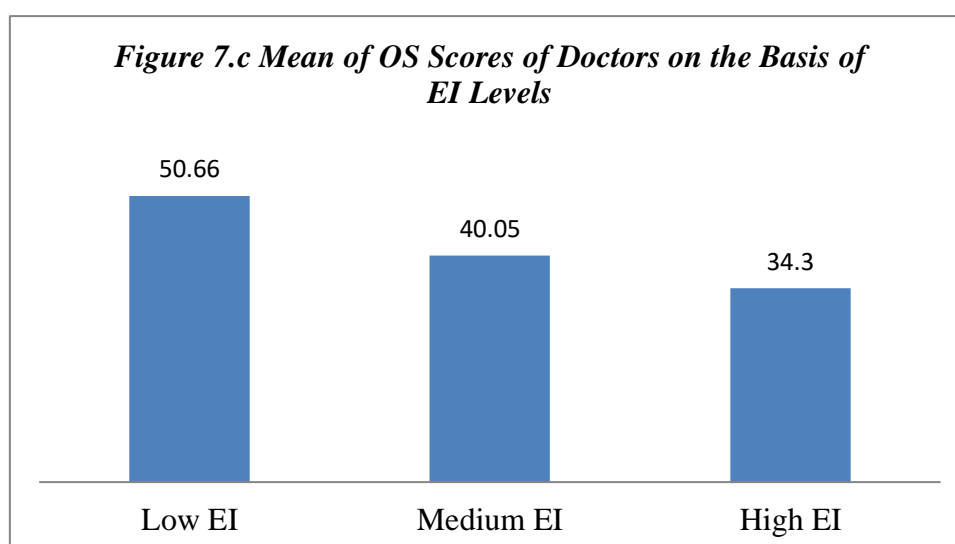
### 7.5.1 Variance in Occupational Stress on the Basis of Emotional Intelligence

In this section sub- hypothesis one that there is a significant difference in Occupational Stress on the basis of Emotional Intelligence levels is tested.

**Table 7.20 Mean of Occupational Stress of Doctors Based on EI Levels**

	No.	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Low	3	50.6667	.57735	.33333	49.2324	52.1009	50.00	51.00
Medium	69	40.0580	6.98503	.84090	38.3800	41.7360	27.00	62.00
High	30	34.3000	9.41441	1.71883	30.7846	37.8154	13.00	47.00
Total	102	38.6765	8.34072	.82585	37.0382	40.3147	13.00	62.00

Sources: Compiled from survey data



From the table -7.20 we find that the mean of occupational stress of those who have a low emotional intelligence is 50.66 with SD .57735. The upper and lower limit (at 95% confidence limit) of this mean is 52.10 and 49.23 respectively. The mean of the occupational stress of those who have a medium emotional intelligence level is 40.05 and SD is 6.98. The upper and lower limit (at 95% confidence limit) of

this mean is 41.73 and 38.38 respectively. The mean of the occupational stress of those who have a high emotional intelligence is 34.33 and SD is 9.41. The upper and lower limit (at 95% confidence limit) of this mean is 37.81 and 30.78.

**Table 7.21 ANOVAs Analysis Based on EI of Doctors**

	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	<b>1137.589</b>	<b>2</b>	<b>568.794</b>	<b>9.562</b>	<b>.000</b>
<b>Within Groups</b>	<b>5888.735</b>	<b>99</b>	<b>59.482</b>		
<b>Total</b>	<b>7026.324</b>	<b>101</b>			

**Sources: Compiled from survey data**

The result of ANOVA (table 7.21) shows that the probability calculated ( $p=.000$ ) is less than  $\alpha=0.05$ . Hence, we conclude that our experiment provides evidence that the difference among the mean of occupational stress on the basis of emotional intelligence levels among doctors is statistically significant in the population.

**Inference:** We can accept the null hypothesis that there is a significant difference in the occupational stress among doctors on the basis of emotional intelligence levels and conclude that doctors who have a high level of emotional intelligence are less prone to occupational stress.

### **7.5.2 Relation between Occupational Stress and Emotional Intelligence**

To study the relationship between occupational stress and emotional intelligence six hypotheses are built. The occupational stress of medical doctors is dependent variable and emotional intelligence and its five components are considered as independent variables. To perform linear regression, in consideration of obtaining best analytical model; the average of the items of the construct is taken. The regression result gives an explanation of the variations in the dependent variable based on the variations in the independent variables. Hypotheses are accepted when calculated probability is less than  $\alpha=.05$  at 95% confidence level.

**Sub-Hypothesis two:** There is a negative relation between Occupational Stress and Emotional Intelligence and Emotional Intelligence has a significant impact on occupational stress.

**Table 7. 22 Summary of Regression Analysis (Emotion )**

Model summary		Annova		Regression coefficient		Durbin-Watson	Vif
R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig	R	Sig	1.946	1
.270	.263	36.965	.000	-.520	.000		

**Source : Compiled from Survey Data**

The Summary of regression analysis (table7.22) shows that the R<sup>2</sup> value is .263 which means that 26 % of the variance in workplace happiness is caused by the occupational stress of the doctors.

The F statistics and t statistics in the table (table7.22) show that p -values (p=.000) are less than the assumed level of significance .05. We shall accept the sub-hypothesis and hence it can be said that the emotional intelligence of the medical doctors has a significant influence on occupational stress.

The regression coefficient between occupational stress and emotional intelligence is -.520 (Table 7.22). Since the value is higher than r=.5 it suggests a strong negative correlation between occupational stress and emotional intelligence. It is inferred that as the emotional intelligence of the doctors increases the level of stress decreases.

**Inference Drawn:** The sub- hypothesis is proved. It means that emotional intelligence of the doctors of medical college has a strong impact on occupational stress. A high level of emotional intelligence enables doctors to communicate better with their colleagues, principal, nurse, subordinates, and patients.

**Sub-hypothesis three:** There is a negative relationship between Occupational Stress and Self -Awareness and Self -Awareness has a significant impact on Occupational Stress.

The Summary of regression analysis (table7.23) shows that the R<sup>2</sup> value is .417 which means that 41 % of the variance in stress is caused by the self- awareness component of emotional intelligence of the doctors. The F statistics and t statistics in the table (table7.23) show that p -values (p=.000) are less than the assumed level of

significance .05. We shall accept the sub- hypothesis and hence it can be said that the self-awareness of the doctors has a significant influence on medical doctors' occupational stress.

**Table 7.23 Summary of Regression Analysis of (Self Awareness)**

Model summary		ANOVAs		Regression coefficient		Durbin-Watson	Vif
R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig	R	Sig	1.706	1
.417	.163	20.732	.000	-.414	.000		

**Source: Compiled from Survey Data**

The regression coefficient between occupational stress and self-awareness is -.414 (Table 7.23). Since the value is higher than  $r=.3$  it suggests a strong negative correlation between occupational stress and self-awareness component of emotional intelligence. It is inferred that as self-awareness among doctors increases the level of occupational stress decreases.

**Inference :** Analysis of data s proves that self-awareness of the doctors of medical college has a strong impact on occupational stress. Self-awareness (knowing oneself in terms of beliefs, attitudes, norms, and values) is an important and basic quality of doctors (Eskin 1980). A high level of self-awareness may help one to manage efficiently oneself and then be competent to manage others in the difficult situation.

**Sub-hypothesis four:** There is a negative relationship between Occupational Stress and Self-Regulation and Regulation has a significant impact on Occupational Stress.

The Summary of regression analysis (table7.24) shows that the R<sup>2</sup> value is .097 which means that 9 % of the variance in occupational stress is caused by the self-regulation of the doctors.

The F statistics and t statistics in the -table 7.24 show that p-values ( $p=.000$ ) are less than the assumed level of significance .05. We shall accept the null hypothesis and hence it can be said that the self-regulation of the doctors has a significant influence on medical doctors' occupational stress.

**Table 7.24 Summary of Regression Analysis of (Self -Regulation)**

Model summary		ANOVAs		Regression coefficient		Durbin-Watson	Vif
R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig	R	Sig	1.851	1
.097	.088	10.725	.001	-.311	.000		

**Source: Compiled from Survey Data**

The regression coefficient between occupational stress and self-regulation is -.311 (Table7.24). Since the value is equal to  $r=.3$  it suggests a moderate negative correlation between occupational stress and self regulation component of emotional intelligence. It is inferred that as self -regulation among doctors increases the level of occupational stress decreases.

**Inference Drawn:** The sub- hypothesis is accepted and we can infer that self-regulation dimension of emotional intelligence of the doctors of medical college has a strong impact on occupational stress. A high level of self -regulation enables doctors to manage their strengths and weaknesses. The ability to perceive oneself as good is essential for relating well to others (Claudia S. P. Fernandez et.al.).

**Sub-hypothesis five:** There is a negative relationship between Occupational Stress and Self- Motivation and Self -Motivation has a significant impact on Occupational Stress.

**Table 7.25 Summary of Regression Analysis (Self Motivation )**

Model summary		ANOVAs		Regression coefficient		Durbin-Watson	Vif
R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig	R	Sig	1.876	1
.167	.159	20.088	.001	-.409	.000		

**Source: Compiled from survey data**

The Summary of regression analysis (table7.25) shows that the R<sup>2</sup> value is .167 which means that 16 % of the variance in occupational stress is caused by the self- motivation of the doctors.

The F statistics and t statistics in the table (table 7.25) show that p- values (p=.000) are less than the assumed level of significance .05. We shall accept the sub-hypothesis and hence it can be said that the self -motivation of the doctors has a significant influence on medical doctors’ occupational stress.

The regression coefficient between occupational stress and self- motivation is -.409 (Table 7.25). Since the value is greater than  $r=.3$  it suggests a strong negative correlation between occupational stress and self- motivation of emotional intelligence. It is inferred that as self –motivation among doctors increases the level of occupational stress decreases.

**Inference Drawn:** We can conclude that our experiment provides evidence that self-motivation dimension of emotional intelligence of the doctors of medical college has a strong impact on occupational stress. A high level of self- motivation enables doctors to be positive and look at the brighter side of life. They are comfortable with oneself, patients, nurse and with their colleague and with life in general.

**Sub-hypothesis six:** There is a negative relationship between Occupational Stress and Social Awareness and Social -Awareness has a significant impact on Occupational Stress.

**Table 7.26 Summary of Regression Analysis of (Social- Awareness)**

Model summary		ANOVAs		Regression coefficient		Durbin-Watson	Vif
R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig	R	Sig	1.788	1
134	.126	15.537	.000	-.367	.000		

**Source: Compiled from survey data**

The Summary of regression analysis (table7.26) shows that the R<sup>2</sup> value is .134 which means that 13 % of the variance in occupational stress is caused by the social- awareness of the doctors.

The F statistics and t statistics in the table (table 7.26) show that p- values (p=.000) are less than the assumed level of significance .05. We shall accept the sub-hypothesis and hence it can be said that the social- awareness among the doctors has a significant influence on medical doctors’ occupational stress.

The regression coefficient between occupational stress and social- awareness is  $-.367$  (table 7.26). Since the value is greater than  $r=.3$  it suggests a strong negative correlation between the occupational stress and social -awareness of emotional intelligence. It is inferred that as social -awareness of doctors increases the level of stress decreases.

**Inference:** Analysis of data proves that social- awareness of the doctors of medical college has a strong impact on occupational stress. A high level of social -awareness among doctors enable to be empathic, aware of the organization matter and service oriented which in turn helps to reduce occupational stress.

**Sub-hypothesis seven:** There is a negative relationship between Occupational Stress and Social -Skills and Social-Skills has a significant impact on Occupational Stress.

**Table 7.27 Summary of Regression Analysis (Social -Skills)**

Model summary		ANOVAs		Regression coefficient		Durbin-Watson	Vif
R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig	R	Sig	1.996	1
.145	.137	16.975	.000	-.381	.000		

**Source: Compiled from survey data**

The Summary of regression analysis (table7.27) shows that the R<sup>2</sup> value is .145 which means that 14.5 % of the variance in occupational stress is caused by the social- skill of the doctors.

The F statistics and t statistics in the table 7.27 show that p- values ( $p=.000$ ) are less than the assumed level of significance .05. We shall accept the null hypothesis and hence it can be said that the social- skills of the doctors has a significant influence on medical doctors' occupational stress.

The regression coefficient between occupational stress and social skill is  $-.381$  (Table 7.27). Since the value is greater than  $r=.3$  it suggests a strong negative correlation between the occupational stress and social - skill dimension of emotional intelligence. It is inferred that as the social -skill of doctors increases the level of occupational stress decreases.



**Inference:** Analysis of data in the study proves that social -skill dimension of emotional intelligence of the doctors of medical college has a strong impact on the occupational stress. Social- Skills dimension of emotional intelligence includes leadership quality, control, encouraging others, change catalyst, communication, conflict management, building bonds, teamwork and collaboration (Deepa Nair,2012).All these qualities enable doctors to reduce their occupational stress.

**Sub-hypothesis eight:** There is a negative relationship between factors of Emotional Intelligence and Occupational Stress.

**7.28 Coefficient of Multiple Regressions**

Variable	B	Beta	T	Sig	Tolerance	Vif
SA	-2.966	-.261	-2.689	.008	.783	1.277
SM	-.487	-.062	-.624	.534	.740	1.351
SR	-1.197	-.160	-1.513	.134	.655	1.527
SCA	-.771	-.090	-.813	.418	.606	1.649
SK	-1.446	-.177	-1.622	.108	.619	1.614

**Source: Compiled from survey data; Dependent Variable: Stress**

Table 7.28 shows the coefficient of multiple regressions where occupational stress is the dependent variable and components of emotional intelligence are predictors. The obtained t is significant,  $t(101) = -2.689, p = .008$  (table 6.16) for self-awareness. Among the five components of emotional intelligence only for self-awareness the  $p$ -value is less than .05 and it is the significant predictor of occupational stress. Sub-hypothesis nine can be accepted and we can conclude that factors of emotional intelligence are negatively related to occupational stress but the relationship is statistically significant for self – awareness factor of emotional intelligence.

### **7.5.3 Moderator Role of Emotional Intelligence on the Relationship between Occupational Stress and Workplace Happiness**

**Sub-hypothesis nine:** Emotional intelligence moderates the relationship between occupational stress and workplace happiness.

To test the moderating effects of emotional intelligence on the relationship between occupational stress and workplace happiness hierarchical regression (recommended by Baron and Kenny, 1986) is done. To reduce the problem of multicollinearity the dependent variable and independent variable are centralized (Fazier, Tix and Baron, 2004). Tolerance values of less than .10 and VIF (Variance

Inflation Factor) values of greater than 10 show a multicollinearity problem (Cohen, Cohen, West, & Aiken, 2003) in regression analysis. In this study, the tolerance values are between .172 and 1, and the VIF values are between 1 and 5.80. These results indicate that there is no problem with multicollinearity (Asım Çivitci, 2015).

**Table 7.29 The Results of Hierarchical Regression Analysis for the Moderating Effects of EI on the Relationship between Occupational stress and workplace happiness**

Variable	B	Beta	T	R <sup>2</sup>	R <sup>2</sup> Change
Step-1 Occupational stress	-21.106	-.640	-8.332*	.410**	.410**
Step-2 Occupational stress EI	-16.358 8.283	-.496 .277	-5.771** 3.224**	.466**	.056**
Step-3 Occupational stress EI Occupational stress*EI	-30.735 7.477 7.035	-.532 .250 .471	-5.467** 3.001** 2.926**	.509**	.043**

**Source: Compiled from survey data; Dependant variable: Workplace Happiness**

In step one of the hierarchical regressions first entered the predictor variable occupational stress, for the second step of the regression equation; the moderator variable emotional intelligence is entered. The interaction of predictor and moderator variable is entered in the third step into the regression equation. In table- 7.29, in step one, the independent variable occupational stress explains 41% variance in dependent variable i.e. workplace happiness. In step 2 when emotional intelligence is added to the equation the R Square is significant and explains 46.6% variance. In step-3 when interaction effect of emotional intelligence on occupational stress is added R square is then also significant and explains 50.9% variance and R square change has increased by .043(table-7.29) in step-three. Thus it confirms that emotional intelligence acts as a moderator between the relationship occupational stress and workplace happiness.

The table 7.29 reveals that in step one occupational stress ( $\beta = -.640, p < .001$ ) has a significant negative relation with workplace happiness and in step two EI ( $\beta = .277, p < .001$ ) has a significant positive relation with workplace happiness. Step three shows that interaction of occupational stress and emotional intelligence significantly predict workplace happiness. A significant result of the  $R^2$  change (table 7.29) in step three indicates that there is moderation effect of emotional intelligence on the relationship between occupational stress and workplace happiness (Asım Çivitci, 2015). Our experiments fulfill all the three condition of moderation regression .The interaction chart (annexure-E-1) shows that an interaction effect is strong among the doctors who have a moderate level of emotional intelligence. They are better able to manage their occupational stress and increase workplace happiness. Thus we accept the sub- hypothesis that EI acts as a moderator between occupational stress and workplace happiness.

**Inference:** Our experiment provides evidence that emotional intelligence acts as a mediator to reduce occupational stress and increasing workplace happiness of doctors.

#### **7.5.4 Discussion**

The objectives of this section of the research are to explore the relationship between occupational stress and emotional intelligence of doctors of North Bengal medical college. The result of ANOVA analysis shows that there is a significant difference in the mean of occupational stress of doctors' according to their levels of emotional intelligence. This result of the study is in line with Jude's observation. He found that emotional intelligence had a significant impact on perceived occupational stress and among the school teachers there was a significant difference in the mean of occupational stress on the basis of emotional intelligence levels (high, medium and Low) .Results of correlation and regression reveal that emotional intelligence and its five dimensions (i.e., Self-awareness, Self-regulation, Motivation, Social-awareness and Social-skill) are negatively related to occupational stress and have a significant impact on occupational stress. It can be concluded that higher level of emotional intelligence is related to lower level of occupational stress. The finding that there is a significant negative relationship between emotional intelligence and occupational stress supports the result of Sunil (2009) , NINA OGIŃSKA-BULIK (2005), Zeynep

Kalyoncu (2012) and Maryam Khaniyan et.al (2013) but contradicts the finding of Brand's(2007) and DR. R. Krishnakumar and S. Lalitha2( 2014) .The study of Deepa Mohan and Sudarsan (2014) also not supports this result .They found that stress related to the organization were not influenced by emotional intelligence and any action taken to enhance emotional intelligence by the organization to minimize stress would not be materialized. Singh and Singh (2008) found a negative relation between emotional intelligence and stress for both the genders of medical professionals.

The result reveals 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.

The result of hierarchical regression shows that emotional intelligence influences the strength of the relationship between occupational stress and workplace happiness. The influence is strong in moderate emotional intelligence level. Pau et. al (in NINA OGIŃSKA-BULIK, 2005) stated that individuals with high level of emotional intelligence were expected to accept more evidence and consideration, social, organizational and time-management skills. The individual's capability to successfully deal with emotions in the workplace helps in managing occupational stress and to maintain psychological well-being (NINA OGIŃSKA-BULIK, 2005).

## **7.6 Relation between Occupational Stress and Locus of Control**

This section of the chapter deals with the objectives and hypotheses related to the relationship between occupational stress and locus of control ((i.e. Internal or External) of medical doctors of North Bengal.

The table 7.30 reveals that out of 83 internal doctors 8 (9.63%) have a high level of occupational stress, 62 (74.69%) have a medium level and 13(15.68%) have a low level of occupational stress. Approximately 47% of external doctors have a high level of occupational stress and 47% external doctors have a medium level of occupational stress. Approximately 6% external doctors have a low occupational stress level.

**Table 7.30 OS Profiles of Doctors Based on Loc Type (Internal & External)**

<b>EI/Loc</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
<b>Internal Loc</b>	<b>13</b>	<b>62</b>	<b>8</b>
<b>External Loc</b>	<b>1</b>	<b>9</b>	<b>9</b>

**Source: Compiled from survey data**

### **Hypothesis Testing**

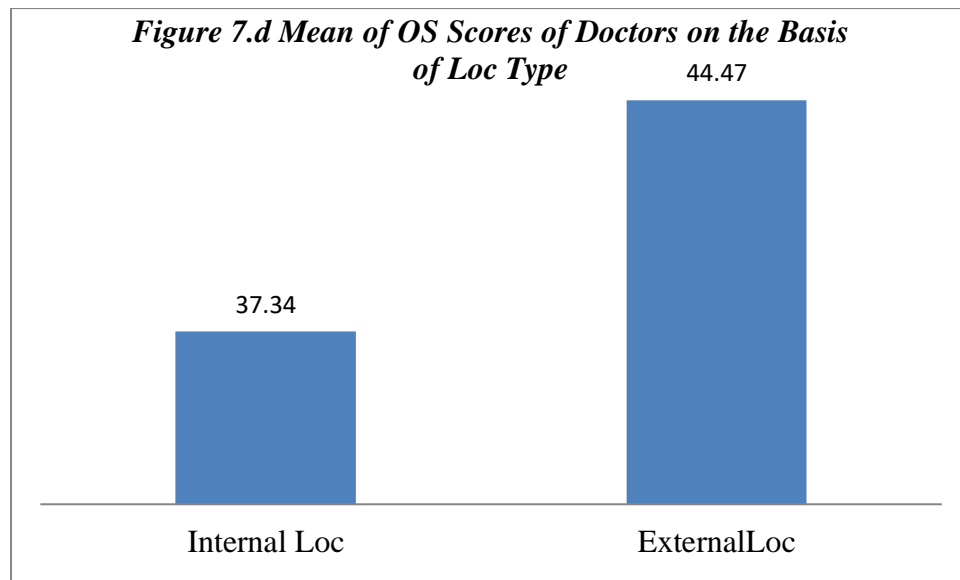
**Sub-hypothesis one:** There is a significant difference in Occupational Stress on the basis of Locus of control (internal & external).

**Table 7.31 Mean of OS of Doctors Based on Loc Type**

	No.	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
<b>Internal</b>	<b>83</b>	<b>37.3494</b>	<b>7.54892</b>	<b>.82860</b>	<b>35.7010</b>	<b>38.9978</b>	<b>13.00</b>	<b>50.00</b>
<b>EXTERNAL</b>	<b>19</b>	<b>44.4737</b>	<b>9.33553</b>	<b>2.14172</b>	<b>39.9741</b>	<b>48.9733</b>	<b>25.00</b>	<b>62.00</b>
<b>Total</b>	<b>102</b>	<b>38.6765</b>	<b>8.34072</b>	<b>.82585</b>	<b>37.0382</b>	<b>40.3147</b>	<b>13.00</b>	<b>62.00</b>

**Sources: Compiled from survey data**

Table -7.31 shows that in the sample the mean of occupational stress of internal doctors and external doctors is 37.34 and 44.47 respectively. At 95% confidence interval, in the population, the upper limit of the mean of occupational stress scores of internal doctors is 38.99 and for external doctors are 48.97. In the population, the lower limit of the mean of occupational stress of internal locus of control of medical doctors and of external locus of control of medical doctors is 35.70 and 39.97 respectively.



In the Table 7.32, we find that the probability calculated ( $p=.001$ ) is less than  $ALFA= 0.05$ . Hence, we conclude that our experiment does provide evidence that the difference in mean of occupational stress on the basis of internal and external Loc of medical doctors is statistically significant in the population.

**Table 7.32 ANOVA Analysis Based on Loc Type Variation**

	Sum of Squares	Df	Mean Square	F	Sig.
<b>Between Groups</b>	<b>784.719</b>	<b>1</b>	<b>784.719</b>	<b>12.572</b>	<b>.001</b>
<b>Within Groups</b>	<b>6241.604</b>	<b>100</b>	<b>62.416</b>		
<b>Total</b>	<b>7026.324</b>	<b>101</b>			

**Sources: Compiled from survey data**

**Inference:** We can accept the sub- hypothesis. It can be inferred that there is a significant difference in mean of occupational stress of internal and external Loc type of doctors or we can say that locus of control (i.e. internal and external) effects occupational stress of medical doctors.

**Sub-hypothesis two:** There is a negative relation between Occupational Stress and Loc type (internal & external).

Pearson's Correlation is applied to assess the nature of the relationship between occupational stress and Loc type. Table- 7.33 shows that there is a significant ( $p<...05$ ) negative correlation between internal locus of control and occupational stress. Pearson's Correlation coefficient  $r$  for the relation between occupational stress with external Loc is ( $r= .321$ ) not significant. The hypothesis is partially accepted.

**Table 7.33 Correlations between OS and Loc Type**

		STRESS	INTERNAL	EXTERNAL
<b>STRESS</b>	<b>Pearson Correlation</b>	1	-.286**	.099
	<b>Sig. (2-tailed)</b>		.004	.321
	<b>N</b>	102	102	102
<b>INTERNAL</b>	<b>Pearson Correlation</b>	-.286**	1	.172
	<b>Sig. (2-tailed)</b>	.004		.083
	<b>N</b>	102	102	102
<b>EXTERNAL</b>	<b>Pearson Correlation</b>	.099	.172	1
	<b>Sig. (2-tailed)</b>	.321	.083	
	<b>N</b>	102	102	102

**Source: Compiled from survey data: Correlation is significant at the 0.01 level (2-tailed).**

**Inference:** Thus the sub- hypothesis is partially proved. There is a significant negative relation between Internal Loc and occupational stress and external Loc is not statistically related to occupational stress.

**Sub-hypothesis three:** Internal Locus of control moderates the relationship between Workplace Happiness and Occupational stress.

To test the moderating effects of internal Loc on the relationship between occupational stress and workplace happiness hierarchical regression (recommended by Baron and Kenny, 1986) is done. To reduce the problem of multicollenierity the dependent variable and the independent variable are centralized (Fazier, Tix and Baron, 2004). Tolerance values of less than .10 and VIF (Variance Inflation Factor) values of greater than 10 show a multicollinearity problem (Cohen, Cohen, West, & Aiken, 2003) in regression analysis. In this study, the tolerance values are between .670 and 1, and the VIF values are between 1 and 1.493. These results indicate that there is no problem of multicollinearity (Asım Çivitci, 2015).

In table-7.34, in step- 1 the independent variable occupational stress explains 41% variance in dependent variable i.e. workplace happiness. In step- 2 when Loc (internal) is added to the equation the R Square is significant and explains 47.6% variance. In step-3 when interaction effect of internal Loc on occupational stress is added R square is then also significant and explains 55.6% variance and R square change has increased by .080 (table-7.34) in step-3 . Thus it confirms that Loc

(internal) acts as a moderator between the relationship occupational stress and workplace happiness.

**Table 7.34 The Results of Hierarchical Regression Analysis for the Moderating Effects of Internal Loc on the Relationship between Occupational stress and workplace happiness**

variable	B	Beta	T	R <sup>2</sup>	R <sup>2</sup> Change
Step-1 Occupational stress	-21.106	-.640	-8.332*	.410**	.410**
Step-2 Occupational stress Loc(internal)	-18.579 2.698	-.563 .268	-7.422** 3.535**	.476**	.066**
Step-3 Occupational stress Loc Occupational stress*Loc(internal)	-17.601 .884 4.484	-.534 .088 .424	-5.565** 1.070** 4.215**	.556**	.080**

**Source: Compiled from survey data; Dependant variable Workplace Happiness**

The beta coefficients in table 7.34 reveal that in step -1 occupational stress ( $\beta = -.640, p < .001$ ) has a significant negative relation with workplace happiness and in step-2 internal Loc ( $\beta = .268, p < .001$ ) has a significant positive relation with workplace happiness. Step three (table 7.34) shows that interaction of occupational stress and Loc (internal) significantly predict workplace happiness. The significant result of  $R^{2\text{ change}}$  (table 7.34) in step three indicates that there are moderation effects of Loc (internal) on the relationship between occupational stress and workplace happiness. Our experiments fulfill all the three condition of moderation regression. The interaction chart (annexure-E-2) shows that interaction effect is strong among the doctors who have a high level of internal Loc. They are better able to manage their occupational stress and increase workplace happiness. Thus we accept the sub-hypothesis that Loc (internal) acts as a moderator between occupational stress and workplace happiness.

**Inference:** Our experiment provides evidence that internal Loc plays a buffering role to reduce occupational stress and to increase workplace happiness of doctors.



### **7.6.1 Discussion**

In this part of the research, the researcher tries to find out the relationship between internal locus of control, external locus of control, and occupational stress. One way ANOVA analysis states that Loc type significantly affects occupational stress level. Doctors with internal Loc are less stressed than external doctors. Pearson correlation results exhibit that the relationship between internal Loc type and occupational stress is negative and this relation is statistically significant. It can be concluded that higher level of internal Loc is related to lower level of occupational stress. On the other hand, the relation between external Loc type and occupational stress is positive but statistically not significant. These findings are similar to the findings of many previous researches. Vasiliki Brouskeli and Angelos Markos (2013) found external Loc showed a tendency to experience more stress. Rajiv Kumar Jha and Bushara Bano (2012) also found that internal employees faced less job stress compare to external employees. Their findings establish and supplement the present finding that the internal locus of control is negatively correlated with organizational stress and external locus of control is positively correlated with stress. Douglas S. Mulbury (1995) reported an individual with an external locus of control was significantly related to higher stress and had lower achievement orientation.

The result of hierarchical regression shows that Loc (internal) plays a role of moderator in controlling occupational stress and increasing workplace happiness. This result is consistent with the result of A.P. Singh and Nitu Singh (2014) and many others. As a personality trait, Loc plays an important moderating role to affect the occupational stress. The studies showed that internal locus of control was very effective in controlling stress and managing its negative impacts. Internals could take their own decision and also decide the outcome of the action. As a result, internal may control and predict the situation and keep them engaged in work and adapt stress management strategies to stay healthy ( A.P. Singh and Nitu Singh,2014).

Steliana Rizeanu (2016) also reported that locus of control as personality trait moderated stress in a given psychological state. Angela C. Roddeenberry (2007) explored that Loc only partially mediated the relationship between stress and illness.

## **7.7 Conclusion**

The research hypothesis that there exists a negative relationship between occupational stress, emotional intelligence and workplace happiness is acceptable. The demographic variables (Gender, age education, and experience) are not significant in determining occupational stress. It is due to the sampling fluctuation that the difference in mean scores of the demographic variables with regards to occupational stress that was observed.

Internal locus of control and emotional intelligence play the role of moderator in the relationship between workplace happiness and occupational stress .Both the variables are strong predictors of occupational stress. Doctors with a good score of emotional intelligence and internal type of locus of control can regulate their occupational stress level better which help to increase their job happiness.