

## **Chapter - Six**

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

#### **6.1. Introduction**

The more important determinant of psychological wellbeing other than any mental and emotional factor is the locus of control (Ross and Sastry in Raminder Kaur and Dr. Sonia Kapur ,2015) .It plays the most important role in various aspects of human behavior such as self-control, social adjustment, independence, expectancy, achievement motivation and success-orientation (Ogunsanwo et.al. 2014).

Emotional intelligence is an important factor of success in human life and also in work life. Research findings have shown that emotional intelligence has been correlated with life satisfaction, quality of work life and many social aspects (Ogunsanwo et.al. 2014) .It is gaining importance in education, business, and social science research.

The analysis of the relationship between Locus of control, Emotional Intelligence and Workplace happiness would help to know the relationship between these variables and to predict doctors' satisfaction level. This, in turn, helps the administrator to retain efficient and effective employees in the organization

#### **6.2 Primary Objective**

4. To study the relationship between Locus of Control, Emotional Intelligence, and Workplace Happiness of the doctors of North Bengal medical college.

##### **6.2.1 Sub- Objectives**

1. To identify the type of locus of control (i.e. internal or external) present in medical doctors.
2. To identify the relationship between locus of control (i.e. internal or external) and biographic /demographic variables.
3. To identify the relationship between locus of control (i.e. internal or external) and workplace happiness.
4. To study the level of emotional intelligence of medical doctors who work at North Bengal medical college.

5. To identify the relationship between emotional intelligence and biographic variables.
6. To study the relationship between workplace happiness and emotional intelligence, and workplace happiness and components of emotional intelligence of medical doctors of North Bengal medical college.
7. To study the emotional intelligence profiles of doctors according to the locus of control ((i.e. internal or external).
8. To study the relationship between emotional intelligence, its different components and locus of control e ((i.e. internal or external) of medical doctors of North Bengal.

### **6.3. Research Hypothesis**

H<sub>04</sub>: There is a relation between Locus of Control (i.e. internal or external), Emotional Intelligence and Workplace Happiness.

#### **6.3.1 Sub- Hypotheses**

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

#### **6.3.2 Related to Locus of Control and Workplace Happiness**

- 1: There is a difference in the degree of internality and in the degree of externality (locus of control) on the basis of demographic variables of medical doctors of North Bengal.
- 2: There is a difference in doctors' workplace happiness on the basis of Locus of Control.
- 3: There is a relationship between internal locus of control and workplace happiness of medical doctors of North Bengal.
- 4: There is a relation between external locus of control and workplace happiness of medical doctors of North Bengal.
- 5: Locus of control (internal and external) is a good predictor of workplace happiness.

### **6.3.3 Sub hypotheses related to Emotional Intelligence and Workplace Happiness**

1. Medical doctors have a high level of emotional intelligence.
2. There is a difference in emotional intelligence on the basis of biographic /demographic variables (gender, age, education, and experience) of medical doctors of North Bengal.
3. There is a difference in workplace happiness on the basis of emotional intelligence levels of medical doctors of North Bengal.
4. There is a relation between workplace happiness and emotional intelligence, and emotional intelligence has an impact on workplace happiness
5. There is a relation between workplace happiness and self-awareness and self-awareness has an impact on workplace happiness.
6. There is a relation between workplace happiness and self-regulation and self-regulation has an impact on workplace happiness.
7. There is a relation between workplace happiness and self-motivation and self-motivation has an impact on workplace happiness.
8. There is a relation between workplace happiness and social -awareness and social-awareness has an impact on workplace happiness.
9. There is a relation between workplace happiness and social- skills and social- skills have an impact on happiness.

### **6.3.4 Sub- hypotheses related to Emotional Intelligence and Locus of Control**

- 1: There is a difference in emotional intelligence on the basis of locus of control (internal and external).
- 2: There is a relationship between emotional intelligence, its components, and internal locus of control.
- 3: There is a relationship between emotional intelligence, its components, and external locus of control.

## **6.4 Findings Related to the Relationship between Locus of control and Workplace Happiness**

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

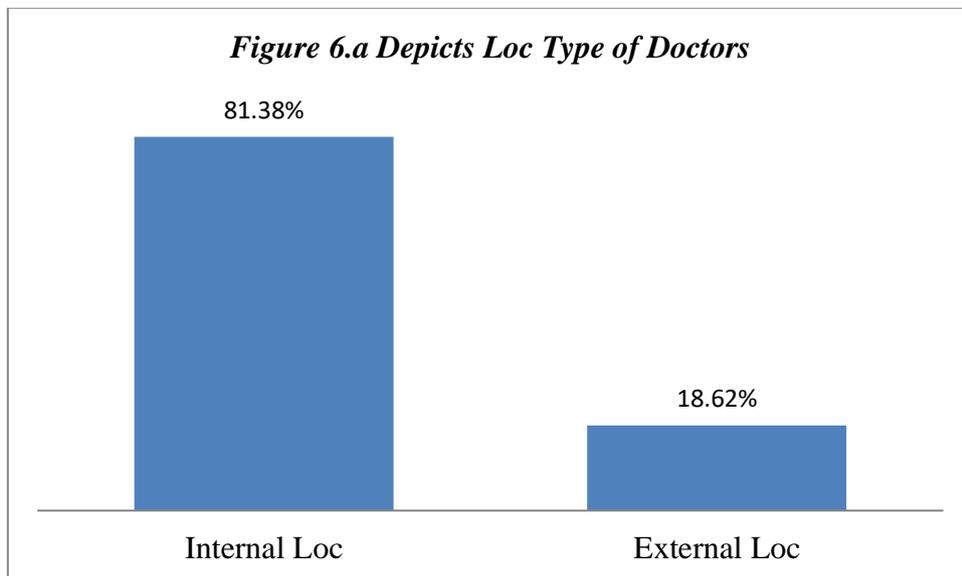
#### 6.4.1. Locus of control of Medical Doctors

The table 6.1 reveals that a greater percentage of the respondents have an internal locus of control (81.38%). Out of 102 respondents, 83 are internal and rests of the doctors have an external locus of control. Among the male doctors, 84% are internal and 62% of female doctors have an internal locus of control.

**Table 6.1 Frequency and Percentage Analysis of Loc of Doctors**

Loc	Frequency	Percentage
Internal Loc(trait)	83	81.38
External Loc (trait)	19	18.62

Source: Compiled from survey data



**Table 6.2 Descriptive Statistic of Loc (Internal & External)**

	No.	Minimum	Maximum	Mean	Std. deviation	Skewness	Kurtosis
Internal	102	3	40	26.3431	8.39672	-1.074	.474
External	102	1	38	16.61	6.56560		

Source: Compiled from survey data

Table 6.2 shows the mean and standard deviation of the locus of control. Internal locus of control has a mean of 26.34 and a standard deviation of 8.39 and external locus of control has a mean of 16.61 and standard deviation of 6.61.

#### 6.4.2. Demographic Variables and Locus of control

Table 6.3 reveals that out of the internal type of Loc of doctors 88% are male doctors and out of male doctors 84% are internal. 62% of female doctors have an internal locus of control and 38% female doctors have an external type of Loc.

Among the young doctors 90% (out of 62) have internal locus of control and the percentage of the type of locus of control (internal and external) among oldest doctors is same (i.e. 3 in both type; out of 6). Internality is the dominant locus of control of the doctors within the age range of 40 years.

As regards to academic qualification doctors with bachelor degree have the highest percentage of internality (83%) compared to those who have post graduation degree (80%).

In case of job experience, doctors with 8-11 years in service are more of the internal type of locus of control (87%). Only 63% of doctors having job experience more than eleven years are internal. Doctors who are new in the service are more of the internal type of locus of control.

**Table 6.3 Frequency and Percentage Analysis of Locus of control of Doctors Based on Demographic Variables**

Variables	Internal Loc	External Loc
<b>Gender:</b>		
Male	73 (87.95%)	13 (68.42%)
Female	10(12.05%)	6 (31.58%)
<b>Age Range:</b>		
25-30	56 (67.46%)	6 (31.58%)
31-40	16 ( 19.27%)	3 (15.78%)
41-50	8 (9.63%)	7 (36.86%)
>50	3 (3.64%)	3 (15.78%)
<b>Education Standard:</b>		
Bachelor(Graduate)	35 (83.33)	7(16.67)
Master (Postgraduate)	48 (80%)	12 (20%)
<b>Years as Doctors</b>		
1-3	53 (86.88%)	8(13.12%)
4-7	11 (78.57)	3 (21.43%)
8-11	7 (87.5%)	1 (12.50%)
> 11	12 (63.15%)	7(37.85%)

Source: Compiled from survey data

**Sub- hypothesis one** : There is a difference in the level of locus of control (internal and external) on the basis of demographic variables of medical doctors of North Bengal.

### 6.4.3. Relationship between Demographic Variables and Internal Locus of control

#### 6.4.3.1. Internal Locus of control of Medical Doctors Based on Gender Variation

Table-6.4 shows that in the sample mean of internal locus of control scores for female and male doctors are 2.3875 and 2.6791 respectively. At 95% confidence interval, in the population the upper limit of the mean of internal locus of control for female doctors is 2.9818 and for male doctors is 2.8464. In the population, the lower limit of the mean of internal locus of control for female doctors is 1.7932 and for male doctors is 2.5118. The male respondents have a higher score of internal locus of control than female respondents.

**Table 6.4 Mean of Internal Loc Based on Demographic Variables**

Demographic Variables	No.	Mean	Sd	Std error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower bound	Upper Bound		
<b>Gender</b>								
Female	16	2.3875	1.11527	.27882	1.7932	2.9818	.60	3.80
Male	86	2.6791	.78036	.08415	2.5118	2.8464	.30	4.00
<b>Age</b>								
25-30	62	2.7355	.79054	.10040	2.5347	2.9362	.30	3.80
31-40	19	2.6789	.77070	.17681	2.3075	3.0504	.90	4
41-50	15	2.1733	1.08263	.27953	1.5738	2.7729	.60	4
>50	6	2.5833	.70261	.28684	1.8460	3.3207	1.40	3.3
<b>Education</b>								
Graduate	42	2.6071	.83356	.12862	2.3474	2.8669	.30	3.60
Post Graduate	60	2.6517	.85400	.11025	2.4311	2.8723	.50	4
<b>Experience</b>								
1-3	61	2.7197	.77585	.09934	2.5210	2.9184	.40	3.80
4-7	14	2.5000	1.08557	.29013	1.8732	3.1268	.30	4
8-11	8	2.8625	.32043	.11329	2.5946	1.1304	2.30	3.3
>11	19	2.3579	.96742	.22194	1.8916	2.8242	.60	4

Source: Compiled from survey data

In the table 6.5 the result of ANOVA shows that there is no significant difference in the mean of internal Loc of female and male doctors; because the calculated p-value (.205) is higher than the .05 level of significance. Thus we infer that there is no significant difference in internal Loc based on gender.

**Table 6.5 One-Way ANOVA Showing Relationship between Demographic Variables and Internal Locus of control**

		Sum of Squares	df	Mean Square	F	Sig
<b>GENDER</b>	<b>Between Groups</b>	<b>1.147</b>	<b>1</b>	<b>1.147</b>	<b>1.629</b>	<b>.205</b>
	<b>Within Groups</b>	<b>70.420</b>	<b>100</b>	<b>.704</b>		
	<b>Total</b>	<b>71.567</b>	<b>101</b>			
<b>Age</b>	<b>Between Groups</b>	<b>3.875</b>	<b>3</b>	<b>1.292</b>	<b>1.870</b>	<b>.140</b>
	<b>Within Groups</b>	<b>67.691</b>	<b>98</b>	<b>.691</b>		
	<b>Total</b>	<b>71.567</b>	<b>101</b>			
<b>Education</b>	<b>Between Groups</b>	<b>.049</b>	<b>1</b>	<b>.049</b>	<b>.068</b>	<b>.794</b>
	<b>Within Groups</b>	<b>71.518</b>	<b>100</b>	<b>.715</b>		
	<b>Total</b>	<b>71.567</b>	<b>101</b>			
<b>Experience</b>	<b>Between Groups</b>	<b>2.565</b>	<b>3</b>	<b>.855</b>	<b>1.214</b>	<b>.309</b>
	<b>Within Groups</b>	<b>69.001</b>	<b>98</b>	<b>.704</b>		
	<b>Total</b>	<b>71.567</b>	<b>101</b>			

Source: Compiled from survey data

#### **6.4.3.2 Internal Locus of control of Medical Doctors Based on Age Variation**

The table no. 6.4 reveals that due to the variation of age of doctors there is very little difference in mean of internal Loc. In the sample who is aged between 25-30 years, mean of internal Loc of that group is 2.7355, those who are under age group of 31-40 years the mean is 2.6789, the mean is 2.1733 for under age group of 41-50 years and 2.5833 for those who are above fifty years.

In table -6.5 (ANOVA Analysis based on age) it is observed that there is no significant difference in the mean of internal locus of control scores of doctors having a different age group in the profession. This is because significant value calculated (i.e. .140) is greater than ALFA=0.05. Thus, it is concluded that there is no significant difference in the degree of internal Loc of young and aged medical doctors.

#### **6.4.3.3 Internal Locus of control of Medical Doctors Based on Educational Standard Variation**

As recorded in the table -6.4, in the sample, it is observed that medical doctors who have post graduation degree have high scores of internal locus of control. The mean of internal locus of control scores of those who have post graduation degree in medical science is 2.6517 and 2.6071 for those who have the bachelor degree.

The ANOVA Analysis based on education standard (table 6.5) reveals that significant value calculated (i.e. .794) is greater than ALFA=0.05. Thus, it is concluded that there is no significant difference in the mean of internal Loc scores of medical doctors with the variation in the level of education standard achieved.

#### **6.4.3.4 Internal Locus of control of Medical Doctors Based on Experience Variation**

Descriptive statistics (table 6 .4) mean and SD show that doctors with one to three years of experience in service have a higher mean of internal Loc scores (2.7197) than those who have experience of more than eleven years.

ANOVA is conducted to test the equality of mean of the sample on the basis of experience in service. The result of one-way ANOVA (table-6.5) shows that there is no significant difference amongst the mean of the variable based on experience; because the calculated p-value (.309) is greater than Alpha = .05 level of significance. We infer that that there is no significant difference in internal Loc based on experience in service.

### **6.4.4 Relation between Demographic Variables and External Locus of control**

#### **6.4.4.1 External Locus of control of Medical Doctors Based on Gender Variation**

Table-6.6 shows that in the sample mean of external locus of control scores of female and male doctors are 1.7313 and 1.6477 respectively. At 95% confidence interval, in the population, the upper limit of the mean of external Loc scores of

female doctors is 2.1102 and of male doctors is 1.7869. In the population, the lower limit of the mean of external locus of control scores of female medical doctors is 1.3523 and for male medical doctors is 1.5084. The female respondents have higher scores of external Loc than male respondents.

**Table 6.6 Mean of External Loc Based on Demographic Variables**

Demographic Variables	No.	Mean	Sd	Std error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower bound	Upper Bound		
Gender		1.7313	.71107	.17777	1.3523	2.1102	.40	2.80
Female	16	1.6477	.64952	.07004	1.5084	1.7869	.05	3.80
Male	86							
Age		1.6210	.67935	.08628	1.4484	1.7935	.05	3.8
Upto30	62	1.4474	.66447	.15244	1.1271	1.7676	.50	2.8
31-40	19	1.9033	.47564	.12281	1.6399	2.1667	.95	2.5
41-50	15	2.1417	.45543	.18593	1.6637	2.6196	1.30	2.6
>50	6							
Education		1.5464	.71281	.10999	1.3243	1.7686	.05	3.80
Graduate	42	1.7408	.6447	.07842	1.5839	1.8978	.50	2.90
Post Graduate	60							
Experience		1.6320	.68757	.08803	1.4559	1.8081	.05	3.8
1-3	61	1.4357	.63380	.16939	1.0698	1.8017	.60	2.9
4-7	14	1.6500	.64973	.22971	1.1068	2.1932	.50	2.5
8-11	8	1.9237	.52291	.11996	1.6716	2.1757	.95	2.6
>11	19							

**Source: Compiled from survey data**

To test the equality of mean one way ANOVA is conducted. In table 6.7 the result of ANOVA shows that there is no significant difference between the mean of external Loc of female and male doctors; because the calculated p-value (.642) is greater than the .05 level of significance. We can infer that there is no significant difference in external Loc based on Gender.

**Table 6.7 One-Way ANOVA showing relationship between Demographic Variables and External Locus of control**

		Sum of Squares	Df	Mean Square	F	Sig
<b>GENDER</b>	<b>Between Groups</b>	<b>.094</b>	<b>1</b>	<b>.094</b>	<b>.217</b>	<b>.642</b>
	<b>Within Groups</b>	<b>43.444</b>	<b>100</b>	<b>.434</b>		
	<b>Total</b>	<b>43.538</b>	<b>101</b>			
<b>Age</b>	<b>Between Groups</b>	<b>3.234</b>	<b>3</b>	<b>1.078</b>	<b>2.621</b>	<b>.055</b>
	<b>Within Groups</b>	<b>40.305</b>	<b>98</b>	<b>.411</b>		
	<b>Total</b>	<b>43.538</b>	<b>101</b>			
<b>Education</b>	<b>Between Groups</b>	<b>.934</b>	<b>1</b>	<b>.934</b>	<b>2.192</b>	<b>.142</b>
	<b>Within Groups</b>	<b>42.604</b>	<b>100</b>	<b>.426</b>		
	<b>Total</b>	<b>43.538</b>	<b>101</b>			
<b>Experience</b>	<b>Between Groups</b>	<b>2.074</b>	<b>3</b>	<b>.691</b>	<b>1.634</b>	<b>.186</b>
	<b>Within Groups</b>	<b>41.464</b>	<b>98</b>	<b>.423</b>		
	<b>Total</b>	<b>43.538</b>	<b>101</b>			

Source: Compiled from survey data

#### **6.4.4.2. External Locus of control of Medical Doctors Based on Age Variation**

The table -6.6 reveals there is very little difference in the mean score of external Loc having different age groups. In the sample who are aged between 25-30 years, the mean score of external Loc of those group are 1.6210, those who are under age group of 31-40 years is 1.4464, 1.9033 for under age of 41-50 years and 2.1417 for those above fifty years.

In table -.6.7, (i.e. ANOVA Analysis based on age) it is observed that there is no significant difference in the mean score of external Loc of doctors having the different age group in the profession. This is because significant value calculated i.e. .055 is greater than ALFA=0.05. Thus, it is concluded that there is no significant difference in the degree of external Loc of young and aged medical doctors.

#### **6.4.4.3 External Locus of control of Medical Doctors Based on Educational Standard Variation**

As recorded in the table No.6.6, in the sample, it is observed that medical doctors who have post graduation degree have high scores of external Loc. The mean score of those who have post graduation degree in medical science is 1.7408 and 1.5464 for those who have a bachelor degree.

The ANOVA Analysis based on education standard (table 6.7) reveals that significant value calculated (i.e. .1420) is greater than ALFA=0.05. Thus, it is conclude that there is no significant difference in the mean score of external Loc of medical doctors with the variation in the level of education standard achieved. We infer that with the acquisition of higher education degree external loc does not increase.

#### **6.4.4.4 External Locus of control of Medical Doctors Based on Experience Variation**

Descriptive statistics (table 6.6) mean and SD show that doctors who have more than eleven years of experience in service have a higher mean of external Loc ( 1.9237) than those who have experience of one to three years.

ANOVA is conducted to test the equality of mean of the sample. The result of one-way ANOVA (table-6.7) shows that there is no significant difference amongst the mean of the variable based on experience; because the calculated p-value (.186) is higher than an Alpha=.05 level of significance. We infer that that there is no significant difference in internal Loc based on experience in service.

**Inference:** We conclude that our experiment does not provide evidence that the difference in internal Loc and external Loc on the basis of demographic variables is statistically significant in the population. Thus we reject the sub hypothesis one that there is a difference in the degree of internality and in the degree of externality (Locus of control) on the basis of demographic variables of medical doctors of North Bengal.

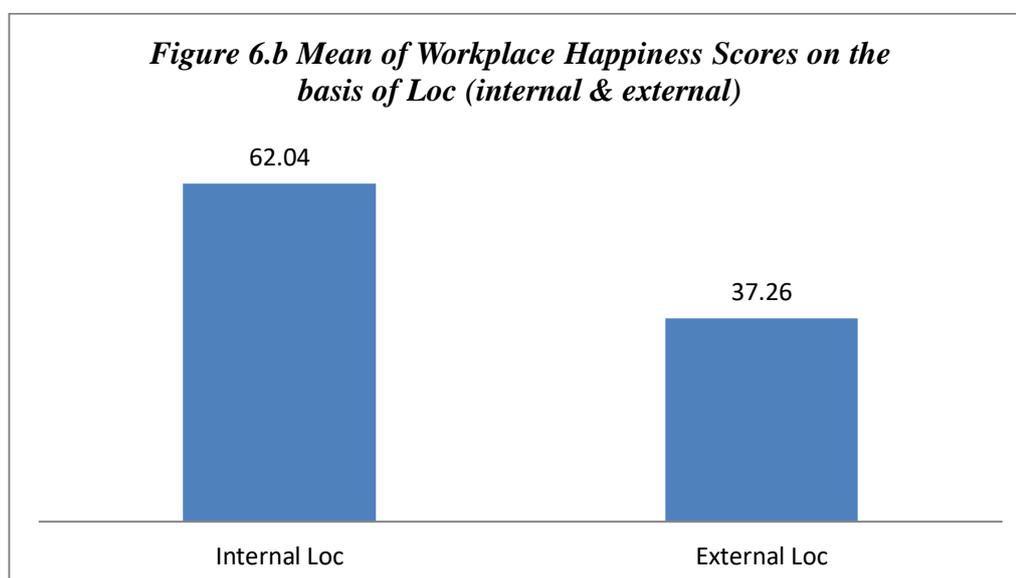
#### 6.4.5 Relation between Workplace Happiness and Locus of control

**Sub-hypothesis two:** There is a difference in doctor's happiness on the basis of Locus of Control.

**Table - 6.8 Mean of Workplace Happiness of Doctors Based on Loc Type (Internal and External)**

	No	Mean	Std deviation	Std Error	95% confidence Interval		Minimum	Maximum
					Lower Bound	Upper Bound		
Internal Loc	83	62.0425	15.94082	1.74973	58.5618	65.5233	28.92	99.15
External Loc	19	37.2674	28.74534	6.59463	23.4126	51.1222	1.56	79.20
Total	102	57.4275	21.15484	2.09464	53.2723	61.5828	1.56	99.15

Source: Compiled from survey data



In table 6.8 the mean of workplace happiness scores of internal Loc is 62.04 and for external Loc is 37.26. At 95% confidence interval, in the population, the upper limit of the mean of workplace happiness scores for internal Loc is 65.52 and for

external Loc is 51.12. In the population, the lower limit of the mean of workplace happiness scores for internal Loc is 58.56 and for external Loc is 23.41.

From the table - 6.9 (i.e. ANOVA analysis based on Loc type), we find that the probability calculated i.e. (.000) is less than ALFA= 0.05. Hence, we conclude that our experiment provides evidence that the difference in the mean of workplace happiness of doctors according to internal Loc and external Loc is statistically significant in the population.

**Table 6.9 ANOVA Analysis Based on Loc Type Variation**

Sources of Differences	Sum of Squares	Df	Mean square	F	Sig.[=0.05]
Between Groups	9489.963	1	9489.963	25.575	.000
Within Group	35710.301	100	357.103		
Total	45200.264	101			

Source: Compiled from survey data

**Inference:** Our experiment provides evidence that there is a difference in doctors' workplace happiness on the basis of Locus of control or doctors with an internal Loc is happier than the doctors with an external Loc.

**Sub-hypothesis three:** There is a relationship between internal locus of control and workplace happiness of medical doctors of North Bengal.

**Sub-hypothesis four:** There is a relationship between external locus of control and workplace happiness of medical doctors of North Bengal.

**Table 6.10 Summary of Regression Analysis**

Variables	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	R <sup>2</sup> change	F	Durbin-Watson	Vif
Internal Loc	.429	.184	.176	.184	22.591**	2.001	1
External Loc	-.058	.003	-.007	.003	.343	1.971	1

Source: Compiled from survey data, Dependent variable workplace happiness.

In table 6.10 it can be seen that calculated value of r is .429 for internal Loc. This indicates that there is a positive relationship between internal Loc and workplace

happiness of doctors. The R square value of .184 indicates that 18% of the variance in workplace happiness is due to doctors' Loc (Internal). F statistic also shows that level of significance is less than .05 for internal Loc. For external Loc F statistics is not significant (sig. value .343 is greater than .050), we can conclude that external Loc has no impact on workplace happiness.

Pearson's Correlation has been used in order to assess the nature of the relationship between workplace happiness and Loc. Table- 6.11 shows that there is a significant ( $r=.429$ ,  $n=102$ ,  $p<.000$  single tailed) positive correlation between internal Loc and workplace happiness. 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)]. Pearson correlation between internal Loc and workplace happiness is  $r=.429$  which is close to  $r= .5$ , therefore, it reveals a strong positive relationship between the two variables.

**Table- Table 6.11 Correlation between Workplace Happiness and the Type of Loc (i.e. Internal or External)**

Happiness	Pearson Correlation	Sig.(2 tailed)
LOC		
Internal	<b>.429**</b>	<b>.000</b>
External	<b>-.058</b>	<b>.560</b>

**Source: Compiled from survey data, Correlation is significant at the.001 level.**

The correlation between external Loc and workplace happiness is found a negative value and insignificant relation ( $r =-.058$ ,  $n=102$ ,  $p>.560$ , sig 2 tailed). As the significance value is greater than 0.01 for external Loc, we can say that there is a negative relation between workplace happiness and external Loc but this relation is statistically not significant.

**Inference:** Analysis of data proves that there is a positive correlation between internal Loc and workplace happiness of the doctors. The sub-hypothesis four is rejected and the alternative hypothesis is accepted which states that there is no significant relation between external Loc and workplace happiness of the doctors of the medical college of North Bengal.

**Sub-hypothesis five:** Locus of control (Internal and internal) is a good predictor of workplace happiness.

**Table 6.12 Loc Type (i.e. Internal or External) Profiles of Very happy and Very Unhappy Doctors**

LOC Type	Very Happy	Happy	Moderate	Unhappy	Very Unhappy
<b>Internal</b>	<b>10</b>	<b>36</b>	<b>28</b>	<b>9</b>	<b>Nil</b>
<b>External</b>	<b>Nil</b>	<b>5</b>	<b>5</b>	<b>1</b>	<b>8</b>

**Source: Compiled from survey data**

In the above table 6.12, we see that all the very happy doctors of the survey have an internal Loc. In the very happy group, there are no doctors who have an external Loc. They are all in the very unhappy group. Hence, from this table, we can also conclude that our experiment provides evidence that internal Loc is a good predictor of workplace happiness. In the survey the number of Internal Loc type of doctors is high; so this type of Loc may be dominant in all workplace happiness groups.

**Inference:** We partially accept the sub- hypothesis five and conclude that internal Loc is a good predictor of workplace happiness.

#### **6.4.6 Discussion**

The objectives of this section of the research are to identify the Loc type of medical doctors who work at North Bengal medical college and to explore the relationship between workplace happiness and type of Loc (internal and external). The research finding reveals that there exists more of the internal type of Loc among medical doctors. The one-way ANOVA analysis shows that the biographic variables (gender, age, education and experience in service) studied in the research have no significant effect on Loc type (internal and external). This finding is consistent with the result of Lakshman Vijayashreea and Mali Vishalkumar Jagdishchandrab (2011). Their results showed that there was no significant variance in Loc type according to gender and education but did not match with the result that age had an effect on internal Loc. Sandra Gildea (2012) also reported that there was no significant difference in internal / external or exaggerated internal Loc on the basis of gender.

The result of ANOVA indicates that doctors with internal Loc (mean of happiness 62.04) are happier than the doctors with external Loc (mean of happiness 37.26.). Pearson Correlation Coefficient is applied to explain the strength of the relationship between workplace happiness and Loc. The result of correlation shows that internal Loc is positively related to happiness and external Loc has insignificant negative relation with happiness. This suggests that doctors with internal Loc are happier than external Loc. The findings related to the relationship between happiness and locus of control are consistent with Rotter (1966) and inconsistent with Lindiwe M. Sindane (2011). Findings suggested that individuals with internal Loc are happier because of the way they prefer to analyze experiences as they tend to repress their failures and remember successes. Whereas those with external Loc verified less need to suppress because they accredited their failures to external forces (Rotter, 1966). Argyle (2001) also opined that individuals with internal Loc perceived their control over events and considered less to negative events while externals blame to fate or external force for negative events (Lindiwe M. Sindane,2011). An individual with internal Loc believes their inner power and they can control future (Seyede Golafrouz Ramezani and Abbas Gholtash1,2015).

### **6.5 Findings related to the Relationship between Workplace Happiness and Emotional Intelligence**

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

#### **6.5 .1 Level of Emotional Intelligence**

**Table 6.13 Level of EI and Interpretation**

<b>Class interval of the score</b>	<b>Upto 300</b>	<b>301-400</b>	<b>401- 500</b>
<b>Interpretation of the score</b>	<b>Low</b>	<b>Moderate</b>	<b>High</b>

**Source: Compiled from survey data**

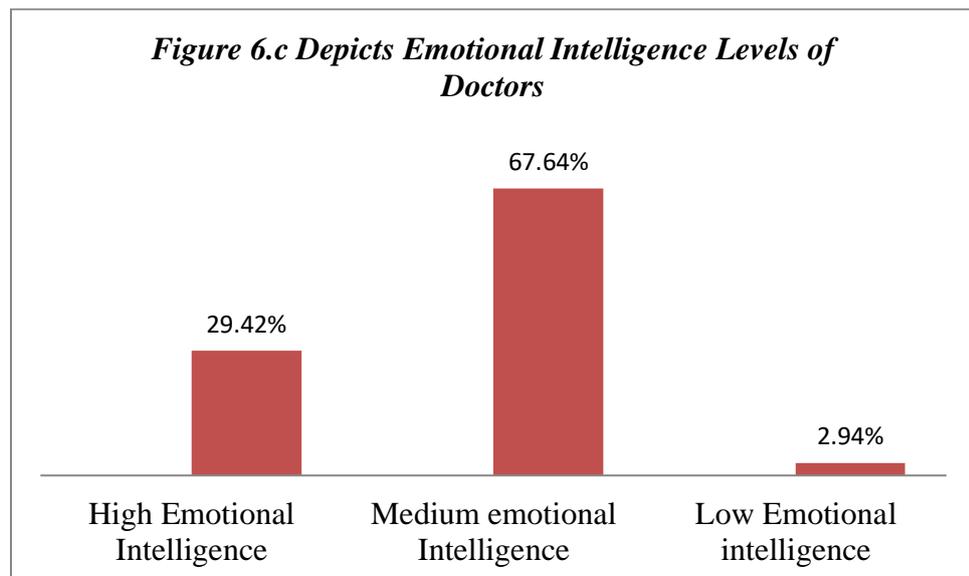
LINAC EI scale measures EI which uses a 500 point scoring scale. The maximum one respondent can score is 500 and the minimum possible score is 100. Up to 300 scores are considered as low and above 400 as high and 301 to 400 as a medium level of EI.

The levels of EI and its all five components are shown in table-6.14. The table reveals that out of 102 respondent 30 (29.41%) have a high EI, 67% have a medium and 3(2.94%) have a low level of EI. A greater percentage of the respondents have a medium level of EI. Doctors have a moderate level in all five components of EI, accept social awareness.57% of doctors have a high level of social- awareness. In other four dimensions of EI (self- awareness, self -regulation, self- motivation and social skill) they have a medium level of EI.

**Table 6.14 Levels of EI of Doctors**

<i>Variables</i>	<i>High</i>	<i>medium</i>	<i>Low</i>
<i>EI</i>	29.42%	67.64%	2.94%
<i>Self Awareness</i>	<b>36.28%</b>	<b>60.78%</b>	2.94%
<i>Self Regulation</i>	<b>36.28%</b>	<b>57.84%</b>	<b>5.88%</b>
<i>Self Motivation</i>	<b>27.46%</b>	<b>56.86%</b>	<b>15.68%</b>
<i>Social Awareness</i>	<b>56.86%</b>	<b>37.26%</b>	<b>5.88%</b>
<i>Social skill</i>	<b>46.07%</b>	<b>51.95%</b>	<b>5.88%</b>

**Source: Compiled from survey data**



The average of EI and its components, and the level of EI of doctors on the basis of scale are shown in table-6.15. The minimum score of EI is 290 and maximum

score of EI is 454. The mean of social -awareness scores is highest (78.91) among all the components of EI and ranked first. Almost 57% of doctors have a high level in this dimension.

**Table-6.15 Descriptive statistics of EI and Its Components**

Variables	Mean	SD	Maximum	Minimum	Skewness	Kurtosis	Level	Rank
<i>EI</i>	381.90	35.39	454	290	-.306	.166	Medium to high	–
<i>Self Awareness</i>	76.07	7.334	88	48	-.598	1.062	Medium to high	4
<i>Self Regulation</i>	76.588	10.65	100	50	.156	-.077	Medium to high	3
<i>Self Motivation</i>	72.33	11.23	96	44	-.344	-.161	Medium to high	5
<i>Social Awareness</i>	78.91	9.69	96	78.91	-.525	-.164	Medium to high	1
<i>Social skill</i>	77.99	10.20	100	42	-.556	1.532	Medium to high	2

Sources: Compiled from Survey Data

### Hypothesis Testing

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

**Table 6.16 One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean	Skewness	Kurtosis
EMOTION	102	381.9020	35.39746	3.50487	-.306	.166

Source: Compiled from survey data

From the Table No 6.16, it can be observed that mean of medical doctors' EI scores is 381.902. At 95% confidence interval; the upper limit of EI of this population is 38.85 and the lower limit is 24.9492 (table 6.16).

**Table 6.17 One-Sample Test of EI (350.5)**

	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
EMOTION	9.102	101	.000	31.90196	24.9492	38.8547

**Source: Compiled from survey data**

To test the hypothesis that medical doctors have a high-level EI, one sample t-test is used. The obtained t is significant,  $t(101) = 9.102$ ,  $p = .000$  (table 6.17). Since the p-value is less than .05, we can say that the population mean is not equal to the sample mean; hence the research hypothesis is accepted.

**Inference:** In table 6.16 we see that obtained mean of EI (381) is higher than assumed mean and sig. value is less than alpha value. It means that doctors of North Bengal medical college have a high level of EI and the sub-hypothesis one which postulates that doctors expressed a high level of EI is accepted.

### **6.5.2 Demographic Variables and Emotional Intelligence**

**Sub-hypothesis two;** There is a difference in EI on the basis of demographic variables (gender, age, education, and experience) of doctors of North Bengal medical college.

#### **6.5.2.1 Level of Emotional Intelligence of Doctors' Based on Demographic Variables**

The table 6.18 reveals that among the female doctors 25% (4/16) are highly emotional and 68.75% of female doctors have a moderate level of EI. A great percentage of male doctors are moderately intelligent.

**Table 6.18 Frequency and Percentage Analysis of EI of Doctors Based on Demographic Variables**

<b>Variables</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
<b>Gender:</b>	<b>(33.33%)</b>	<b>11(15.95%)</b>	<b>4 (13.33%)</b>
<b>Female</b>	<b>2 (66.67%)</b>	<b>58(84.05 %)</b>	<b>26 (86.67%)</b>
<b>Male</b>			
<b>Age Range:</b>			
<b>25-30</b>	<b>Nil</b>	<b>46(66.66%)</b>	<b>16(53.53%)</b>
<b>31-40</b>	<b>1(33.33%)</b>	<b>8(11.59%)</b>	<b>10 (33.33%)</b>
<b>41-50</b>	<b>2(66.37%)</b>	<b>10(14.49%)</b>	<b>3(10%)</b>
<b>&gt;50</b>	<b>Nil</b>	<b>5(7.26%)</b>	<b>1 (3.34%)</b>
<b>Education standard:</b>			
<b>Bachelor (Graduate)</b>	<b>NIL</b>	<b>32(46.37%)</b>	<b>10(33.33%)</b>
<b>Master(postgraduate)</b>	<b>3(100%)</b>	<b>37 (53.63%)</b>	<b>20 (66.67%)</b>
<b>Experience</b>	<b>1(3.33%)</b>	<b>44 (63.76%)</b>	<b>16(53.34%)</b>
<b>1-3</b>	<b>I (3.33%)</b>	<b>7(10.14%)</b>	<b>6 (20%)</b>
<b>4-7</b>	<b>Nil</b>	<b>4(5.79%)</b>	<b>4(13.33%)</b>
<b>8-11</b>	<b>1(3.34%)</b>	<b>14(20.31%)</b>	<b>4(13.33%)</b>
<b>&gt;11</b>			

**Source: Compiled from survey data**

Out of the young doctors, 53.53% (table-6.18) have a high level of EI. There is no young and old doctor in low EI group. Only 3.34% of aged doctors have a high level of EI. In the survey maximum numbers of respondents are young, so they are dominant in all EI groups.

As regards to academic qualification, postgraduate doctors are highly emotionally intelligent. The percentage is 66.67% (table-6.18). In the group of low EI, there are no doctors with bachelor degree. Among the bachelor doctors, 46.37% have a medium level of EI. In the survey maximum respondents have a master degree, so doctors with the highest degree dominate in all three groups of EI.

In case of job experience, the percentage of junior doctors in high EI group is 53.34 and only 13.33% senior doctors are in this group (table-6.18). In the survey maximum numbers of respondents are young, so they are also dominant in medium and low groups.

### 6.5.2.2 Variance in the Level of Emotional Intelligence Based on Gender Variation

**Table 6.19 Mean of EI of Doctors Based on Gender**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Female	16	368.7500	40.56189	10.14047	347.1361	390.3639	290.00	446.00
Male	86	384.3488	34.05697	3.67246	377.0470	391.6507	290.00	454.00
Total	102	381.9020	35.39746	3.50487	374.9492	388.8547	290.00	454.00

Source: Compiled from Survey data

Table 6.19 shows that in the sample mean of EI scores of female and male doctors are 368.75 and 384.3488 respectively. At 95% confidence interval, in the population, the upper limit of the mean of EI of female doctors is 390.36 and of male doctors is 391.65. In the population, the lower limit of the mean of EI scores for female medical doctors and for male medical doctors are 347.13 and 377.04 respectively.

From the table -6.20, (i.e. ANOVA analysis based on gender variation), it can be observed that the probability calculated (i.e. .106) is greater than ALFA= 0.05. Hence, we can conclude that our experiment does not provide evidence that the difference between the mean of EI of female and male medical doctors is statistically significant in the population. Hence we cannot accept the hypothesis.

**Table 6.20 ANOVA Analysis Based on Gender Variation**

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3282.485	1	3282.485	2.663	.106
Within Groups	123268.535	100	1232.685		
Total	126551.020	101			

Source: Compiled from survey data

**Inference:** Male and female doctors do not differ in their emotional intelligence. Hence, we cannot accept the hypothesis. The results of this study prove it false that women are more responsive to others needs and so have high EI.

### 6.5.2.3 Variance in the level of Emotional Intelligence Based on Age Variation

**Table 6.21 Mean of EI 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	382.3226	31.13628	3.95431	374.4154	390.2297	312.00	446.00
31-40	19	390.1579	37.92722	8.70110	371.8776	408.4382	290.00	448.00
41-50	15	367.6667	47.35831	12.22786	341.4405	393.8928	290.00	450.00
>50	6	387.0000	33.52611	13.68698	351.8165	422.1835	363.00	454.00
<b>Total</b>	<b>102</b>	<b>381.9020</b>	<b>35.39746</b>	<b>3.50487</b>	<b>374.9492</b>	<b>388.8547</b>	<b>290.00</b>	<b>454.00</b>

Source: Compiled from survey data

The table - 6.21 reveals that in the sample, doctors whose age is between 25-30 years mean of EI scores of that group is 382.32. The upper limit and lower limit (at 95% confidence limit) of this mean are 390.22 and 374.41 respectively. Mean of EI of those who are under age group of 31-40 is 390.15. The upper limit and lower limit (at 95% confidence limit) of this mean are 408.43 and 371.87 respectively. Mean of EI of doctors who are under age of 41-50 years is 367.66. The upper limit and lower limit (at 95% confidence limit) of this mean are 393.89 and 341.44 respectively. Mean of EI of doctors who are above 50 years is 387. The upper limit and lower limit (at 95% confidence limit) of this mean are 422.18 and 351.81 respectively.

**Table 6.22 ANOVA Analysis Based on Age Variation**

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4501.612	3	1500.537	1.205	.312
Within Groups	122049.408	98	1245.402		
Total	126551.020	101			

Source: Compiled from survey data

From the table No.6.22, (i.e. ANOVA Analysis based on age) it may be concluded that there is no significant difference among the mean of EI scores of medical doctors having a different age groups in the profession. This is because significant value calculated i.e. .312 is greater than ALFA=0.05. Thus we reject the null hypothesis.

**Inference:** There is no difference in emotional intelligence based on age variation. It is concluded that there is no significant difference in the mean of EI of young and aged medical doctors.

#### 6.5.2.4 Variance in the Level of Emotional Intelligence of Doctors Based on Educational Standard Variation

As recorded in the table - 6.23, in the sample, it is observed that medical doctors who have bachelor degree have the high level of EI. The mean of EI of doctors who have a bachelor degree in medical science is 384.73. The upper limit and lower limit (at 95% confidence limit) of this mean are 394.87 and 374.60 respectively. The mean level of EI of doctors who have a master degree in medical science is 379.91. The upper limit and lower limit (at 95% confidence limit) of this mean are 389.58 and 370.25 respectively.

**Table 6.23 Mean of EI of Doctors Based on Education Standard**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Graduate	42	384.7381	32.52471	5.01867	374.6027	394.8735	312.00	444.00
Post graduate	60	379.9167	37.41761	4.83059	370.2507	389.5827	290.00	454.00
Total	102	381.9020	35.39746	3.50487	374.9492	388.8547	290.00	454.00

Source: Compiled from survey data

From the table - 6.24, (i.e. ANOVA Analysis based on Education Standard variation) it may be concluded that there is no significant difference between the mean of EI scores of medical doctors having a different educational qualification. This is because significant value calculated i.e. .501 is greater than ALFA=0.05. Thus, it is concluded that there is no significant difference between mean of EI of medical doctors with the variation in the level of education standard acquired.

**Table 6.24 ANOVA Analysis Based on Education Standard Variation**

	Sum of Squares	Df	Mean Square	F	Sig.
<b>Between Groups</b>	<b>574.317</b>	<b>1</b>	<b>574.317</b>	<b>.456</b>	<b>.501</b>
<b>Within Groups</b>	<b>125976.702</b>	<b>100</b>	<b>1259.767</b>		
<b>Total</b>	<b>126551.020</b>	<b>101</b>			

Source: Compiled from survey data

**Inference:** There is no significant difference between the mean of EI based on educational Standard.

#### 6.5.2.5 Variance in the level of Emotional Intelligence of Medical Doctors Based on Experience in Service Variation

**Table 6.25 Mean of EI of Doctors Based on Experience in Service**

	No.	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1-3	61	380.5738	30.78228	3.94127	372.6901	388.4575	304.00	446.00
4-7	14	382.8571	44.60227	11.92046	357.1046	408.6097	290.00	448.00
8-11	8	400.7500	30.48067	10.77655	375.2675	426.2325	344.00	444.00
>11	19	377.5263	43.46565	9.97171	356.5765	398.4761	290.00	454.00
<b>Total</b>	<b>102</b>	<b>381.9020</b>	<b>35.39746</b>	<b>3.50487</b>	<b>374.9492</b>	<b>388.8547</b>	<b>290.00</b>	<b>454.00</b>

Source: Compiled from survey data

From the table -6.25, we find that the mean of EI of doctors who have 1 to 3 years of service experience is 380.57. The upper limit and lower limit (at 95% confidence limit) of this mean are 388.45 and 372.69 respectively. The mean of EI of doctors who have 4 to 7 years of service experience is 382.85. The upper limit and lower limit (at 95% confidence limit) of this mean are 408.60 and 357.10 respectively. The mean of EI of doctors who have 8 to 11 years of service experience is 400.75. The upper limit and lower limit (at 95% confidence limit) of this mean are 426.23 and 375.26 respectively. The mean of EI of doctors who have above 11 years of service experience is 377.52. The upper limit and lower limit (at 95% confidence limit) of this mean are 398.47 and 356.57 respectively.

**Table 6.26 ANOVA Analysis Based on Experience in Service Variation**

	Sum of Squares	Df	Mean Square	F	Sig.
<b>Between Groups</b>	<b>3326.150</b>	<b>3</b>	<b>1108.717</b>	<b>.882</b>	<b>.453</b>
<b>Within Groups</b>	<b>123224.869</b>	<b>98</b>	<b>1257.397</b>		
<b>Total</b>	<b>126551.020</b>	<b>101</b>			

**Source: Compiled from survey data**

From the table- 6.26, (i.e. ANOVA analysis based on experience in service variation) it may be inferred that there is no significant difference in the mean of EI of medical doctors having a different level of experience in the profession. This is because the significant value calculated (i.e. .453) is greater than ALFA=0.05. Thus, it is concluded that there is no significant difference in the level of EI of less experienced and more experienced medical doctors.

**Inference:** The EI of the medical doctors is not inflated by their experience. We accept alternative hypothesis and conclude that doctors with more number of years in service do not have high EI than doctors with lesser years of experiences.

We can conclude that our experiment does not provide evidence that the difference in EI on the basis of demographic variables is statistically significant in the population. Thus we reject the hypothesis that there is a significant difference in EI on

the basis of demographic variables (Gender, age education, and experience) of medical doctors of North Bengal.

### 6.5.3 Variance in Happiness on the Basis of Emotional Intelligence

In this section **sub- hypothesis three** i.e. there is a difference in happiness on the basis of EI is tested.

**Table 6.27 Happiness Profiles of Doctors on the Basis of EI**

<b>Emotion/Happiness</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
<b>Very unhappy</b>	<b>3</b>	<b>3</b>	<b>2</b>
<b>Unhappy</b>	<b>Nil</b>	<b>10</b>	<b>Nil</b>
<b>Moderate</b>	<b>Nil</b>	<b>25</b>	<b>8</b>
<b>Happy</b>	<b>Nil</b>	<b>31</b>	<b>10</b>
<b>Very Happy</b>	<b>Nil</b>	<b>Nil</b>	<b>10</b>

**Source: Compiled from survey data**

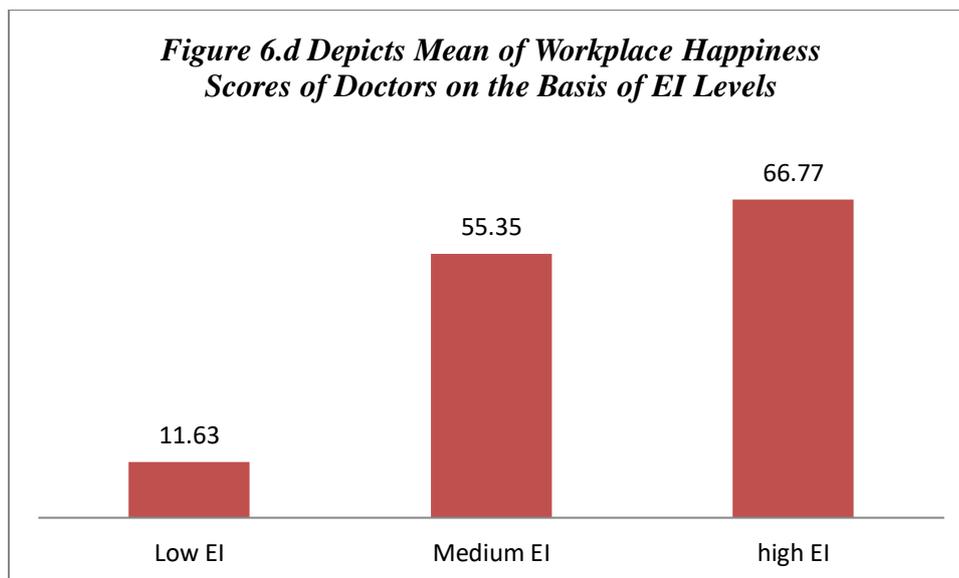
The table 6.27 reveals that all the very happy respondents of the survey have a high level of EI and all the doctors who have low level of EI are in the very unhappy group. Two doctors who have high EI level are in very unhappy group. 66.67% respondents with high EI is in the happy group. 44% respondents with medium EI is in the happy group and 25% doctors with medium EI are moderately happy.

From the table - 6.28, we find that the mean of workplace happiness of those who have a low EI is 11.63 with SD 2.49. The upper limit and lower limit (at 95% confidence limit) of this mean are 17.82 and 5.43 respectively. The mean of happiness of doctors who have a medium EI is 55.35 and SD is 19.25. The upper limit and lower limit (at 95% confidence limit) of this mean are 59.97 and 50.73 respectively. The mean of workplace happiness of doctors who have a high EI is 66.77 and SD is 19.27. The upper limit and lower limit (at 95% confidence limit) of this mean are 73.97 and 59.57 respectively.

**Table 6.28 Mean of Happiness of Doctors Based on EI**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1.00	3	11.6300	2.49345	1.43959	5.4359	17.8241	9.54	14.39
2.00	69	55.3549	19.25219	2.31769	50.7300	59.9798	1.56	79.05
3.00	30	66.7747	19.27530	3.51917	59.5772	73.9722	29.20	99.15
Total	102	57.4276	21.15495	2.09465	53.2724	61.5829	1.56	99.15

Source: Compiled from survey data, 1=Low Level of EI, 2=Medium Level of EI and 3=high level of EI



From the table- 6.29, (i.e. ANOVA analysis based on EI variation), we find that the probability calculated (.000) is less than ALFA= 0.05. Hence, we conclude that our experiment does provide evidence that there is a difference in the mean of workplace happiness on the basis of EI of doctors is statistically significant in the population.

**Table 6.29 ANOVAs Analysis Based on EI of Doctors**

	Sum of Squares	Df	Mean Square	F	Sig.
<b>Between Groups</b>	<b>9209.712</b>	<b>2</b>	<b>4604.856</b>	<b>12.667</b>	<b>.000</b>
<b>Within Groups</b>	<b>35991.004</b>	<b>99</b>	<b>363.545</b>		
<b>Total</b>	<b>45200.716</b>	<b>101</b>			

**Source: Compiled from survey data**

**Inference:** We accept the null hypothesis and conclude that there is a significant difference in happiness among doctors on the basis of EI.

#### **6.5.4 Relation between Happiness and Emotional Intelligence**

To study the relationship between workplace happiness and EI six hypotheses are build. The workplace happiness of medical doctors is dependent variable and EI 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 Alfa=.05 at 95% confidence level.

**Table 6.30 Correlation between Workplace Happiness, EI and Its components**

<b>Variables</b>	<b>Emotion</b>	<b>Self Awareness</b>	<b>Self regulation</b>	<b>Self motivation</b>	<b>Social Awareness</b>	<b>Social skill</b>
<b>Pearson Correlation Happy</b>	<b>.535**</b>	<b>.342**</b>	<b>.287**</b>	<b>.442**</b>	<b>.361**</b>	<b>.480**</b>
<b>Sig. (2-tailed)</b>	<b>.000</b>	<b>.000</b>	<b>.004</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>

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

Pearson's Correlation has been used in order to assess the nature of the relationship between EI, components of EI and workplace happiness. The Pearson's Correlation values (table 6.30) are less than 0.5 indicate that there is a positive

association between EI, its components, and workplace happiness, and also statistically significant at 5% significance level. The strength of association (r) lies .535 to .287; it means that EI and its components have a medium to large impact of on workplace happiness. Positive and significant relation can be seen between the variables and it could be inferred that EI and its components determine workplace happiness levels of doctors

**Sub-hypothesis four:** There is a relation between happiness and EI and EI has an impact on happiness.

**Table 6.31 Summary of Regression Analysis (Emotion)**

Model Summary			Model Parameter		Unstandardised coefficient				Durbin Watson	VIF
R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig.	B	Standard Error	t	Sig.		
.535	.286	.279	40.083	.000	15.984	2.525	6.331	0.000	1.988	1

**Source: Compiled from survey data**

The correlation coefficient between happiness and Emotional Intelligence is .535 (Table 6.31). Since the value is higher than  $r=.5$  it suggests a strong positive correlation between happiness and emotional intelligence. It is inferred that as the emotional intelligence of the doctors increases the level of workplace happiness also increases.

The Summary of regression analysis (table No.6.31) shows the R<sup>2</sup> value is .286 which means that 28 % of the variance in happiness is caused by the emotional intelligence of the doctors.

The F statistics and t- value in the table show that p- values .000 are less than the assumed level of significance .05. We shall accept the null hypothesis and hence it can be said that the EI of the doctors has a significant impact on medical doctors' workplace happiness.

**Inference Drawn:** Analysis of data proves that EI of the doctors of medical college has a strong impact on workplace happiness. A high level of EI enables doctors to communicate better with their colleagues, principal, nurse, subordinates, and patients.

**Sub-hypothesis five:** There is a relation between happiness and self-awareness and self-awareness has an impact on happiness.

**Table 6.32 Summary of Regression Analysis (Self -Awareness)**

Model Summary			Model Parameter		Unstandardised coefficient				Durbin Watson	VI F
R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig.	B	Standard Error	T	Sig.	1.9168	1
.342	.117	.108	13.283	.000	9.986	2.710	3.645	0.000		

**Source: Compiled from survey data**

The correlation coefficient between happiness and self-awareness dimension of emotional intelligence is .342 (Table 6.32). Since the value is positive and greater than  $r=.3$  it suggests that a moderate positive correlation between happiness and self-awareness. It can be inferred that as self-awareness dimension of EI of the doctors increases the level of workplace happiness too increases.

The Summary of regression analysis (table No. 6.32) shows the R<sup>2</sup> value is .117 which means that 11.7 % of the variance in happiness is caused by the self-awareness dimension of emotional intelligence of the doctors.

The F statistics and t statistics in the table (6.32) also indicate that the level of significance is less than .05. It proves the null hypothesis that self-awareness has an impact on happiness.

The p-value (.000) of t statistics is less than the assumed level of significance 0.05; we shall accept the hypothesis five. At the Alpha = 0.05 level of significance, there exists adequate proof to infer that the self-awareness is a valuable predictor of workplace happiness.

**Inference:** We can conclude that our experiment provides evidence that self-awareness of the doctors of medical college has a strong impact on workplace happiness. Self-awareness (knowing oneself in terms of beliefs, attitudes, norms, and values) is an important quality and basic quality of doctors (Eskin 1980). A high level

of self-awareness may help one to efficiently manage oneself and then be competent to manage others in the difficult situation.

**Sub-hypothesis six:** There is a relationship between happiness and self-regulation and self-regulation has an impact on happiness.

**Table 6.33 Summary of Regression Analysis (Self - Regulation)**

Model Summary			Model Parameter		Unstandardised coefficient				Durbin Watson	VI F
R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig.	B	Standard Error	t	Sig.	1.984	1
.287	.082	.073	8.946	.004	5.691	1.903	2.991	.004		

Source: Compiled from survey data

The correlation coefficient between happiness and Self-regulation dimension of emotional intelligence is .287 (Table 6.33). Since the r value .287 is close to  $r=.3$  and p-value is less than .05 it suggests a moderate positive correlation between happiness and self-regulation. It can be inferred that as the self-regulation of the doctors increases the level of workplace happiness also increases. The Summary of regression analysis (table No. 6.33) shows the R<sup>2</sup> value to be .082 which predicts that 8.2 % of the variance in happiness is caused by the self-regulation dimension of emotional intelligence of the doctors.

The F statistics in the table (6.33) also indicates that the level of significance is less than .05. It proves the null hypothesis that self-regulation has a strong impact on workplace happiness.

The assumed level of significance 0.05 is greater than the computed sig.-value (0.004) of t statistics; we shall accept the sub-hypothesis six. At the Alpha = 0.05 level of significance, there exists adequate proof to infer that the self-regulation is a valuable predictor of workplace happiness.

**Inference Drawn:** The hypothesis is proved and we can conclude that self-regulation component of EI of the doctors of medical college has a strong impact on workplace happiness. A high level of self-regulation enables doctors to manage their strength

and weaknesses. The ability to perceive oneself as good is essential for relating well to others (Claudia S. P. Fernandez et.al.).

**Sub-hypothesis seven:** There is a relationship between happiness and self-motivation and self-motivation has an impact on workplace happiness.

**Table 6.34 Summary of Regression Analysis (Self -Motivation)**

Model Summary			Model Parameter		Unstandarised coefficient				Durbin Watson	VI F
R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig.	B	Standard Error	T	Sig.	1.870	1
.442	.196	.188	24.329	.000	8.331	1.698	4.932	0.000		

**Source: Compiled from survey data**

The correlation coefficient between happiness and self-motivation dimension of EI is .442 (Table 6.34). Since the value of r (.442) is close to  $r=.5$  and sig. value (p) is less than .05, it suggests a strong positive correlation between happiness and self-awareness. It can be inferred that as the emotional intelligence of the doctors increases the level of workplace happiness increases.

The Summary of regression analysis (table No. 6.34) shows the R<sup>2</sup> value is .196 which means that 19.6 % of the variance in happiness is caused by the self-motivation dimension of EI of the doctors.

The F statistics in the table (6.34) also indicates that the level of significance is less than .05. It proves the null hypothesis that self-motivation has a strong impact on workplace happiness.

The assumed level of significance 0.05 is greater than the computed sig.-value (0.000) of t statistics; we shall accept the sub-hypothesis seven. At the Alpha = 0.05 level of significance, there exists adequate proof to infer that the self-motivation is a valuable predictor of workplace happiness.

**Inference Drawn:** Analysis of data in the study shows that self-motivation dimension of EI of the doctors of medical college has a strong impact on workplace happiness. 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 eight:** There is a relation between workplace happiness and social -awareness and social-awareness has an impact on happiness.

**Table 6.35 Summary of Regression Analysis (Social -Awareness)**

Model Summary			Model Parameter		Unstandardised coefficient				Durbin Watson	VIF
R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig.	B	Standard Error	T	Sig.		
.361	.130	.122	15.006	.000	7.4885	2.035	3.874	0.000	1.983	1

**Source: Compiled from survey data**

The correlation coefficient between happiness and social -awareness dimension of EI is .361 (Table 6.35). Since the co-efficient value is positive and close to  $r=.4$  and p-value is also significant, it suggests a moderate to strong positive correlation between happiness and self -awareness. It can be inferred that as EI of the doctors increases the level of workplace happiness increases.

The Summary of regression analysis (table No. 6.35 a) shows the R<sup>2</sup> value is .130 which means that 13 % of the variance in happiness is caused by the social awareness of EI of the doctors.

The F statistics in the table (6.35) also indicates that the level of significance is less than .05. It proves the hypothesis that social awareness has a significant impact on happiness.

The assumed level of significance 0.05 is greater than the computed sig.-value (0.000) of t statistics; we shall accept the sub- hypothesis eight. At the Alpha = 0.05 level of significance, there exists adequate proof to infer that the self-awareness is a valuable predictor of workplace happiness.

**Inference Drawn:** Thus the hypothesis is proved and we can infer that social awareness of the doctors of medical college has a significant impact on workplace

happiness. A high level of social -awareness among doctors enables to be empathic, aware of the organization matter and service oriented.

**Sub-hypothesis nine:** There is a relationship between happiness and social- skills and social- skills have an impact on workplace happiness.

**Table 6.36 Summary of Regression Analysis (Social -skill)**

Model Summary			Model Parameter		Unstandardised coefficient				Durbin Watson	Vif
R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig.	B	Standard Error	T	Sig.	2.06	1
.480	.231	.223	30.002	.000	9.906	1.818	5.477	0.000		

**Source; Compiled from Survey Data**

The correlation coefficient between workplace happiness and social -skills dimension of EI is .480 (Table 6.36). Since the coefficient value is positive and close to r=.5 and p-value is also significant; it suggests a strong positive correlation between workplace happiness and social- skills. It can be inferred that as the social skill of the doctors increases the level of workplace happiness increases.

The summary of regression analysis (table No. 6.36) shows the R<sup>2</sup> value is.231 which indicates that 23 % of the variance in workplace happiness is caused by the social -skill dimension of EI of the doctors.

The F statistics in the table (6.36) also indicates that the level of significance is less than .05.It proves the hypothesis that social- skill has a significant impact on happiness.

The assumed level of significance 0.05 is greater than the computed sig.-value (0.000) of t statistics; we shall accept the sub-hypothesis nine. At the Alpha = 0.05 level of significance, there exists adequate proof to infer that the self-skills are a valuable predictor of workplace happiness.

**Inference Drawn:** Thus the hypothesis is proved and from this we can conclude that social- skill dimension of EI of the doctors of medical college has a strong impact on workplace happiness. Social-- skills of EI includes leadership quality, control, encouraging others, change catalyst, communication, conflict management, building bonds, teamwork & collaboration (Deepa Nair,2012.).

The result of Regression Coefficient (table-6.37) indicates that out of five components of EI only social skill of doctors is the good predictor of workplace happiness.

**Table 6.37 Summary of Regression Coefficient**

<b>Components of EI</b>	<b>Beta</b>	<b>SIG.</b>
<b>Self Awareness</b>	<b>.173</b>	<b>.072</b>
<b>Self Regulation</b>	<b>.026</b>	<b>.788</b>
<b>Self Motivation</b>	<b>.198</b>	<b>.060</b>
<b>Social Awareness</b>	<b>.034</b>	<b>.757</b>
<b>Social skill</b>	<b>.321</b>	<b>.003</b>

**Source: Compiled from survey data**

### **6.5.5 Discussion**

The objectives of this section of the research are to identify the EI level of doctors who work at North Bengal medical college and to explore the relationship between demographic variables, EI and workplace happiness.

Data on emotional intelligence across gender indicates that male has a higher mean score of EI than female but this difference is statistically not significant. This finding is consistent with the result of Deepa Nair (2012), Kathungu Beatrix Mwathi (2010) Singh (2007) and Hopkins and Bilimoria (2008). The finding contradict the result of Mandell and Pherwani (2003) which showed significant differences in general EI scores between male and female managers. Stone, Parker, and Wood (2006) found the women scored higher on EI than men.

The result of ANOVA analysis of emotional intelligence based on age reveals that there is no significant difference in EI of doctors of different age groups. This finding supports the result of Deepa Nair (2012) who found no significant differences between EI and age range among private sectors banks employees in terms of EI in India and Kathungu Beatrice Mwathi (2010) also found no significant differences between EI and age range among service providers in Kenya. This finding contradicts the findings of Anitei (2008) study on a group of American people. The researcher reported a positive, significant, but weak relationship between age and EI.

The result of ANOVA analysis of emotional intelligence based on educational qualification reveals that there is no significant difference in EI of doctors having

different educational standard. This finding supports the result of Kathungu Beatrix Mwathi (2010) and contradicts the findings of Deepa Nair (2012). This finding support Goleman's ideas that higher educational qualifications may not have had a big impact on emotional intelligence (Kathungu Beatrix Mwathi, 2010).

The result of ANOVA analysis on emotional intelligence based on experience in service indicates that there is no significant difference in the mean of EI of doctors having different years of service experience. This finding supports the result of Kathungu Beatrix Mwathi (2010) and Deepa Nair (2012).

This finding also supports the result of Ngah, Jusof, and Rahman (2009), who established an insignificant correlation between EI and length of service among academics and middle management employees in Malaysian academia. Landa, Lopez-Zafra, Martos, and Aquilar-Luzon (2008) also found that among the nurses in general hospital in Spain EI not related to the length of service (Kathungu Beatrix Mwathi, 2010).

In the present study, the non-significant differences in EI on the basis of the demographic variables (Gender, age, educational qualification and experience in service) are observed; possibly it is the reflection of general EI score. If separate dimensions of EI are considered it may be possible that some significant differences may obtain. The small sample may also persuade the non-significance of the variance (Kathungu Beatrix Mwathi ,2010).

The research finding indicates that the medical doctors have a high level of EI. Findings reveal that all the dimensions of the EI (i.e., Self-awareness, Self-regulation, Motivation, Social-awareness, and Social-skill) and the overall EI are significantly correlated to workplace happiness .The regression results show that the overall EI and its dimensions have a significant impact on workplace happiness. It can be concluded that higher level of EI is related to higher levels of workplace happiness. The results of this study are consistent with the findings of Mallika Dasgupta, Furnham and Petrides (2003) which stated that EI bears a positive relation with happiness and a significant predictor of happiness. The results of the present study are also in coherence with the findings of Malik Roshan Ara (2013) that showed that the overall EI and its five dimensions are significantly related to happiness. The results of this study are consistent with the findings of Philip (2009) and Meetu Khosla and

Vandana Dokania (2010) who reported that happy respondents had higher EI compared to the unhappy respondents.

### 6.6 Findings related to the Relationship between Locus of control and Emotional Intelligence

This section deals with the analysis and interpretations related to the objectives and hypothesis of the relationship between Loc and Emotional intelligence

**Table 6.38 EI Profiles of Doctors Based on Loc Type (Internal & External)**

EI/Loc	Low	Medium	High
Internal Loc	1	54	28
External Loc	2	15	2

**Source: Compiled from survey data**

The table 6.38 reveals that out of 83 internal doctors 28 (34%) have a high EI level, 54 (65%) have a medium EI level and 1(1%) have a low level of EI. Approximately 11% of external doctors have a high and low level of EI.

### Hypothesis Testing

**Sub-hypothesis one:** There is a difference in EI on the basis of Loc.

**Table 6.39 Mean of EI of Doctors Based on Loc Type**

LOC	N	Mean	Std. Deviation	Std. Error Mean
Internal	83	389.1205	29.48848	3.23678
External	19	350.3684	42.18242	9.67731

**Source: Compiled from survey data**

As recorded in the table No.6.39, in the sample, it is observed that medical doctors who have Internal Loc the mean of EI is 389.1205 and SD is 29.48848. The mean of EI of doctors who have external Loc is 350.3684 and SD is 42.18242. The Levene's test of equality of variances (6.40) shows that the level of significance (.003) is less than .05, the variances are not equal. The calculated p-value (.001) is less than .05 the assumed level of significance; hence the null hypothesis is accepted. It is concluded that there is a significant difference on EI on the basis of Loc or Loc effect the EI.

**Table 6.40 Independent t test**

	Levene's test of equality of variance		T test of equality of means						
	F	Sig	t	Df	Sig (2 tailed)	Mean differens	Std. error difference	95% confidence interval of the difference	
								Lower	Upper
Emotion Equal variance assumed	4.856	.030	4.470	100	.000	38.75206	8.17531	22.53248	54.97164
Equal variance not assumed			3.798	22.192	.001	38.75206	10.20427	17.60029	59.90383

**Source: Compiled from survey data**

**Inference:** We accept the null hypothesis i.e. there is a significant difference in EI on the basis of Loc type (i.e. internal and external).

**Sub-hypothesis two:** There is a relation between EI and its components with Internal Loc.

Pearson's Correlation has been used in order to assess the nature of the relationship between EI, its component, and internal Loc. Table- 6.41 shows that there is a significant ( $p < .05$ ) positive correlation between internal locus of control, EI, and its components, except social awareness.

**Table 6.41 Correlations between EI and Its Components with Internal Loc**

Variables	EI	Self Awareness	Self Regulation	Self motivation	social Awareness	Social Skill
<b>.Internal Loc</b>	<b>.440**</b>	<b>.139</b>	<b>.245*</b>	<b>.300**</b>	<b>.338**</b>	<b>.470**</b>
<b>Sig.(2 tailed)</b>	<b>.000</b>	<b>.165</b>	<b>.013</b>	<b>.002</b>	<b>.000</b>	<b>.000</b>

**Source: Compiled from survey data; \*\*.** Correlation is significant at the 0.01 level (2-tailed).;\*. Correlation is significant at the 0.05 level (2-tailed).

Pearson's Correlation Coefficient  $r$  of the relation between EI and internal Loc is .444, self-awareness and internal Loc is .139(not significant), self-regulation and internal Loc is .254, self-motivation and internal Loc is .300, social awareness and internal Loc is .338, and social skill and internal Loc is .470. The sub- hypothesis two

is accepted i.e. there is a positive correlation between internal locus of control, EI and its components of the medical doctors of North Bengal.

**Inference:** Our experiment provides evidence that there is a significant positive relationship between Internal Loc, EI and different components of EI, except self - awareness dimension of EI of the doctors of the medical college.

**Sub-hypothesis three:** There is a relation between EI and its components with External Loc.

**Table 6.42 Correlations between EI and Its Components with External Loc.**

Variables	EI	Self Awareness	Self Regulation	Self motivation	social Awareness	Social Skill
External Loc	.118	-.068	-.174	.044	-.157	-.080
Sig.(2 tailed)	.236	.500	.081	.660	.114	..426

**Source: Compiled from survey data**

Pearson's Correlation result in table 6.42 shows that there is an insignificant ( $p > 0.05$ ) negative correlation between external Loc, EI and its components ;except self- motivation where the relationship is positive but insignificant. Since the obtained  $p$  is greater than the assumed 0.05 level of significance for all variables we reject the null hypothesis at 0.05 levels.

**Inference:** Thus the alternative hypothesis is accepted that there is an insignificant relation between EI, its components and external Loc.

### 6.6.1 Discussion

The objectives of this section of the research are to identify the levels of EI according to Loc type of doctors who work at North Bengal medical college and to explore the relationship between EI and Loc type. The survey finds that internal Loc type doctors have a high EI level than the doctors who have external type of Loc. Internal Loc is significantly and positively correlated with EI and its dimensions. This result supports the findings of Singh (2006) Gore & Sturgis (2005) and Sandra Glidea (2012). The results of Sandra Glidea (2012) also showed that a significant positive correlation with exaggerated internal Loc; which demonstrated that a person with an

excessive and unrealistic belief in their personal control was also high in EI. Individuals with internal Loc believe they can control their life events and have the well-built willpower to control and monitor their emotion. Pearson correlation result shows that external Loc is insignificantly and negatively related to EI and its dimension. This type of individuals believes in luck and faith than personal effort and control.

### 6.7 Relation between Workplace Happiness, Locus of control, and Emotional Intelligence

**Table 6.43 EI and Loc Profile of Very Happy and Very Unhappy Doctors**

Happiness/EI	Low	Medium	High
Very Happy	Nil	Nil	10(Internal Loc)
Very Unhappy	3(External Loc)	5(External Loc)	Nil

**Source: Compiled from survey data**

Table 6.43 shows that all the very doctors of the survey have internal Loc and high level of EI. There are no doctors with external loc in a very happy group with high EI level. They are in a very unhappy group with medium and low-level of EI.

**Table 6.44 Summary of Regression analysis (EI and Internal Loc)**

Model Summary			Model Parameter		Durbin Watson	VIF
R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig.	1.977	1.239
.577	.333	.319	24.698	.000		

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

In the table 6.31, we see that 28.6% variation in happiness is explained by EI. When internal Loc is taken with EI, it explains 33.3% (the Summary of regression analysis table No.6.44) variance in workplace happiness; which is higher than previous one.

The F statistics (table-6.44) value shows that p- value .000 is less than the assumed level of significance .05 and it is statistically significant. The value of r (.577) indicates that EI and internal Loc jointly have strong relation to workplace happiness.

**Table 6.45 Summary of Regression analysis (EI and External Loc)**

Model Summary			Model Parameter		Durbin Watson	VIF
R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	Sig.	1.977	1.239
.535	.286	.272	19.844	.000		

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

In the table 6.45, we see that 28.6% variation in happiness is explained by EI. When external Loc is taken with EI, there is no change (the Summary of regression analysis table No.6.45) in variation in workplace happiness. This is same as 28.6% variation in happiness as previous one (table-6.31).

The F statistics (table-6.45) value shows that p - value .000 is less than the assumed level of significance .05 and it is statistically significant.

The value of r (.535) indicates that the relation between EI, external Loc and workplace happiness. EI and external Loc jointly not influenced workplace happiness

We can conclude that there is a positive relationship between internal Loc, external Loc and EI, and Loc (internal and External) and EI explained significant variance in workplace happiness. Doctors with internal Loc are very happy and they have a high level of EI. Internal loc and EI are good predictors of workplace happiness.

### **6.7.1 Discussion**

EI with internal Loc is a strong positive predictor of workplace happiness. Happy individuals can regulate their emotions better and control their impulses. The variance in workplace happiness has not changed when EI with external Loc is entered in the regression to test the effect of these variables on workplace happiness. EI with external Loc is not a strong positive predictor of workplace happiness.

### **6.8 Conclusion**

The research hypothesis that there is a relation between Loc type (internal and external), EI and Workplace Happiness is tenable. There is a significant positive relationship between internal Loc and workplace happiness and no significant relation is found between external Loc and workplace happiness. The demographic /biographic variables (gender, age, education, and experience) are not significant in

determining EI and Loc type. It may be due to the sampling fluctuation that the differences in mean score of demographic variables with regard to EI and Loc type that was observed. EI with internal Loc is a strong positive predictor of workplace happiness. Happier individuals can regulate their emotions better and control their impulses. Furthermore, workplace happiness increases the level of Self-awareness, Self-regulation, Motivation, Social-awareness, and Social- skills (Mali Roshan Ara (2013).