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## **“Correlational study on emotional intelligence and academic performance of nursing students in a selected college of nursing, Kochi”.**

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### **ABSTRACT:**

Emotional Intelligence (EI), often measured as an Emotional Intelligence Quotient (EQ), describes ability, capacity, skill or a self-perceived ability, to identify, assess, and manage the emotions of one's self, of others, and of groups. The study is titled “Correlational study on emotional intelligence and academic performance of nursing students in a selected college of nursing, Kochi”. The objectives were 1) to determine the emotional intelligence of the nursing students. 2) to determine the academic performance of the nursing students. 3) to correlate the emotional intelligence and the academic performance of the nursing students. 4) to determine influencing factors of emotional intelligence and academic performance. **Methodology:** A quantitative approach, descriptive correlational design, among 90 nursing students who were selected by stratified random sampling technique and the data were collected using an Emotional intelligence questionnaire. **Results:** Overall academic performance has a positive correlation between adaptability(0.540), achievement (0.539), conflict management (0.549), teamwork and collaboration (0.553), influence (0.660). Correlation between the emotional intelligence and academic performance during higher secondary level of the students shows a significant positive correlation in the ability to adapt ( $r=0.500$ ) and achievement ( $r=0.508$ ). Correlation between the emotional intelligence and academic performance during the previous year of the nursing students shows a significant positive correlation in the area of conflict management ( $r=0.544$ ). The association between emotional intelligence and socio demographic variables shows that except gender ( $p>0.05$ ), none of the variables are associated with EQ and in regard of academic performance, it has no association with any of the socio demographic variables ( $p>0.05$ ). **Conclusions:** Nursing students who were more emotionally intelligent performed better in both the continuous assessments and the final professional examination. Therefore, it is possible that emotional skill development may enhance nursing students' academic performance.

### **KEYWORDS:**

Emotional intelligence quotient, academic performance, empathy, conflict management

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## INTRODUCTION

"Education plays an important role in building up the society. In modern day society and the nation cannot achieve the aims of economic growth and development without educating and nurturing the talent of its citizens. The present state of affairs needs immediate attention of students in the process of education".<sup>1</sup>

The term „emotional intelligence’ was coined by Peter Salovey from University of Yale and John Mayer from University of New Hampshire in 1990. Emotional Intelligence (EI), often measured as an Emotional Intelligence Quotient (EQ), describes ability, capacity, skill or a self-perceived ability, to identify, assess, and manage the emotions of one's self, of others, and of groups.<sup>2</sup> Five components of emotional intelligence are a) Self-awareness b) Managing emotions c) Motivating self d) Empathy and e) interpersonal skills.<sup>3</sup>

The success in academic performance of the students depends on their psychological well-being. A good academic achievement of a particular student is associated with his personality and mental health. In order to perform his duty in an effective manner a student should be intelligent in emotion and satisfied as a student because a student is the hope for his society and nation. Student's personality, behavior, interest, attitude and emotions affect their academic performance. So a student should understand his own emotions and other attributes in the teaching learning process.<sup>1</sup>

The present study would give researcher additional knowledge and understanding about the impact of emotional quotients on academic performance of students. Since emotional intelligence is not fixed like IQ, it can be learned through developmentintervention strategies hence, the possibility of improving academic performance. The results of the study will encourage other researchers to conduct similar studies that may be utilized to advance research in the concept on how EQ affects nursing student academic performance.

## MATERIALS AND METHODS

Quantitative approach using non-experimental and correlation study design was used for the present study. The research study was conducted in a selected nursing college at Kochi. Probability stratified random sampling technique was used for the selection of subjects. Ninety subjects were selected from the college according to inclusion criteria. The data collection instruments included- **Section A:** Baseline variables such as age, gender, education of parents, annual income of family, type of family, residence, ordinal position in the family. **Section B:** Emotional intelligence questionnaire for assessing emotional intelligence of nursing students. **Section C:** Academic performance of nursing students is measured by Grade Point Average (GPA)

## RESULTS

**Table 1. Distribution of sample characteristics based on sociodemographic data n=90**

Variables	Frequency (f)	Percentage (%)
<b>Age (in years)</b>		
15 - 17	0	0.0
18 - 20	58	64.4
21 - 23	32	35.6
Above 23	0	0.0
<b>Gender</b>		

Male	4	4.4
Female	86	95.6
<b>Religion</b>		
Christian	35	38.9
Hindu	53	58.9
Muslim	2	2.2
<b>Education of Father</b>		
Primary School	7	7.8
High School	61	67.8
Graduate	22	24.4
Post Graduate	0	0.0
<b>Education of Mother</b>		
Primary School	2	2.2
High School	60	66.7
Graduate	25	27.8
Post Graduate	3	3.3
<b>Annual Income</b>		
Above Rs. 2,50,000	5	5.6
Rs. 1,00,001 - 2,50,000	32	35.6
Rs. 20,001 - 1,00,000	53	58.9
Up to Rs. 20,000	0	0.0
<b>Type of Family</b>		
Nuclear	78	86.7
Joint	11	12.2
Extended	1	1.1
<b>Ordinal Position</b>		
Only Child	12	13.3
First Child	51	56.7
Second Child	26	28.9
Third and Above	1	1.1
<b>Current Habitation</b>		
Hostel	90	100
Home	0	0
Paying Guest	0	0

Support system		
Family	63	70.0
Friends	27	30.0
Colleagues	0	0.0

Table 1 represents the sample characteristics based on sociodemographic data. The table shows that 58 (64.4%) of the students are in the age group of 18-20 years, followed by 32 (35.6%) in 21-23 years. Majority, that is, 86 (95.6%) of the students are females, and more than half 53 (58.9%) are Hindus. Educational status of majority of the parents are high school level, that is, 67.8% of fathers and 66.7% of mothers. Annual family income of majority 53(58.9%) is between Rs.20,001-1,00,000/-. Regarding the type of family , 86.7% (78 out of 90) are from nuclear family and more than half (56.7%)are first child of the parents. Family is the main support system of 63(70%) of the students.

**The first objective was to determine the emotional intelligence of the nursing students.**

**Table 2. Itemwise distribution of Emotional Intelligence n=90**

Items	Maximum score	Mean	SD	Range
Emotional Self Awareness	18	11.5	2.712	4 - 17
Accurate Self Assessment	36	24.4	6.339	9 - 63
Self Confidence	42	26.3	8.907	8 - 86
Emotional Self Control	24	15.8	6.519	6 - 67
Transparency	24	14.6	3.836	7 - 23
Adaptability	30	17.8	4.758	8 - 30
Initiative	36	21.4	4.474	12 - 34
Achievement	36	22.9	5.173	12 - 34
Optimism	24	16.3	6.874	8 - 68
Empathy	42	31.7	8.117	17 - 67
Organisational Awareness	24	15.9	3.870	8 - 24
Service Orientation	42	29.8	5.671	16 - 42
Developing Others	30	20.8	5.837	12 - 57
Inspirational Leadership	24	16.7	8.914	6 - 82
Conflict Management	30	18.2	4.535	8 - 29
Change Catalyst	42	27.7	8.723	11 - 83
Teamwork and Collaboration	48	33.9	8.266	12 - 48
Influence	42	25.4	6.130	15 - 42
Total (Emotional Intelligence)	594	391.3	67.587	245 - 588

Data presented in table 2, showed that the mean and SD of emotional intelligence was 391.3 and 67.587. Among the components of emotional intelligence, the highest mean score was for team work and collaboration (33.9) and the lowest score for emotional self awareness (11.5). **The second objective was to determine the academic performance of the nursing students.**

**Table 3. Distribution according to the academic performance of the students n=90**

Variables	Frequency	Percentage
<b>Emotional Intelligence</b>		
Poor	0	0.0
Average	30	33.3
Good	49	54.4
Excellent	11	12.2
<b>Grade in +2</b>		
Pass	0	0.0
Second Class	1	1.1
First Class	34	37.8
Distinction	55	61.1
<b>Number of Attempts in +2</b>		
One	90	100.0
Two	0	0.0
Three	0	0.0
Four	0	0.0
<b>Grade in the Previous Year</b>		
Pass	8	8.9
Second Class	33	36.7
First Class	46	51.1
Distinction	3	3.3
<b>Distribution of Number of Attempts in the previous year</b>		
One	77	85.6
Two	11	12.2
Three	1	1.1
Four	1	1.1

Data presented in table 3, showed that the emotional intelligence of 54.4% (49 out of 90) is „Good’ and only 12.2% belong to the category, “excellent” emotional intelligence and there were none with poor emotional intelligence. Further, it can also be noted that some of the

students fall in to the category of “poor”. Out of the 90 subjects, 55 (61.1%) secured distinction in +2 followed by first class (37.8%) and all the students have passed the +2 in the first attempt. But the data also give evidence that there are only 3.3% (3 out of 90) who secured distinction in the previous year and only 85.6% have cleared the previous year with first class. There is 1.1% each who cleared the previous year in the third and fourth attempt.

**The third objective was to correlate the emotional intelligence and the academic performance of the nursing students.**

**Table 4. Correlation between emotional intelligence and academic performance n=90**

Emotional Intelligence	Higher Secondary		Previous Year		Overall	
	Correlation (r)	p - value	Correlation (r)	p - value	Correlation (r)	p - value
Emotional Self Awareness	0.151	0.155	0.305	0.003	0.256	0.015
Accurate Self Assessment	0.289	0.006	0.268	0.011	0.305	0.003
Self Confidence	0.369	0.000	0.457	0.000	0.461	0.000
Emotional Self Control	0.098	0.356	0.197	0.063	0.174	0.101
Transparency	0.396	0.000	0.366	0.000	0.425	0.000
Adaptability	0.500	0.000	0.468	0.000	0.540	0.000
Initiative	0.377	0.000	0.473	0.000	0.476	0.000
Achievement	0.508	0.000	0.446	0.000	0.539	0.000
Optimism	0.313	0.003	0.197	0.063	0.288	0.006
Empathy	0.325	0.002	0.334	0.001	0.369	0.000
Organisational Awareness	0.389	0.000	0.392	0.000	0.438	0.000
Service Orientation	0.491	0.000	0.460	0.000	0.531	0.000
Developing Others	0.334	0.001	0.385	0.000	0.398	0.000
Inspirational Leadership	0.247	0.019	0.361	0.000	0.343	0.001
Conflict Management	0.436	0.000	0.544	0.000	0.549	0.000
Change Catalyst	0.263	0.012	0.210	0.047	0.265	0.012
Teamwork and Collaboration	0.499	0.000	0.497	0.000	0.553	0.000
Influence	0.468	0.000	0.468	0.000	0.518	0.000
Emotional Intelligence	0.575	0.000	0.605	0.000	0.660	0.000

Table 4 represents the correlation between the emotional intelligence and academic performance of the nursing students. Karl Pearson’s correlation coefficient was used to measure the degree of linear relationship between the variables. Results showed that emotional

intelligence had a positive correlation with the academic performance that is with overall ( $r=0.660$ ), previous year ( $0.605$ ) and highersecondary( $0.575$ ).

Overall academic performance has a positive correlation between adaptability ( $0.540$ ), achievement ( $0.539$ ), conflict management ( $0.549$ ), teamwork and collaboration ( $0.553$ ), influence ( $0.660$ ) which indicates that higher the EQ, better is the ability to adapt, possibility to achieve, ability to manage conflict, ability for teamwork and collaboration and to influence.

Correlation between the emotional intelligence and academic performance during higher secondary level of the subjects shows a significant positive correlation in the ability to adapt ( $r=0.500$ ) and achievement ( $r=0.508$ ).

Correlation between the emotional intelligence and academic performance during the previous year of the nursing students shows a significant positive correlation in the area of conflict management ( $r=0.544$ ).

**The fourth objective was to determine influencing factors of emotional intelligence and academic performance.**

**Association between emotional intelligence and selected socio-demographic variables**

Association between emotional intelligence and selected demographic variables was determined using the non parametric test- Fisher’s exact test.

**Table 5. Association between emotional intelligence and socio demographic variables**

Socio demographic variables	Emotional Intelligence			Total	p – value
	Average (n,%)	Good (n,%)	Excellent (n,%)		
<b>Age</b>					0.601
18 - 20 Years	21 (36.2)	29 (50.0)	8 (13.8)	58	
21 - 23 Years	9 (28.1)	20 (62.5)	3 (9.4)	32	
Total	30 (33.3)	49 (54.4)	11 (12.2)	90	
<b>Gender</b>					0.015
Male	2 (50.0)	0 (0.0)	2 (50.0)	4	
Female	28 (32.6)	49 (57)	9 (10.5)	86	
Total	30 (33.3)	49 (54.4)	11 (12.2)	90	
<b>Religion</b>					0.724
Chrisrian	10 (28.6)	19 (54.3)	6 (17.1)	35	
Hindu	19 (35.8)	29 (54.7)	5 (9.4)	53	
Muslim	1 (50.0)	1 (50.0)	0 (0.0)	2	
Total	30 (33.3)	49 (54.4)	11 (12.2)	90	



<b>Education of Father</b>					
Primary School	2 (28.6)	3 (42.9)	2 (28.6)	7	0.420
High School	21 (34.4)	35 (57.4)	5 (8.2)	61	
Graduate	7 (31.8)	11 (50.0)	4 (18.2)	22	
Total	30 (33.3)	49 (54.4)	11 (12.2)	90	
<b>Education of Mother</b>					
Primary School	1 (50.0)	1 (50.0)	0 (0.0)	2	0.675
High School	23 (38.3)	30 (50.0)	7 (11.7)	60	
Graduate	5 (20.0)	16 (64.0)	4 (16.0)	25	
Post Graduate	1 (33.3)	2 (66.7)	0 (0.0)	3	
Total	30 (33.3)	49 (54.4)	11 (12.2)	90	
<b>Annual Income</b>					
Above Rs. 2,50,000	0 (0.0)	4 (80.0)	1 (20.0)	5	0.146
Rs. 1,00,001 - 2,50,000	8 (25.0)	21 (65.6)	3 (9.4)	32	
Rs. 20,001 - 1,00,000	22 (41.5)	24 (45.3)	7 (13.2)	53	
Total	30 (33.3)	49 (54.4)	11 (12.2)	90	
<b>Type of Family</b>					
Nuclear	26 (33.3)	41 (52.6)	11 (14.1)	78	0.712
Joint	4 (36.4)	7 (63.6)	0 (0.0)	11	
Extended	0 (0.0)	1 (100.0)	0 (0.0)	1	
Total	30 (33.3)	49 (54.4)	11 (12.2)	90	
<b>Ordinal Position</b>					
Only Child	3 (25.0)	8 (66.7)	1 (8.3)	12	0.683
First Child	18 (35.3)	28 (54.9)	5 (9.8)	51	
Second Child	8 (30.8)	13 (50.0)	5 (19.2)	26	

Third Child	1 (100.0)	0 (0.0)	0 (0.0)	1	
Total	30 (33.3)	49 (54.4)	11 (12.2)	90	
<b>Current Habitation</b>					
Hostel	29 (34.1)	46 (54.1)	10 (11.8)	85	
Home	0 (0.0)	3 (75.0)	1 (25.0)	4	0.263
Paying Guest	1 (100.0)	0 (0.0)	0 (0.0)	1	
Total	30 (33.3)	49 (54.4)	11 (12.2)	90	
<b>Support System</b>					
Family	19 (30.2)	35 (55.6)	9 (14.3)	63	0.517
Friends	11 (40.7)	14 (51.9)	2 (7.4)	27	
Total	30 (33.3)	49 (54.4)	11 (12.2)	90	

Data presented in table 5 regarding association between emotional intelligence and socio demographic variables shows that except gender ( $p > 0.05$ ), none of the variables are associated with EQ.

**Table 6. Association between academic performance and socio demographic variables**

Socio demographic variables	Academic Performance			Total	p – value
	Second Class (n,%)	First Class (n,%)	Distinction (n,%)		
<b>Age</b>					0.367
18 - 20 Years	4 (6.9)	44 (75.9)	10 (17.2)	58	
21 - 23 Years	0 (0.0)	25 (78.1)	7 (21.9)	32	
Total	4 (4.4)	69 (76.7)	17 (18.9)	90	
<b>Gender</b>					0.188
Male	1 (25.0)	3 (75.0)	0 (0.0)	4	
Female	3 (3.5)	66 (76.7)	17 (19.8)	86	
Total	4 (4.4)	69 (76.7)	17 (18.9)	90	
<b>Religion</b>					0.451
Chrisrian	2 (5.7)	25 (71.4)	8 (22.9)	35	
Hindu	2 (3.8)	43 (81.1)	8 (15.1)	53	
Muslim	0 (0.0)	1 (50.0)	1 (50.0)	2	
Total	4 (4.4)	69 (76.7)	17 (18.9)	90	

<b>Education of Father</b>					
Primary School	0 (0.0)	6 (85.7)	1 (14.3)	7	0.863
High School	4 (6.6)	46 (75.4)	11 (18.0)	61	
Graduate	0 (0.0)	17 (77.3)	5 (22.7)	22	
Total	4 (4.4)	69 (76.7)	17 (18.9)	90	
<b>Education of Mother</b>					
Primary School	0 (0.0)	2 (100.0)	0 (0.0)	2	0.158
High School	4 (6.7)	48 (80.0)	8 (13.3)	60	
Graduate	0 (0.0)	18 (72.0)	7 (28.0)	25	
Post Graduate	0 (0.0)	1 (33.3)	2 (66.7)	3	
Total	4 (4.4)	69 (76.7)	17 (18.9)	90	
<b>Annual family Income</b>					
Above Rs. 2,50,000	0 (0.0)	3 (60.0)	2 (40.0)	5	0.166
Rs. 1,00,001 - 2,50,000	1 (3.1)	22 (68.8)	9 (28.1)	32	
Rs. 20,001 - 1,00,000	3 (5.7)	44 (83)	6 (11.3)	53	
Total	4 (4.4)	69 (76.7)	17 (18.9)	90	
<b>Type of Family</b>					
Nuclear	4 (5.1)	60 (76.9)	14 (17.9)	78	0.391
Joint	0 (0.0)	9 (81.8)	2 (18.2)	11	
Extended	0 (0.0)	0 (0.0)	1 (100.0)	1	
Total	4 (4.4)	69 (76.7)	17 (18.9)	90	
<b>Ordinal Position</b>					
Only Child	1 (8.3)	8 (66.7)	3 (25.0)	12	0.508
First Child	1 (2.0)	42 (82.4)	8 (15.7)	51	
Second Child	2 (7.7)	18 (69.2)	6 (23.1)	26	
Third Child	0 (0.0)	1 (100.0)	0 (0.0)	1	
Total	4 (4.4)	69 (76.7)	17 (18.9)	90	
<b>Current Habitation</b>					
Hostel	4 (4.7)	65 (76.5)	16 (18.8)	85	0.990
Home	0 (0.0)	3 (75.0)	1 (25.0)	4	
Paying Guest	0 (0.0)	1 (100.0)	0 (0.0)	1	
Total	4 (4.4)	69 (76.7)	17 (18.9)	90	
<b>Support System</b>					

Family	3 (4.8)	50 (79.4)	10 (15.9)	63	0.567
Friends	1 (3.7)	19 (70.4)	7 (25.9)	27	
Total	4 (4.4)	69 (76.7)	17 (18.9)	90	

Data presented in table 6 regarding association between academic performance and socio demographic variables shows that academic performance has no association between any of the socio demographic variables ( $p>0.05$ ).

## DISCUSSION

The present study was undertaken to assess the relationship between students emotional intelligence and academic performance in a selected nursing college, Kochi. The current study was done in 90 nursing students. Results of the present study revealed that emotional intelligence had a significant correlation with academic performance. This finding is congruent with the earlier research findings of Schuttle et al. (1998) and Tapia (1998) who found a significant relationship between emotional intelligence and the Scholastic Aptitude Test. The effect of emotional intelligence on academic success is well documented in the literature (Bar-On, 2003; Farook, 2003; Marquez et al. 2006; Adeyemo, 2007). This result is easily explainable bearing in mind that emotional intelligence competences, such as ability to regulate one's feeling, problem solving, intrapersonal and interpersonal skills are highly germane to academic success. For instance, a student who is adapt in emotional management could use such skill to ward off stress and anxiety associated with test-taking and examination. Furthermore, ability to display interpersonal skills may assist students to seek academic help from teachers, peers and resource persons.

## CONCLUSION

Increasing emotional intelligence may not only facilitate the learning process and improve career choice and likelihood of success, but could also enhance the probability of better personal and social adaptation in general. The educational experience would be more balanced or holistic as it would focus on educating the whole person. There could also be beneficial effects for the institutions, improving the environment in which the educational experience occurs. Students need the ability to appraise a situation correctly, react appropriately in difficult circumstances and exercise stress tolerance or display impulse control when making judgments about academic decisions. Students need activities and advising sessions that help establish proactive patterns that increase awareness about emotional intelligence. The goal is to foster skills that lead to academic success.

## REFERENCE

1. Dhull P. Emotional Intelligence of Students in Relation To Their Academic Achievements. International Indexed & Refereed Research Journal; April- May 2013 VOL-IV \* ISSUE 51-52.
2. Mayer JD, Salovey P. Emotional intelligence and construction and regulation of feelings. *ApplPrevPsychol* 1995;4(3):197-208.
3. Mayer JD, Salovey P, Caruso DR. What is Emotional intelligence? *J sport psychology* [serial online] 2002 [cited 2012 Sept 30]; 63(6):503-7 Available

from:[http://heblat.research.yale.edu/pub\\_pdf/pub55\\_measuringemotionalintelligencewiththeMSCEITV2.0.pdf](http://heblat.research.yale.edu/pub_pdf/pub55_measuringemotionalintelligencewiththeMSCEITV2.0.pdf)

4. Sudarsam S, Kumar S. (2002) Traditional intelligence (IQ) and Emotional Intelligence (EQ)" University News Vol. 40(12).
5. Benson G, Ploeg J, Brown B. A cross sectional study of emotional intelligence in baccalaureate nursing students. Nurse Education Today.[serial online] 2010 Jan 30 [cited 2012 Dec 14] 30(1):49-53 Available from: URL:<http://www.krepublishers.com/02-Journals/JHE/JHE-17-0-000-000-2005-Web/JHE-17-2-085-160-2005-Abst-PDF/JHE-17-2-153-155-2005-1208-Katyal-S/JHE-17-2-153-155-2005-1208-Katyal-S.pdf>
6. Sharan P, Sagar R. The Need for National Data on Epidemiology of Child and Adolescent Mental Disorders. J Indian Assoc Child Adolesc Ment Health [serial online] 2008 [cited 2012 Aug 30]; 4(2):22-7 Available from: <http://www.jiacam.org/0402/EDIT0402.pdf>
7. Nita. Academic Intelligence is related to Emotional Intelligence. Journal of Indian Psychology [serial online] 2008 Jun 25 [cited 2012 Sep 20]; 24(7):23-30. Available from: URL:<http://nitawriter.wordpress.com/2008/06/25/academic-intelligence-is-related-to-emotional-intelligence/>
8. Aremu OA, Tella A. Relationship among emotional intelligence, parental involvement and academic achievement of secondary school students in Ibadan, Nigeria. [online] 2005 [cited Dec 21] Available from :[www.usca.edu/essays/vol182006/tella1.pdf](http://www.usca.edu/essays/vol182006/tella1.pdf)
9. Nasir M, Masrur R. An Exploration of Emotional Intelligence of the Students of IIUI in Relation to Gender, Age and Academic Achievement. Bulletin of Education and Research June 2010, Vol. 32, No. 1 pp 37-51.