EMOTIONAL INTELLIGENCE - A REFLECTION OF SELF AWARENESS, SELF CONFIDENCE, RESPONSIBILITY, FLEXIBILITY AND ADAPTABILITY AMONG DENTAL COLLEGE STUDENTS

M.B. Sai Keerthana¹, G. Sridevi², S. Sangeetha ³

¹ Saveetha Dental College and Hospital, Saveetha institute of Medical and Technical sciences (SIMATS), Saveetha University, Chennai, India.
² Associate Professor Department of Physiology Saveetha Dental College and Hospital, Saveetha institute of Medical and Technical sciences (SIMATS), Saveetha University, Chennai, India.
³ Lecturer Department of Anatomy Saveetha Dental College and Hospital, Saveetha institute of Medical and Technical sciences (SIMATS), Saveetha University, Chennai, India.

ABSTRACT

Emotional intelligence is the ability of a person to control and react according to emotions and feelings. Emotional intelligence is an inborn ability that makes people recognise, learn, feel, understand the emotions they are going through. Emotions are nothing but feelings that should be used properly as it has a huge impact in our lives. Emotional intelligence has an impact on various characters and attitudes of a person like self confidence, responsibility, adaptability, and self awareness. Emotional intelligence usually helps a person during a team performance rather than an individual performance. A standard set questionnaire designed was used to assess emotional intelligence among dental students. The study shows that the majority of the students have knowledge about emotional intelligence and intellectual capability. The present study concluded that the majority of the students are self aware and are able to manage their stress and emotions better. They were found to be self confident, trustworthy and adaptable and flexible. Among all of the students females are seen to cope up with their stress and are able to manage their emotions better than male participants.

KEYWORDS: emotional intelligence, self awareness, self confidence, responsibility, gender

INTRODUCTION

Emotional intelligence is the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions. (Mallery, 2008) Emotional Intelligence matters as much as the Intellectual ability of a person. (Zeki et al., 2016), (David et al., 2019). Emotional Intelligence allows a person to think more creatively and use their Emotions to solve problems. (Samineni and Shankar, 2015), (Shruthi and Preetha, 2018). Emotional Intelligence is found to be related to
workplace performance in highly demanding work environments mainly in Professionals like Doctors and Dentists.( Gilar-Corbi et al., 2019), ( Choudhari and Jothipriya, 2016). Emotional Intelligence has relationships with mainly four aspects - Self Awareness, Self Regulation , Social Skills and Self Motivation ( Herrera et al., 2019), ( Iyer et al., 2019). Emotional Intelligence has proven to be associated with academic and clinical performance of medical students. Emotional Intelligence has played an important role in communication skills , academic and Clinical Performances and to maintain patients satisfaction. ( Ravikumar et al., 2017), (Swathy and Gowri Sethu, 2015). The Emotional Quotient bar ensures to measure certain factors which are mostly self oriented like emotional self-awareness, self-actualization, empathy, Social responsibility, problem solving and many more. ( Schutte et al., 1998), ( R and Sethu, 2018).

Emotional Intelligence is said to be different for Males and Females. One of the main factors affecting Emotional Intelligence is Gender. This affect can be due to social and biological factors. It is believed that females are known to have greater Emotional Intelligence than males. Females have certain areas in the brain that are called the processing area which is usually larger than males. Males and females are different in perceiving and processing Emotions that gives rise to differences in Emotional Intelligence. ( Meshkat and Nejati, 2017), ( Abigail et al., 2019), (Renuka and Sethu, 2015). Females are more linked to better knowledge of dealing with Emotions. A woman’s biochemistry is better prepared emotions than males as it is an important thing for survival. ( Fernández-Berrocal et al., 2012). Studies show that Emotional intelligence has positive effects over Self Esteem and helps students gain high confidence in educational and job environments. ( Bibi et al., 2016). Study shows that there have been positive effects of Emotional intelligence and Responsibility. ( Moradi Sheykhjan et al., 2014), ( Timothy et al., 2019). Emotional intelligence has a lot of advantages, mainly making better empathy skills, improving relationships and career prospects, reducing their stress levels and increasing their creativity.

The aim of the study is to assess the attitudes of self Awareness, self confidence , responsibility, flexibility and adaptability concerned with emotional intelligence among the dental student population.

**MATERIALS AND METHODS**

**APPENDIX - 1- EMOTIONAL INTELLIGENCE QUESTIONNAIRE**

<table>
<thead>
<tr>
<th>Demographic Data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
</tr>
<tr>
<td>2. Gender: A) Male B) Female</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emotional intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Emotional awareness:</td>
</tr>
<tr>
<td>1. I always know which emotions I am feeling and why.</td>
</tr>
<tr>
<td>● underdeveloped</td>
</tr>
<tr>
<td>● Needs improvement</td>
</tr>
<tr>
<td>● Adequate</td>
</tr>
</tbody>
</table>
2. I realise the links between my feelings and what I think, do, and say.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent

B) Accurate self assessment:

3. I am aware of my strengths and weaknesses.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent

4. I am reflective and I try to learn from my experiences.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent

C) Self confidence:

5. I present myself with self assurance.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent

6. I can voice views that are unpopular and go out for what is right.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent

D) Self control:
7. I manage my impulsive feelings and emotions well.
   • underdeveloped
   • Needs improvement
   • Adequate
   • Good
   • Excellent

8. I think clearly and stay focused under pressure.
   • underdeveloped
   • Needs improvement
   • Adequate
   • Good
   • Excellent

E) Trustworthiness:

9. I admit my own mistakes and confront others.
   • underdeveloped
   • Needs improvement
   • Adequate
   • Good
   • Excellent

10. I build trust by being reliable and authentic.
    • underdeveloped
    • Needs improvement
    • Adequate
    • Good
    • Excellent
F) Consciousness:

11. I meet commitments and keep promises.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent

12. I am organised and careful in my work.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent

G) Adaptability:

13. I adapt my responses and tactics to fit into the circumstance.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent

14. I am flexible in how I see events.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent

F) Innovativeness:

15. I generate new ideas.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent
This present evaluation is a cross sectional study to evaluate Emotional Intelligence among professional career students. 100 participants of first year BDS of Saveetha dental college in the age group between 18 to 25 years were included in the study. The students were selected by random sampling method. Inclusion criteria: Normal healthy students of both genders Exclusion criteria: Students who had depression, mood swings or any psychological disorders and taking antidepressant medications were excluded from the study. The survey was created on an online platform called Google Docs Forms, and was circulated among students.

The questionnaire included questions that mainly focused on self-assessment and few yes or no type questions. This survey included around 16 questions based on self evaluation of emotional intelligence and various parameters related to it. The data was collected from Google docs forms. An association analysis was done between the two variables namely gender and emotional intelligence. The data was collected and a cumulative percentage of the responses were depicted in the form of pie charts. Association analysis between gender and emotional intelligence was done using SPSS version 22. The statistical test used was Pearson Chi square test and the level of significance was fixed at p<0.05.

**RESULTS AND DISCUSSION**

In the present study the results showed that around 60.4% of female students participated and 39.6% of male students participated (Figure 1). The questionnaire included questions like if they felt Stressed - 51.9% answered yes and 48.1% answered No. (Figure 2, 20). 70.8% of students that are able to manage their stress and 29.12% of students say they are not able to manage their stress (Figure 3, 21). The students were asked if they know what emotions they are feeling and why - 16% say underdeveloped, 21.7% say they need improvement, 25.5% say adequate, 19.8% answered good and 17% say excellent (Figure - 4). 17% of the students say underdeveloped, 21.7% say needs improvement, 26.4% say adequate, 20.8% say good and

16. I entertain original solutions to problems.
   - underdeveloped
   - Needs improvement
   - Adequate
   - Good
   - Excellent
14.2% say excellent when they were asked do they realise the links between their feelings and what to think, do and say (Figure - 5). The students were asked about their awareness of their strengths and weaknesses. 17.9% students say underdeveloped, 18.9% say needs improvement, 26.4% students say adequate, 20% of students say good and 16% of students say excellent (Figure - 6). Around 15.1% says underdeveloped, 18.9% say needs improvement, 25.5% say adequate, 24.5% says good, 16% say excellent. When the students were asked if they reflection and if they learn from their experiences (Figure - 7).

The students were asked if they present with self assurance -13.2% say underdeveloped, 17% say needs improvement, 27.4% say adequate, 22.6% say good, 19.8% say excellent (Figure - 8). 9.4% students say underdeveloped, 18.9% students say they need improvement, 31.1% say adequate, 21.7% say good and 18.9% say excellent when they are asked if they can voice views that are unpopular and go out for what is right (Figure - 9). The students were asked if they can manage their impulsive feelings and emotions well, 9.4% students say underdeveloped, 17.9% say needs improvement, 27.4% say adequate , 25.5% say good and 19.8% says excellent (Figure - 10). The students were asked if they think clearer and stay focused under pressure, 9.4% say underdeveloped, 18.9% say needs improvement, 33% say adequate and 21.7% say good, 17% said excellent (Figure - 11). 11.3% say underdeveloped, 18.9% say needs improvement, 22.6% say adequate, 25.5% say good and 21.7% say excellent when they were asked if they admitted their own mistakes and confront others (Figure - 12). The students were asked if they built trust by being reliable and authentic. 7.5% says underdeveloped, 18.9% students say they need improvement, 31.1% say adequate, 21.7% say good and 18.9% say excellent when they were asked if they can voice views that are unpopular and go out for what is right (Figure - 9).

Association analysis on gender revealed that the female participants experienced more stress compared to male and also the females were able to manage stress more effectively compared to males (Figure - 20,21)

Students belonging to business professionals, academicians play an important role in enriching students' emotional intelligence. So emotional intelligence is strongly associated with leadership qualities, personal communication skills and they are able to satisfy personal life experiences. Also that there were significant differences in emotional intelligence among students of engineering and management courses. (Chaubey and Kala, n.d.). Professional students show better academic performance with emotional intelligence. The
The present study evaluated the EI among dental populations to find the relationships. An association between emotional intelligence and academic performance was investigated among undergraduates of Kohat university of science and technology, Pakistan by (Suleman et al., 2019) which showed that emotional intelligence among undergraduate students improved their academic Performance. Another research finding showed that people who have increased emotional intelligence are people who are aware of themselves and their needs, their strength with their weaknesses, self controlled and able to form new relationships. Also that there was no significant difference in EI among students across various departments (Topaloğlu, 2014). Another study based on the evaluation of EI among 150 College students with special reference to three cities in kerala was conducted and their results revealed that students scored a high Emotional intelligence and that they were able to succeed in work as well as life.

There is also considerable previous research done among gender differences in emotional intelligence. According to Saba Ajmal, Sana Javed - emotional intelligence is a capability that makes a sense and controls and reacts according to emotions. Emotional intelligence guides our thinking and behaviour. (Ajmal et al., 2017), (Samuel and Devi, 2015). Pablo Fernandez and Rosario Cabello say that the emotional dimension of human beings is to a greater extent in females than males. Biological and social factors are invoked in women's biochemistry that makes them prepared for their emotions. (Fernández-Berrocal et al., 2012), (Dave and Preetha, 2016) Maryam Meskat and Roza Nejati say that to check any difference in males and females regarding emotional intelligence, self regard and empathy. From their study it showed - 22.59, 23.99, 25.36, 24.97 for males and 23.32, 21.94, 24.64 and 24.28 for females. It showed that significantly females outscored males in interpersonal relationships (Meskat and Nejati, 2017), (Baheerati and Gayatri Devi, 2018).

Results from a study revealed that majority of males and females had a total sample of good emotional intelligence (63.557% and 66.04%) - females had (105.37+7.73) and males(102.06+8.87), by Smrithi Shetty and Shibin Girish Parkandy. (Venkatappa et al., 2012), (Rj and R, 2016). A Study by Ravichandran and G.R. Ravi showed that around 186 undergraduate students who participated in the survey, 54.02% students had good emotional intelligence, 2.05% had average emotional intelligence and 28.84% showed poor emotional intelligence. This showed that most percentage students need immediate attention to improve emotional intelligence. (Ravichandra et al., 2015), (Fathima and Preetha, 2016). A study by Rahmi Saylik and Evren Raman showed that females had a faster recognition of emotions than males. (Saylik et al., 2018). Shahan Ali Memon and Hira Dhamyar showed that there was not much difference in males and females. Individually gender appears to influence either male or female spencer's. (Memon et al., 2019), (Harsha et al., 2015).

LIMITATIONS OF THE STUDY
The study was conducted in a limited population in Chennai. Further a cross evaluation among various other medical disciplines could have been done. Also, the future of the neurophysiological parameters and behavioural parameters could have added more relationships to emotional intelligence.

CONCLUSION
The present study evaluated the emotional intelligence parameters among students of the dental population. The results explained that the students of dental professionals had self awareness, self confidence,
trustworthy, adaptable, flexible and able to withstand and manage stress, develop interpersonal relationships.

ACKNOWLEDGEMENT:
The authors would like to thank the study participants for their participation for their kind cooperation throughout the study.

AUTHOR CONTRIBUTIONS:
Ms. Sai keerthana: Literature search, survey, data collection, analysis, manuscript writing. Dr. Sridevi.G: Study design, data verification, manuscript drafting.

CONFLICTS OF INTEREST:
The authors declare that there are no conflicts of interest in the present study.

REFERENCES


Figure 1: A Pie chart showing the responses to the question, “what is your gender?”. Blue colour represents ‘female’, red colour represents ‘male’. 57.14% were female participants and 42.86% were male participants.

Figure 2: A Pie chart showing the responses to the question, “do you feel stressed?”. Blue colour represents ‘yes’, red colour represents ‘no’. 51.43% participants answered yes and 48.57% answered no.

Figure 3: A Pie chart showing the responses to the question, “are you able to manage your stress?”. Blue colour represents ‘yes’, red colour represents ‘no’. 69.52% participants answered yes and 30.48% participants answered no.
Figure 4: A Pie chart showing the responses to the question, “I always know which emotions i am feeling and why?”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 11.43% answered underdeveloped, 21.90% answered needs improvement, 32.38% answered adequate, 20.95% answered good and 13.33% answered excellent.

Figure 5: A Pie chart showing the responses to the question, “I realise the links between my feelings and what I think, do and say”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 6.67% answered underdeveloped, 20% answered needs improvement, 28.57% answered adequate, 25.71% answered good and 19.05% answered excellent.

Figure 6: A Pie chart showing the responses to the question, “I am aware of my strengths and weaknesses”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 4.76%
answered underdeveloped, 14.29% answered needs improvement, 30.48%% answered adequate, 24.76% answered good and 25.76% answered excellent.

Figure 7: A Pie chart showing the responses to the question, “I am reflective and I try to learn from my experiences”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 5.71% answered underdeveloped, 18.10% answered needs improvement, 26.67% answered adequate, 33.33% answered good and 16.19% answered excellent.

Figure 8: A Pie chart showing the responses to the question, “I present myself with self assurance”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 4.76% answered underdeveloped, 16.19% answered needs improvement, 27.62% answered adequate, 26.67% answered good and 24.76% answered excellent.

Figure 9: A Pie chart showing the responses to the question, “I can voice views that are unpopular and go for what is right”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 6.67%
answered underdeveloped, 17.14% answered needs improvement, 25.71% answered adequate, 28.57% answered good and 21.90% answered excellent.

Figure 10: A Pie chart showing the responses to the question, “I manage my impulsive feelings and emotions well”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 3.81% answered underdeveloped, 18.10% answered needs improvement, 29.52% answered adequate, 25.71% answered good and 22.86% answered excellent.

Figure 11: A Pie chart showing the responses to the question, “I think clearly and stay focused under pressure”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 7.62% answered underdeveloped, 10.48% answered needs improvement, 29.52% answered adequate, 22.86% answered good and 29.52% answered excellent.

Figure 12: A Pie chart showing the responses to the question, “I admit my own mistakes and confront it to others”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 5.71%
answered underdeveloped, 17.14% answered needs improvement, 25.71% answered adequate, 20.95% answered good and 30.48% answered excellent.

Figure 13: A Pie chart showing the responses to the question, “I build trust by being reliable and authentic”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 5.71% answered underdeveloped, 14.29% answered needs improvement, 25.71% answered adequate, 29.52% answered good and 24.76% answered excellent.

Figure 14: A Pie chart showing the responses to the question, “I meet commitments and keep promises”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 3.81% answered underdeveloped, 13.33% answered needs improvement, 20% answered adequate, 36.19% answered good and 26.67% answered excellent.

Figure 15: A Pie chart showing the responses to the question, “I am organized and careful in my work”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 1.90% answered
underdeveloped, 14.29% answered needs improvement, 36.19% answered adequate, 36.19% answered good and 23.81% answered excellent.

Figure 16: A Pie chart showing the responses to the question, “I adapt my responses and tactics to fit into circumstance”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 1.90% answered underdeveloped, 9.52% answered needs improvement, 22.86% answered adequate, 36.19% answered good and 29.52% answered excellent.

Figure 17: A Pie chart showing the responses to the question, “I am flexible in how I see events”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 1.90% answered underdeveloped, 10.48% answered needs improvement, 20.95% answered adequate, 33.33% answered good and 33.33% answered excellent.

Figure 18: A Pie chart showing the responses to the question, “I generate new ideas”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 3.81% answered underdeveloped, 7.62%
answered needs improvement, 13.33% answered adequate, 44.76% answered good and 30.48% answered excellent.

Figure 19: A Pie chart showing the responses to the question, “I entertain original solutions to problems”. Blue colour represents ‘underdeveloped’, red colour represents ‘needs improvement’ and green colour represents ‘adequate’, orange colour represents ‘good’, and yellow colour represents ‘excellent’. 3.81% answered underdeveloped, 9.52% answered needs improvement, 16.19% answered adequate, 39.05% answered good and 31.43% answered excellent.

Figure 20: Bar graph depicting the association between the gender and the stress felt by the participants. Blue colour represents stress felt by female participants and red colour represents stress felt by Male participants. X-axis represents the gender of the individuals and Y axis represents the total number of their responses who were stressed. The association between gender and stress felt by the participants was done by Chi square test. (Pearson Chi-Square= 1.456 ; df=2 ; p-value=0.000; p<0.05= significant). Thus, the females responded that they felt more stressed compared to males.
Figure 21: Bar graph depicting the association between the gender and the management of stress by the participants. Blue colour represents stress managed by the female participants and red colour represents stress managed by male participants. X-axis represents the gender of the individuals and Y axis represents the total number of their responses who managed their stress. The association between gender and stress managed by the participants was done by Chi square test (Pearson Chi-Square value = 1.568; df= 3; p-value=0.000; p<0.05= significant). Thus the females responded that they were able to manage stress more effectively compared to males.