#### ORIGINAL ARTICLE



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## Assessing the Emotional Intelligence (EI) Among Dental Students in Chennai — A Cross Sectional Study

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### ABSTRACT



The significance of emotional intelligence (EI) in the prosperous act of medical field has been very much entrenched. However, attempts to investigate the alike in India, especially in dentist and medical professionals, are insufficient. Hence the present study aimed to assess the emotional intelligence among dental students in Chennai. A cross-sectional study was conducted among 177 interns in dental colleges in Chennai. Schutte et al Emotional Intelligence scale was used to measure the EI of the study participants. The emotional intelligence score ranges from 33 to 165, greater scores representing greater EI. Frequency and percentage distribution of the scores were calculated. Independent t-test was done to analyse the difference in EI scores among the participants. The EI ranges among the study participants with a mean of 123.9 and standard deviation of 12.4. Mean score was highest among the perception of emotion and managing own emotion domain when compared with other domains. The present study revealed, there was no much remarkable differences in the overall EI score among male and female participants and it was found to be statistically insignificant. More consideration towards the improvement of emotional intelligence among students by dental professional, pay way to betterment of educational and clinical presentation.

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INTRODUCTION

Analyzing, clarification of problem and learning are pivotal factors of human intelligence. People can inference out many fundamental issue, many complications which may be clarified. Simple and highly

compound behavioral repositories can be accomplished throughout the lifespan. Importantly, there are comprehensive differences in the individual's skill to reason, to solve the problems and to learn which can lead to human variations in the typical capability to cope with difficult conditions (Gottfredson, 2004; Lubinski, 2004; Schmidt and Hunter, 2004). In today's scientific societies, the education systems revolve around the provision of a platform for experimental educational activities and teachings on thinking and learning. Hence, the identification of different types of learning strategies is an educational necessity (Sarabi-Asiabar *et al.*, 2014).

In other words, by identifying the students' learning strategies, it is possible to help students select a more effective learning method and help educational designers and teachers facilitate learning by dint of appropriate teaching methods (Singh, 2017).

Observing, handling and supervising the emotions are a fundamental process in day to day application for individuals in different profession. Health protection for an individual is contributed by a group of members but not by a single individual. Consequently, there has been a change in attitude — from personal achievement to group achievement (McKinley *et al.*, 2014). Emotional intelligence refers to the possession of self-knowledge skills and a person's knowledge of their own identity, thoughts, emotions, feelings, and personal traits (Monem, 2017).

As a better predictor of social success and social adjustment, emotional intelligence plays a more important role in the individual's academic and professional success than general intelligence (Eftekhary, 2017). The research findings revealed that emotional intelligence is a skill that can be learned and acquired through practice and learning. Its quality and quantity can also be improved through education. For instance, the United States spends more than 50 billion dollars on the education of employees every year, and a considerable portion of this budget is allocated to the emotional and social capabilities and skills of the employees (Gupta et al., 2017).

The medical professionals who are emotionally stable are better ready to perceive the requirements of the patient. In current scenario for a profitable practice in medical and clinical field, the patient's satisfaction plays a vital role, so emotional intelligence of the physician has a critical role to be played. The research has proven to shoot up in patient fulfillment ranking after duration of emotional intelligence tutoring by medical inhabitant, as in contrast to preceding outcomes (Dugan et al., 2014).

Students with minimal emotional intelligence have an excessive chance of indulging themselves in health-damaging behavior, alongside with it influencing their sleeping pattern with higher stress rate. On the other hand, their emotional intelligent counterpart, probably to control their stress, the use of social assistance and have been in a position to decide that such behavior would not be useful to assist (Pau *et al.*, 2004). So, The intention of the present study was to assess the emotional intelligence among the dental undergraduates in Chennai.

#### **MATERIALS AND METHODS**

A cross-sectional study with sample size of 177 interns from Chennai was involved. Dental interns who are posted in the clinical department were randomly selected and included in the study and the sampling method used was cluster random sam-

pling. Students having major mental illness, drug addiction, were prohibiting. Written consent of the head of the organization was secured. They were approached in person, the goal of the study was clarified, and a virtuous empathy was confirmed. Adequate time was gone through with every member to clarify the motivation behind the investigation, and questions any doubts, were explained. Ethical clearance was obtained from the Institutional Ethics Committee - of the Saveetha University. An informed written consent was obtained from those participants who were interested in the study. The members were mentioned to give right and complete data and were guaranteed that the individual data gathered would be kept carefully private.

Demographic data of the participants was gathered. Emotional intelligence was estimated utilizing the Schutte Self-Report Emotional Intelligence Test (Schutte et al., 1998). The 33 item self-reported questionnaire which was validated and created by Schutte et al. for emotional intelligence. Members' reaction to each question depends on a 5-point Likert scales ranging from strongly disagree to strongly agree. For EI analysis, the score for each domain was acquired by means of including the rankings for that specific domain. The total score was the sum of all four domain scores. The total score ranges from 33 to 165.

Scores of less than 120 have been regarded low and  $\geq$ 120 high. Based on previous studies, a score of  $\geq$ 20 in each domain was considered good EI; 16-19 average EI; and  $\leq$ 15 poor EI. The emotional intelligence scale involves four sub scales: a) perception of emotion b) managing one's own emotion c) managing others emotion and d) utilization of emotion. In validation studies, the test showed high internal consistency (Cronbach's alpha = 0.90) and adequate test retest reliability (0.78) with an excellent construct, predictive and discriminant validity (Ravichandra et al., 2015). Gathered information was compiled and analyzed using Statistical Package for Social Sciences (SPSS) software version 23.0 (IBM SPSS Statistics).

#### RESULTS AND DISCUSSION

The sample consists of 177 Interns. Table 1 shows the socio-demographic details of the study participants. Most of the participants were females (83.1%) when compared to males (16.9%). Table 2 shows the EI score of the domain 'Perception of Emotion' was 36.24 (4.48) 'Managing Own Emotions' domain was 34.03 (4.51); 'Managing Others Emotions' domain was 30.33 (3.50) and 'utilization of emotion' domain's mean EI score was found to be

Table 1: Socio-demographic details of study participants, most of the participants were females which constitute 83.1%

Variables	Categories	Frequency	Percentage
Gender	Male	30	16.9%
	Female	147	83.1%

Table 2: Distribution of EI scores across the four domains

Emotional Intelligence	Domain 1 (Perception of Emotion)	Domain 2 (Managing own Emotion)	Domain 3 (Managing others Emotion)	Domain 4 (utilization of emotion)
Mean (SD)	36.24 (4.48)	34.03 (4.51)	30.33 (3.50)	23.37 (3.31)

Table 3: Independent sample t-tests to assess the relationship between gender and EI

Gender	Emotional Intelligence scores mean (SD)	p-value
Male	120.03 (15.3)	0.08
Female	124.76 (11.6)	

23.37 (3.31).

The relationship between gender and EI was assessed using Independent sample t-tests Table 3. Results depicted that there was no statistical difference between males and females in their emotional intelligence indicating no clinically relevant differences in scores, however the EI between the domains were found to be statistically significant (P=0.00). Means and standard deviations (SD) of EI among different genders were as follows: male 120.03 (15.3) vs. female 124.76 (11.6), p=0.08. The recognition, management, and usage of emotions are basic for the fruitful practice in the profession of a medical practitioner.

An emotionally intelligent physician might be able to better perceive the necessities of their patients and, thus, give a good consideration, prompting improved patient fulfillment (Weng et al., 2011). Medicinal services in general are given by various functionaries and laborers with the doctors having a little impact of the group. In the Indian situation, the burden of leadership and the executives of the medicinal services group significantly lie on the specialist. The doctors with high emotional intelligence will have the option to head and deal with medicinal services group, at long last prompting the arrangement of better social insurance to the patient (McKinley et al., 2014).

Our examination estimated the emotional intelligence of dental students from Chennai, using the Schutte's Emotional Intelligence Scale. As the students grow older, their emotional intelligent becomes low (r = 0.08, p = 0.12). The finding of

the study was opposing with the findings of McKinley (McKinley *et al.*, 2014), Weng et al. (Weng *et al.*, 2008) and Zeidner, et al. (Zeidner *et al.*, 2013).

Life experiences of an individual increases with age, and as they develop, they become touchier to their very own emotions and to that of others emotion. Emotional intelligence is a fundamental piece of collection of doctors, where sensitivity and affability are required for managing patients in their regular practice. Research has been carried out to determine if emotional intelligence fluctuates among the medical and surgical specialties (Borges *et al.*, 2009; Kermani *et al.*, 2013; Swami *et al.*, 2013). The findings of studies reported by Bhosle (Bhosle, 2014), Ryff, Wing and Love (Ryff *et al.*, 2012) and Singh (Elankumaran, 2002) found the emotional intelligence to be high in females than that of males.

However, study by Chu (Chu, 2003) revealed that males have higher levels of emotional intelligence than females. The fact that emotional intelligence primarily deals with expressing and managing one's emotional skill as well as social skill. Since females tend to be more emotional and intimate in relationships when compared to males, so their emotional intelligence ought to be higher than that of males. Our study neither supported both findings nor revealed that no difference in overall EI ranking between female and male students. The study faces with certain limitation of owing to the smaller sample size, the sample consisted of mainly female participants with few male participants so some analyses had been under powered. Personality characteristics and different contributing elements to EI had

been now not evaluated in this study.

#### **CONCLUSION**

Emotional intelligence has been increasingly associated with the success of health care professionals. The more attention to the development of emotional intelligence may lead to improved academic and clinical performance among participants. Further, researches can be done in order to analyze the EI and well being outcomes among students.

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#### **Conflict of Interest**

The authors declare that they have no conflict of interest for this study.

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