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Original Research Article

A study on various dimensions of emotional intelligence among doctors

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ABSTRACT

Background: Emotional intelligence (EI) involves a combination of competencies which allow a person to be aware of, to understand the emotions of others and to use this knowledge to foster their and others success.
Methods: Academic staffs teaching in private medical colleges were included. Questionnaire was sent to the doctors through online Google form to their Gmail ID. Schutte self report emotional intelligence test (SSEIT) scale was used and the questions were valued based on the Likert scale of five values. Selected socio-demographic profile of the participants and the seven dimensions of EI were studied. Descriptive statistics applied and means of various dimensions were compared. Scoring was done to find out good, average and poor EI.
Results: EI of associate professor and professors was better than other two groups (junior resident/post graduate students and senior resident/assistant professor) with respect to dimensions like appraisal of emotional regulation of the self (ERS), appraisal of emotional regulation of others (ERO) and appraisal of uncategorized (UR).
Conclusions: It was observed that academic staffs who were teaching in medical profession had overall average level of EI except good EI in the dimension like appraisal of emotions in the self (AES).

Keywords: Emotional intelligence, Dimension, Doctor

INTRODUCTION

Emotions have two types of effects on personality. It directly affects the individuals mental functioning, physical functioning and his attitude while indirect effect comes from reactions of members of the social group towards the person who is experiencing the emotions.[1] Each person differs to monitor one's own and others emotions, to differentiate among them. Application of this information as perceived by individual helps one's thinking and actions that explains emotional intelligence (EI).[2] Study conducted by Bellack in 1999 observed that undergraduate student's male has slightly high self-awareness, empathy, integrity, emotional stability, self development, commitment, high self motivation and ability managing relations compared to females.[3] In the field of medical education, it is observed that EI has direct relation with academic achievement and it also improved the doctor-patient relationships.[4] Being a good doctor is about more than scientific knowledge, it also requires an understanding of people. We as people not only insist that they possess the technical knowledge required to diagnose disease and prescribe accordingly, but we also insist that they should serve in such a way which reflects their acknowledgement of our humanity. The application of the basic EI dimensions to the practice of the art of medicine is intuitively sound and clearly applicable to the patient physician relationship for better impact on quality of care.[5] Doctors in the teaching institute depending upon the experience, essential skills, knowledge and talents work in different position with different responsibilities.

Objectives

1) To study distribution of doctors according to their selected socio-demographic variables.
2) To study the relation between demographic variables and EI along with its individual dimensions.
3) To establish score of EI among doctors.

METHODS

Study participants/study setting:

In this study participants included were academic staffs including junior resident (JR) and post graduate (PG) students, teaching in the private medical colleges of Odisha.

Study period

From July 2015 to October 2015.

Sampling and data collection technique

Convenience sampling and online survey was done. Email was sent to the doctors and requested for their participation for study. Out of eighty-five participants, only sixty-one were included for study as we received 61 responses during the study period. Questionnaire was sent to the doctors through online Google form to their Gmail ID along with an introductory letter was provided to the Doctors mentioning the purpose of the study. All the Doctors were requested to voluntarily participate for study after giving their consent. Data received through online Google form was transferred to Excel sheet for analysis.

Study tool

The schutte self report emotional intelligence test (SSEIT) scales which contain 33 questions distributed in seven dimensions were used.[6] All the 33 questions were valued based on the Likert scale of five values: strongly disagree (1), disagree (2), neither disagree nor agree (3), agree (4), strongly agree (5).

Study variables

Socio-demographic profile of the study participants like age, sex, working positions and seven dimensions of EI: appraisal of emotions in the self (AES), appraisal of emotions in others (AEO), appraisal of emotional expression (EE), appraisal of emotional regulation of the self (ERS), appraisal of emotional regulation of others (ERO), appraisal of utilization of emotions in problem solving (UEPS) and appraisal of uncategorized (UR) were studied.

Dimensions of EI

AES/EE: These skills enable individual in processing of emotional information from within the organism & expression of these emotion to others. Some level of minimal competence at these skills is necessary for adequate social functioning. AEO/EE: These skills enable individual to gauge accurately the affective responses in others and to choose socially adaptive behaviours in response. ERS/ERO**:** These skills enable individual with positive attitude to enhance their own and others moods and even manage emotions so as to motivate others towards a worthwhile end but individual with negative attitude whose skill is channelled antisocially may create nefarious ends. UEPS: This skill has 4 components like flexible planning, creative thinking, mood redirected attention and motivating emotions.

Statistics

Data was analyzed using SPSS version 20. Using descriptive statistics: frequency, percentage, means & standard deviation was calculated. Means of various dimensions were compared using independent sample "t" test & one way ANOVA. Scoring was done for each dimensions of EI. Score above 80% (4) was considered good EI, scores between 60% (3) and 80% (4) was considered average EI and scores below 60% (3) was considered poor EI. Average EI required improvement in that dimension while poor EI needed immediate intervention.[7]

RESULTS

Table 1 shows the distribution of study participants according to socio-demographic profile. Age wise distribution revealed 28 (45.9%) participants were less than equal to 35 years and 33 (54.1%) were more than 35 years. Male and female participants were 35 (57.4%) and 26 (42.6%) respectively. Junior residents/post graduate students were 20 (32.8%), senior residents/assistant professor were 19 (31.1%) and associate professor/professor 22 (36.1%).

Table 1: Distribution of participants according to their socio-demographic profile.

Variables		Total (N=61)
Age in years	Less than equal to 35 years	28 (45.9)
	More than 35 years	33 (54.1)
Sex	Male	35 (57.4)
	Female	26 (42.6)
Working position	Junior resident/PG students	20 (32.8)
	Senior resident/assistant professor	19 (31.1)
	Associate professor/professor	22 (36.1)

Figure in parenthesis indicate percentages.

Table 2 shows the mean value and standard deviation of EI among less than equal to 35 years, more than 35 years,

male, female, junior residents/post graduate students, senior residents /assistant professor, associate professor/ professor and total were 116.6 (±3.2), 125.3 (±13.4), 120.9 (±10.3), 121.8 (±11.9), 116.1 (±2.9), 115.9 (±4.8), 130.7 (±13.0) and 121.3 (±10.9) respectively. Mean value of EI among age more than 35 years and less than equal to 35 years had significant difference with ($p<0.05$). Non-significance difference observed between male and female. Associate professor and professors had better EI than other two groups with ($p<0.001$) highly significant.

Table 2: Demographic variables and mean EI with S.D.

Variables		mean EI (S.D)	P value
Age in years	Less than equal to 35 years	116.6 (±03.2)	p<0.05
	More than 35 years	125.3 (±13.4)	
Sex	Male	120.9 (±10.3)	Not significant
	Female	121.8 (±11.9)	
Working position	Junior resident / PG students	116.1 (±02.9)	p<0.001
	Senior resident /Assistant professor	115.9 (±04.8)	
	Associate professor /professor	130.7 (±13)	
For all participants (n=61)		121.3(±10.9)	

Table 3: Demographic variables and mean of seven dimensions of EI.

variables		dimensions of EI						
		AES	AEO	EE	ERS	ERO	UEPS	UR
Age in years	≤35 years	08.2	21.7	06.7	27.5	18.8	15.2	18.4
	>35 years	08.4	23.6	07.2	30.2	21.2	14.7	19.8
	P value	**NS**	<0.05	**NS**	<0.001	<0.001	NS	< 0.05
Sex	Male	08.3	22.7	07.1	28.7	19.9	15	19
	Female	08.3	22.7	06.8	29.4	20.3	14.8	19.4
	P value	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Working position	JR / PG	08.2	21.7	06.9	27.1	18.9	14.8	18.3
	SR /Assi. prof.	08.2	22.3	06.4	27.8	18.8	14	18.1
	Asso. prof./ Prof.	08.6	24.1	06.9	31.7	22.3	15.8	20.9
	P value	**NS**	**NS**	**NS**	<0.001	0.001	NS	<0.001

N.B: ≤ (less than equal to), > (more than), JR (junior resident), PG (Post graduate), SR (senior resident), Assi. Prof. (Assistant professor), Asso. Prof. (Associate professor), Prof. (professor), NS (Not significant).

Table 4: Demographic variables and score of emotional intelligence.

variables		Score
Age in years	Less than equal to 35 years	3.5
	More than 35 years	3.8
Sex	Male	3.6
	Female	3.7
Working position/experience.	Junior resident/ PG students	3.5
	Senior resident/Assistant professor	3.5
	Associate professor/professor	4.0

Table 5: Score of study participants in individual dimension of EI.

Dimensions	Score
AES	4.1
AEO	3.2
EE	3.4
ERS	3.6
ERO	04
UEPS	3.7
UR	3.8
Total score of EI	3.6

Table 3 shows the demographic variables and mean of seven dimensions of EI. More than 35 years had higher mean value than <equal to 35 years with respect to dimensions like AEO and UR, the differences is significant with ($p<0.05$). Dimensions like ERS and ERO also had highly significant difference with ($p<0.001$) in between the age groups. There was no significant difference on mean value of EI among male & female. EI of associate professor and professors was better than other two groups with respect to dimensions like ERS, ERO and UR with ($p<0.001$) highly significant difference.

Table 4 shows demographic variables and score of emotional intelligence. Average level of EI (b/w 60% - 80%) or score 3 to 4, was observed in all the study participants. Table 5 shows score of study participants in individual dimension of EI, Good EI (>80%) or score more than 4 was observed in the dimension like appraisal of emotions in the self (AES).

DISCUSSION

Study done by Sitaram and Khurana observed that EI is important predictor of organizational success and smooth work then the individual having intelligent quotient (IQ). The results showed that EI is more important predictor then IQ and positive correlation with age and status with self efficacy while higher emotional intelligent teachers respond more quickly than lower emotional intelligence.[8] EI has emerged as an interesting topic in social psychology and it play a critical role in key organizational outcomes such as job satisfaction, especially when the focus is on human interaction.[9-11]

In this study, we observed mean value of EI among age more than 35 years and less than equal to 35 years had significant difference. It shows EI had increased with age. Similar finding observed by Vanrooy et al in their study i.e. EI scores tended to increase with age.[12] But Rupali and Vaishali in their study observed in contrast results with us, they observe the mean EI score of professional (PG) students is lower than that of non professional (UG) students by age.[13] To increase the EI from the early age required personality development programme which includes aspects of motivation, commitment towards their life goals, self awareness, empathy and altruism. This should be planned for students as an investment into the future of the country.

This study shows non-significance difference between sexes in relation to EI. Similar finding observed by Arvind Hans et al in their study on emotional intelligence among teachers i.e. no significant difference between male and female teachers in Oman based on descriptive statistics.[14] It was inferred that male and female teachers were emotionally matured and stable while imparting the knowledge in Oman. We also observed from Arvind et al study that EI score among teachers with Ph.D. degree is little higher than rest of the other degree holders (masters and bachelor's degree) in private educational institution in Oman. A Linear relationship between increasing educational degree and EI was found. It was inferred that with the increase in the level of educational degree in the level of EI also increased among the teachers in Oman.[14] This finding consistent with our study i.e. Associate professor and professors had better EI than other two groups (junior resident and PG students) and (senior resident and assistant professor) with ($p<0.001$) highly significant. Barnabas et al in their study on relationship between emotional intelligence and job satisfaction among health workers observed mean value of EI for all participants was 122.65.[15] Almost similar finding observed by us in our study; the mean value of EI for all participants was 121.3.

CONCLUSION

Results indicated that academic staffs including junior resident and post graduate students who were teaching in medical profession had overall average level of emotional intelligence except good EI in the dimension like AES. With increasing age and teaching experience associate professor or professor presented better EI. Emotional intelligence has moved from "nice to have" to "need to have." Current work is the preliminary attempt in the direction of assessment of emotional intelligence among teaching faculty in medical profession. Further explanatory study can be done to see the effect of emotional intelligence on various dependent variables i.e.; employee morale, job satisfaction, quality of health care and organizational climate.

Limitation

Sample size of this study is only 61and it is difficult to generalize the results; however with this sample size we obtain significant results which will definitely boost the researcher to go further step with more socio demographic variables with bigger sample size. The sampling technique applied for this study was convenience sampling keeping in mind that doctors have to spare time for study from their busy schedule and also to motivate them by explaining the importance of their participation at the cost of inviting the chances of selection bias, which might be over look.

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REFERENCES

1. Brannick MT, Wahi MM, Arcejohnson HA, Nazian S, Goldin SB. Comparison of trait and Ability Measures of Emotional Intelligence in Medical Students. Med Teach. 2009;43(11):1062-8.

2. Cooper RK, Sawaf A. Executive EQ. Emotional intelligence in leadership and organizations, New York. Grosset Putnum. 1997.
3. Bellack JP. Emotional Intelligence: A missing ingredient. J Nursing Educ. 1999;38(1):3-4.
4. Boon HC, Azhar MZ, Faezah H. Emotional intelligence and academic performance in first and final year medical students: a cross-sectional study. BMC Med Educ. 2013;13(1):44.
5. Freshman B, Rubino L. Emotional intelligence: a core competency for health care administrators. Health Care Manage 2002;20(4):19.
6. Schutte NS, Malouff JM, Hall LE, Haggerty DJ, Cooper JT, Golden CJ, et al. Development and validation of a measure of emotional intelligence. Personality and Individual Differences. 1998;25:167–77.
7. Ravichandra KS, Ravi GR, Chaitanya RK, Sudhakar V, Koya S, Disha L. Emotional intelligence among dental undergraduate students: An indispensable and ignored aspect in dentistry. J Int Oral Health. 2015;7(4):69-72.
8. Sitaram GB, Khurana P. Emotional quotient: significant predictor of teaching effectiveness. IJMSS. 2014;2:151.
9. Law KS, Wong CS, Song LJ. The construct and criterion validity of emotional intelligence and its potential utility for management studies. J Appl Psychol. 2004;89:483-96.
10. Vanrooy DL, Viswesvaran C. Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. J Vocat Behav 2004;65:71-95.
11. Kafetsios K, Zampetakis LA. Emotional intelligence and job satisfaction: Testing the mediatory role of positive and negative affect at work. Pers Ind Diff. 2008;44:710-20.
12. Vanrooy DL, Alonso A, Viswesvaran C. Group differences in emotional intelligence scores: Theoretical and practical implications. Personality Individual Differences 2005;38:689-700.
13. Rupali S, Vaishali T. Comparative study of emotional intelligence among professional and non professional college students. JDMIMSU. 2015;10(4):207-12.
14. Arvind H, Soofi AM, Ruwaiya SA. A study on emotional intelligence among teachers: a case study of private educational institutions in Muscat. Int J Appl Innovation Engineering Manag. 2013;2(7):359.
15. Barnabas EN, Tobias CO, Ngozi SA, Solomon AA, James UA. Relationship between Emotional Intelligence and Job Satisfaction among Health Workers. IOSR J Nursing Health Sci. 2013;2(5):19-23.

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