

EMOTIONAL DEVELOPMENT: THE INVISIBLE LADDER TO DYNAMIC LEADERSHIP

MALIK S.,¹ MALIK A.,² KHAN S.K.,² SHABKHEZ J.,¹ SALAR M.,³ AND LATIF W.⁴

¹Department of Physiology, Avicenna Medical College, ²Department of Biochemistry CMH Lahore Medical and Dental College, ³Aitchison College and ⁴University of Health Sciences, Lahore

ABSTRACT

Background: Emotional Quotient (EQ) is a measure of a person's level of Emotional Intelligence (EI) which refers to a person's ability to perceive, control, evaluate, and express emotions. Emotional intelligence is one of the best proven predictors of success in leadership which makes it critical to assess it in medical undergraduates as who expected to develop these leadership qualities as they advance from preclinical to clinical years.

Objective: We aimed to measure and compare the EQ score and the leadership (LS) score of preclinical and clinical students and to find any correlation between the EQ score and the LS score within each class.

Material and Methods: Current cross – sectional study was designed for comparison of 12 leadership traits among 83 preclinical (1st year) and clinical (4th year) medical undergraduates at CMH Lahore Medical and Dental College on 5 point likert scale. Their EQ was measured quantitatively as well as qualitatively by using free online test by INSPIR3 based on 10 multiple – choice questions. Qualitative questionnaires were measured on likert scale and compared the EQ and the LS score between the two classes.

Results: Median LS score was generally higher in first year whereas median EQ score was equal in both classes but there was no statistically significant difference in average LS and average EQ score between both classes. A significantly positive correlation was observed between the LS and the EQ scores within each class.

Conclusion: The results indicate that there is no improvement in EQ while advancing from preclinical to clinical years owing to stress on mainly IQ assessments and lack of awareness about significance of EQ. The deterioration of LS highlights lack of EQ development skills. The positive correlation between LS and EQ scores reinforces that students with higher EQ are better leaders and thus reiterates the need to incorporate EQ development programs in the medical training curriculum.

Key words: Emotional Quotient, Emotional Intelligence, Leadership, Preclinical, Clinical.

INTRODUCTION

Our culture traditionally worships intellect which in the words of Albert Einstein cannot lead but can only serve. Intelligent Quotient (IQ) is still considered as a benchmark for academic admissions and the only ladder to success in our system but a study of Harvard graduates in medicine, teaching, business and law students showed zero correlation between an IQ indicator (entrance exam score) and subsequent career success.¹ Psychologists now unequivocally agree that amongst the determinants of success, IQ counts for roughly only 10%; the rest is dependent on emotional intelligence.² Medical students in particular are more likely to emphasize their intelligence at the cost of their emotional intelligence. Emotional intelligence (EI) is the

level of one's ability to understand other people, what motivates them and how to work cooperatively with them. Emotional Quotient (EQ) is a measure of a person's level of emotional intelligence.³ This refers to a person's ability to perceive, control, evaluate, and express emotions. The five major categories of EQ are self awareness, self regulation, motivation, empathy and social skills. EQ predicts the ability to monitor and regulate one's own and other's feelings, and to manage these emotional states to work better as a team.⁴ Emotional management in workplace is a skill based on ability to demonstrate empathy towards patients and to manage our own emotional reactions and to lead others as a team member.⁵ Quite simply, emotional intelligence is the intelligent use of one's emotions.

While IQ remains static and fixed, EQ can be learned, improved, trained and matured at any age. As EQ grows, students can be transformed into leaders.⁶

The reason EQ skill development programs are fast becoming a worthwhile investment in renowned academic institutions is owing to the fact that Emotional intelligence is one of the proven best predictor of leadership success.⁷ The high level of self-awareness associated with higher EQ enables one to display self-confidence, balance, motivation, optimism and thus hugely inspire others.⁸

Medical undergraduates are expected to develop these leadership qualities as they advance from preclinical to clinical years so that they can play a more effective role as better leaders in the dynamic and highly challenging clinical environment requiring critical decision making, effective communication skills and synchronized team effort.⁹

Objectives

1. To measure the EQ score and leadership score (LS) of students of a preclinical year (1st year MBBS) and clinical year (4th year MBBS).
2. To find out any improvement in the EQ and LS score from preclinical to clinical year.
3. To find out the correlation between EQ score and LS score within each class.

MATERIAL AND METHODS

The current cross sectional study was designed for qualitative and quantitative comparison of 12 leadership traits and EQ score among 83 preclinical and clinical medical undergraduates at CMH Lahore Medical and Dental College by randomization after seeking informed consent. Leadership traits (South–side Young Leaders' Academy) were measured on 5 point likert scale. Their Emotional Quotient (EQ) was measured quantitatively as well as qualitatively by using free on-line test by INSPIR3 based on 10 multiple choice questions. Students were advised to mention correct individual information while they were seated in the lecture hall to fill the two questionnaires. They were ensured that their privacy would be safeguarded.

Statistics

Mann Whitney u test was applied to study the variation of LS score with EQ score between the 2 groups. Spearman's rho correlation coefficient test was used to determine the relationship between LS score and EQ score within each group.

RESULTS

Median LS score was generally higher in first year class as compared to fourth year class whereas median EQ score was equal in both classes but there was no statistically significant difference in average LS and EQ score between first and fourth year students (Table 1).

Table 1: Leadership and EQ score in 1st year Versus 4th year medical undergraduates.

LS Score	Mean	SD	Minimum	Maximum	Median	IQR	P-value
First year	47.22	6.041	34	57	50.00	43.00 – 52.00	0.088*
Fourth year	46.02	6.221	29	59	47.00	41.00 – 50.00	
EQ Score							
First year	55.11	13.884	15	80	58.00	48.00 – 68.00	0.510*
Fourth year	57.04	14.061	23	90	58.00	48.00 – 68.00	

Mann – Whitney u Test *P > 0.05 (non-significant)

Table 2: Leadership and EQ score within 1st year and 4th year medical undergraduates.

	First Year	Fourth Year
	EQ Score	
LS Score Correlation Coefficient	0.505	0.412
p-value	< 0.001**	< 0.001**

Spearman's rho Correlation Coefficient
**P < 0.05 (significant)

Significant difference was obtained between LS score and EQ score within each group by applying Spearman's rho Correlation Coefficient (Table 2).

DISCUSSION

The results indicate that there is lack of any improvement in EQ while advancing from preclinical to clinical years owing perhaps to stress of traditional exam pattern that tests only IQ of our students and lack of awareness about significance and learning of EQ skills. Another study conducted on Pakistani medical students with similar results also indicates that the current

medical curriculum and clinical training here is not contributing towards development of emotional intelligence.¹⁰ If a medical student does not develop the EQ skills needed to successfully traverse the maturation process he will be left in a situation of having the intelligence to functionally work but not have the emotional skills to successfully work, thus limiting their potential future as a leader. A similar study highlighted using EI to help college students succeed at workplace.¹¹

There is deterioration of LS score from preclinical to clinical years owing to lack of exposure to challenging situations demanding leadership and lack of implementation of team based learning (TBL) system. Our current system evaluates individuals but not teams, though team based learning enhances leadership skill development in the students as also demonstrated in a similar study showing effective teams to be more emotionally intelligent.¹²

There is a significant positive correlation between LS and EQ scores which highlights that students with higher EQ become better leaders and thus emphasizes the need to incorporate EQ development programs in the medical training curriculum designed to teach emotional intelligence skills which ultimately aid in coping with stress as well. Similar studies showed a positive correlation between EI and leadership effectiveness imparting the resilience needed to thrive as a team amidst the disruptive, fast-paced changing environment of the clinical world.^{13,14}

It is **concluded** that in pre-clinical as well as clinical students, leadership qualities vary directly with EQ.

Benefit of Study

By inculcating leadership qualities among medical students by encouraging team-work, holding seminars by experts along with role-modeling by medical teachers, we can develop future academic and professional leaders capable of delivering their 100% in adverse circumstances!

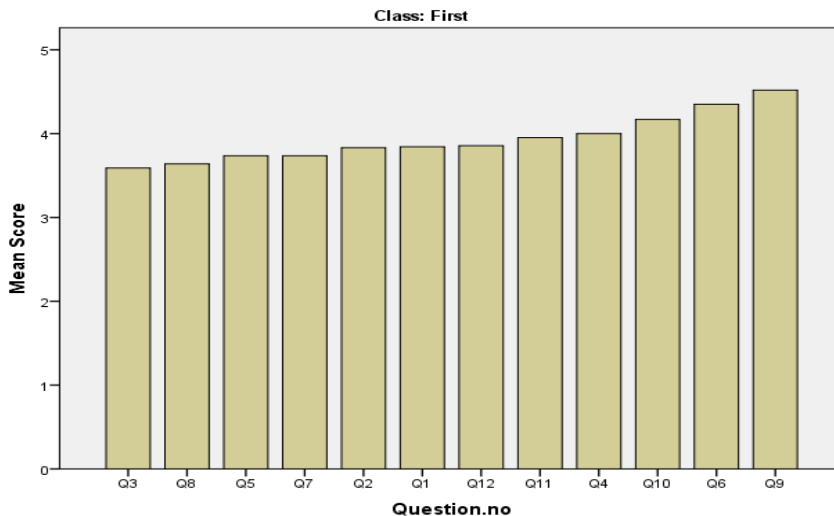


Fig. 1: The 12 Traits of Leadership score as perceived by students. The bars represent from right to left: Loyalty, Integrity, Perseverance, Enthusiasm, Responsibility, Unselfishness, Bearing, Courage, Judgment, Initiative, Knowledge and Decisiveness.

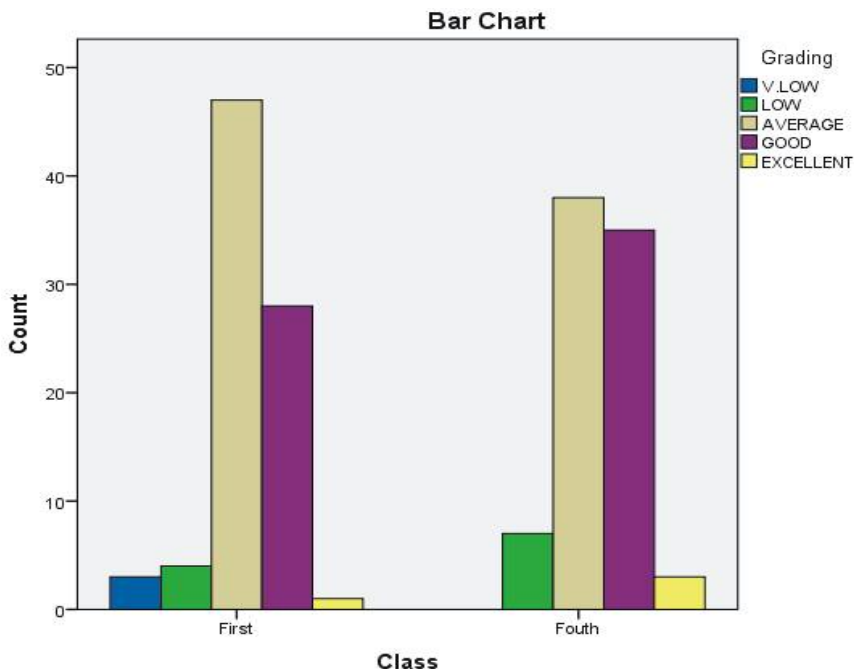


Fig. 2: No Association between grading of leadership score and class-standard (1st year versus 4th year).

Limitation of Study

Due to time constraint, we compared 2 different batches of the same institution. A longitudinal study on same batch is desirable.

Recommendations

Assessment and follow up of EQ scores of medical students as they advance in medical years.

Implementation of EQ development programs in the medical curriculum
Implementation of Team Based Learning to enhance leadership traits.

Contribution of Authors

SM conceived, designed, supervised and presented the study for the first time in AEME 2014 and improved the first draft of the manuscript. AM carried out the study with the help of SKK and prepared the first draft of manuscript. JS entered the data for interpretation with the help of WL, who analyzed the results.

Conflict of Interest

The authors do not have any conflict of interest.

ACKNOWLEDGEMENTS

We acknowledge Dr. Gohar Wajid for imparting the knowledge and inspiration on the subject via his useful workshops on leadership and EQ along with the cooperation of the students of CMH Lahore medical college, Lahore who participated in the study as subjects.

REFERENCES

1. Barchard, K.A. "Does emotional intelligence assist in the prediction of academic success?" *Edu. Psyc. Meas.* 2003; 63 (5): 840-858.
2. Goleman, D. 1995. *Emotional Intelligence*. New York, NY, England: Bantam books, Inc. 1998.
3. Akers, M.D. and Porter, G.L. "Your EQ skills: Got what it takes?" *J Acc.* 2003; 195 (3): 65-69.
4. Emmerling, R. J. and Goleman, D. "Leading with emotion." *Lead Exc.* 2005; 22 (7): 9-10.
5. Doherty EM, Cronin PA, Offiah G. Emotional intelligence assessment in a graduate entry medical college curriculum. *BMC Med Educ.* 2013; 7; 13: 38.
6. Johnson, V. "Emotional Intelligence: Are Successful Leaders Born or Made?" *The Bus Rev, Camb*, 2005; 3 (2): 21-26.
7. Rosete, D. and Ciarrochi, J. "Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness." *Lead Org Dev. J.*, 2005; 26 (5/6): 388-399.

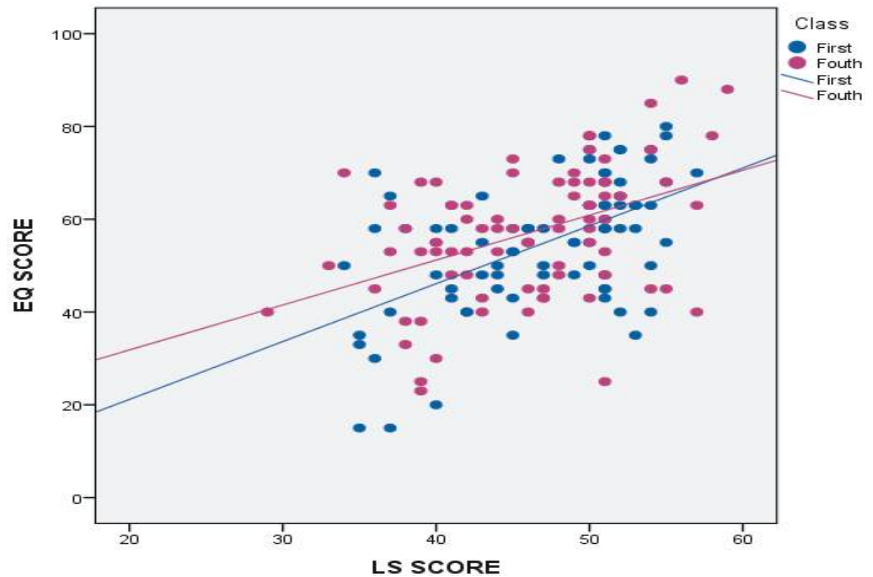


Fig.3: Scatter-plot of leadership and EQ scores among 1st year versus 4th year medical students showing no correlation.

8. Ashkanasy, N.M. and Dasborough, M.T. "Emotional awareness and emotional intelligence in leadership teaching." *J Edu Bus.* 2003; 79 (1): 18-22.
9. Robbins, C.R., Bradley, E.H., Spicer, M. and Mecklenburg, G.A. "Developing leadership in healthcare administration: A competency assessment tool / Practitioner application." *J Health e Manag.* 2001; 46 (3): 188-202.
10. Imran N, Awais Aftab M, Haider II, Farhat. Educating tomorrow's doctors: A cross sectional survey of emotional intelligence and empathy in medical students of Lahore. *Pak J Med Sci.* 2013; 29 (3): 710-4.
11. Liptak, J. J. "Using emotional intelligence to help college students succeed in the workplace." *J Employ Couns.* 2005; 42 (4): 171-178.
12. Yost, C.A., Tucker, M.L. "Are effective teams more emotionally intelligent? Confirming the importance of effective communication in teams", *Delta Pi Epsilon Journal*, 2000; 42 (2): 101-109.
13. Kerr, R., Garvin, J., Heaton, N. and Boyle, E. "Emotional intelligence and leadership effectiveness". *Lead Org Dev J.*, 2006; 27 (4): 265-279.
14. George, J. M. Emotions and leadership: The role of emotional intelligence. *Human Relat*, 2000; 53 (8): 1027-1055.