

ORIGINAL ARTICLE

VARIABILITY OF EMOTIONAL QUOTIENT AMONG MALE AND FEMALE MEDICAL STUDENTS OF PUNJAB: A COMPARATIVE CROSS-SECTIONAL STUDYMuhammad Ehtisham¹, Rida Naseer Ghouri¹, Shireen Javed¹**ABSTRACT**

Introduction: Emotional Quotient (E.Q) is the capacity of the individuals to concede their own emotions, discriminate between various feelings and label them, make use of emotional information to guide thinking and attune the emotions to adopt environment. All researches proved the difference of EQ between males and females. Females are considered cooperative and expressive. Meanwhile, males are considered independent and instrumental.

Material & Methods: A comparative cross-sectional study was directed on 566 students of different medical colleges of Punjab, Pakistan. The data was collected through a validated questionnaire containing sections of consent, demographic data and the questions for E.Q based on emotional intelligence scale (EIS). This questionnaire was shared in the google form among medical students out of which 566 completed their form and came under the inclusion criteria of our study. The data analysis was done by using SPSS v22.0. Results were recorded through independent T test.

Results: On result analysis, we found that males scored higher in most variables of EQ than females. Males had more self-awareness, empathy, emotional stability, self-motivation and can manage relation well with p-value of 0.011, 0.004, 0.01, 0.365 and 0.205 respectively. Females were on higher side concerning integrity and value orientation with p-value of 0.483 and 0.395 respectively which was not statistically significant. Females also prevailed in altruistic behaviour and fulfilling commitment with p-value of 0.008 and 0.036 respectively.

Conclusion: Males were having higher emotional quotient than females.

Key Words: Altruistic behaviour, Commitment, Emotional Quotient, Empathy, Self-awareness, Self-development, Value-orientation.

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INTRODUCTION

Emotions are psychological states brought on by neuro-physiological changes, varyingly associated with perceptions, ideas, feelings, behavioural responses, and a degree of happiness and annoyance.¹⁻⁵ Ekman's research examined six emotions but cross-cultural studies by Daniel Cordaro and Dacher Keltner extended the list. Apart from anger,

abhorrence, distress, pleasure, sadness and surprise, the other emotions can be disrespect, sympathy, embarrassment, desire, pride etc. Joseph LeDoux described the emotions as a cognitive and conscious process that happens in response to a body-system triggered by a stimulus. Emotional Quotient (E.Q) is the capacity of individuals to perceive their own

emotions and those of others, differentiate between various feelings and label them appropriately, use of emotional information to guide thinking and behaviour, and modify emotions to adapt to environment.⁶ In 1985, Dr. Reuven Bar-On put forward the term “emotional Quotient” to reveal the approach in the assessment of general intelligence.⁷ In 1993, Mayer and Salovey claimed that E.Q is not just a positive characteristic but it also contains logical and emotionally assorted capacity.⁸ It was considered as the vital emotional issue including both social and personal difficulties. Individuals with high emotional quotient have a better life satisfaction, understand the emotions of others well, and are also more orderly warm, halcyon and optimistic.⁸ In his book of Emotional Intelligence, Goleman described E.Q as the diversity of skills and characteristics that control leadership performance.

E.Q includes following components known as Self-awareness, empathy, self-motivation, emotional stability, managing relations, integrity, commitment and self-development. It affects one’s attitude towards oneself and others. Emotional stability allows the person to develop a consolidated and balanced way of discerning the problems of life. Managing relations means using an awareness to build strong relationships. It includes enlivening leadership, influence, developing others, conflict management and team-work.⁹ Self-development helps the person to build characters and abilities in them. Commitments keep a person dedicated to a cause and activity. Empathy is also important because it helps people to understand how others are feeling so we can respond to them accordingly.

Many researches proved the difference in E.Q between males and females. According to biological delineation, women’s biochemistry is better to consider one’s own emotions.¹⁰ Many traits are specific for one gender but not for the other one. Self-assured, decisive, and self-confident are the typical features of male. In the socializing process, teachers, peers and parents motivate female to be cooperative, eloquent and adjust themselves to their interpersonal world. On the other hand, males are led to be openly competitive, individualistic, and instrumental. In brains of

females, some specific areas of emotional processing are larger than the respective areas of males. This shows that females and males are different in neural processing of emotions which leads to the changes of E.Q between them.¹¹ Many of the researches reported that low E.Q were associated with lesion in areas of emotional processing just like ventromedial prefrontal cortex and amygdala. Low E.Q is also thought to be associated with high cortisol release during stressful situations. It may also be due to reduced arousal in the left frontal cortex of males and females.¹² According to the “extreme male brain theory of autism” put forward by Baron-Cohen, states that brains of males and females have different structures. The female brain is constructed to feel compassion while the male brain seeks to understand the visualized meaning and expand them. This theory explained the intellectual and observable system of males and females are different from each other.¹⁰ Overall E.Q and gender was considered to have a mean tie-up of 0.17 with females achieving greater than males and females having greater psychic and interpersonal skills than males in United States .¹¹

Several researches have been carried out to differentiate the E.Q between males and females. Strong distinction of EQ among males and females is seen. Females are conceived to be emotionally more sensitive and males to be more calm and steady.¹³ In our daily workings, a balance of emotions is needed to be stable. The ability of emotional control in different circumstances helps the person to guide one’s thinking and actions.¹⁴ Rao and Komala’s research on youth in 2017 also proved women to be more emotionally intelligent yet other researches have contradictory results opening the horizon for further researches.¹⁵ Our aim of study is to assess and compare the emotional quotient among the male and females.

MATERIAL AND METHODS

A comparative cross-sectional study was carried on 566 male and female MBBS students of different medical colleges of Punjab, Pakistan from 30th-aug-2021 to 17th-aug-2021. Only MBBS students were included and students with any kind of behavioural and psychological diseases were excluded from the study. The study was approved (Ref. no

IEC/139-21) from Ethical Review Committee of Aziz Fatima Medical and Dental college Faisalabad. Validated questionnaire was designed on the google form. The first part covered psychological and behavioural history and consent along with proper guidelines for participants. Medical students who were willing to participate and had no psychological disorder were directed to proceed further. Gender of the MBBS students were obtained in the second part of questionnaire. Last part of questionnaire contained questions related to different variables of emotional intelligence (Self-awareness, empathy, self-motivation, emotional stability, managing-relations, integrity, commitment and self-development). The tool used in this study was Emotional intelligence scale (EIS) that was used by many researchers with reliability index of 0.936 showing high validity. This EIS was basically designed by Anukool Hyde; Sanjyot; Upindar Dhar containing 34 questions in questionnaire and 10 variables. EIS consists of a 5 points likert scale from 5(Strongly agree) to 1(Strongly disagree) used in all the questions of the questionnaire. A manual for EIS and instructions were dispensed by the authors makes it undemanding to manage the questionnaire on single person as well as the groups. We transformed this verified questionnaire on our google form to evaluate EQ of participants. Link was shared among 600 male and female medical students from 1st year to final year of different medical colleges of Punjab, Pakistan. The 566 complete responses were included in study and rest were excluded. Psychologically ill students were also kept out. Data was analysed by using statistical package for social sciences (SPSS) version 22.0. Continuous variables like age and scores for EQ related variables were described as mean \pm SD. Categorical variables like gender were showed as frequencies and percentages. Mean scores related EQ variables were compared by independent T test among the male and female gender.

RESULTS

This study comprised of 566 students of age ranged 18 to 27 years with mean and SD of 21.01 ± 1.97 . (Figure 1) Initially, the questionnaire constructed on google form was shared through what's-app among 600 male and female students. However, only 566

complete responses were received, so responding rate was 94.3%. Out of total respondents, 73.9% were females and only 26.1% were males. On analysis, we found that male students achieved comparatively higher scores in most of the variables of emotional quotient as compared to females. Male students have more self-awareness than females and difference in mean was statistically significant with p-value= 0.011. Similarly, males were significantly more empathetic and able to be highly in tune with their own and others feelings and emotions. Mean score concerning empathy was significantly different with p-value=0.004. Male students were emotionally stable than female students and again achieved significant higher scores with p-value= 0.01. Although concerning self-motivation and managing relations, males got higher scores, but the differences in mean scores were not statistically significant with p-values 0.205 and 0.36 respectively. Females were on higher side concerning integrity and value orientation, but the mean scores were not significantly different with p-values 0.48 and 0.39 respectively. (Table 1) Females have more altruistic behaviour than male students and try their best to work for others benefits at any cost. The mean score was significantly different with p-value=0.008. Concerning commitments, females achieved significant higher scores than male students with p-value= 0.036

DISCUSSION

The present study elaborates the gender differentiation in different elements of emotional quotient. E.Q affects our role as a person in society. Social functioning is the area where adults face long term challenges and is important for better understanding of gender difference.¹⁶⁻¹⁹

Empathy has become a broad concept which is the cognitive and emotional reaction of an individual to the observed experiences. A previous study indicated that people with emotional empathy can be good as counsellors and leaders.^{20,21} Our study demonstrated that males have higher element of empathy than females and so respond well to the emotions of the other people. A study by Joshi and Dutta also showed that most of the students had fallen in the average scoring category in this

variable, among them males had higher frequency than females. While, frequency of females was higher than males in above average category.²²

Emotional capacity helps to cope with life challenges in a better way.²³ Emotionally stable persons can develop better relations with others because of having control on their emotions. Our study showed that males were dominant in this element of E.Q.

Self-awareness is the potential to be conscious of your personal thoughts, notions and actions. It guides the decision-making capacity and helps in realistic assessment of one's abilities and sense of self confidence. Joshi and Dutta explored the dominance of males in this element among secondary school students.²² Our findings were in consistent with this old work conducted in secondary school. Another study in Iran by Meshkat and Nejati revealed that females were superior to males in self-awareness.¹¹

Managing relation is the key tool in the development and maintenance of strong relations with others to decrease the disagreement and increases the teamwork. Our study clearly showed that males prevailed in self-motivation over females. Meanwhile, a study in Iran by Meshkat and Nejati described the dominance of females over males in this regards due to some limitations of their study.¹¹ An old study explored that female scored higher in interpersonal relationship.^{24, 25} Self-motivation is the force which keep us pushing forward to achieve our set goals. Our results showed that males were superior in motivating themselves than females. In our survey where most of the elements of E.Q were higher in males, still females dominated in fulfilling commitments and altruistic behaviour. Females were also better in integrity and value orientation. Not many researches have been conducted in terms of these elements of E.Q. However, an old study in 3 Iranian universities demonstrated that females are better in most elements of E.Q. They outscored the males in this regard.¹¹ Fida A also showed similar results like Meshkat study that female students were more dominant in respect of emotional intelligence than male students.²⁶

Our study revealed that males have higher E.Q than females. In contrast to our findings, A

previous survey conducted by Shehzad et al showed that females were better in E.Q than males and so, are able to deal with environmental challenges.²³

A study conducted in 2013 by Chaudhary et al²⁷ and several other studies showed the dominance of females over males in terms of most elements of E.Q but these results were contradicted by the study done by Shahzad S. and Begum who said that males are being more emotionally intelligent than females.²⁸ Another research by Fernandez on E.Q also concluded that females were better in E.Q than males.¹⁰ However, further researches are needed at broad level to know the interrelation of gender with E.Q. Different medical colleges of Lahore, Faisalabad and Rawalpindi were included in the study. A study with large sample size including different cities of Punjab is required to generalize the results.

CONCLUSION

Males dominated over females in most of the variables of E.Q including self-awareness, empathy, self-motivation, emotional stability, and managing relations. However, females were superior in integrity, altruistic behaviour, value orientation, and commitment.

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Table 1: Emotional Quotient among Male and Female Students.

Emotional Variables	Quotient	Male	Female	P-Value
		N (%) Mean ± SD	N (%) Mean ± SD	
Self-awareness		148(26.1%) 16.44 ±9.27	418(73.9%) 15.13 ±2.96	0.011
Empathy		14.74 ±2.82	13.99 ±2.63	0.004
Emotional Stability		14.90 ±3.08	14.18 ±2.90	0.01
Self-motivation		22.09 ±4.22	21.75 ±3.90	0.365
Integrity		12.24 ±2.43	12.42 ±2.62	0.483
Managing Relations		15.07 ±3.57	14.66 ±3.27	0.205
Self-Development		7.47 ±1.75	7.49 ±1.58	0.876
Value Orientation		7.83 ±1.82	8.17 ±4.78	0.395
Altruistic Behaviour		7.82 ±3.62	7.22 ±1.66	0.008
Commitment		7.36 ±1.95	7.72 ±1.71	0.036

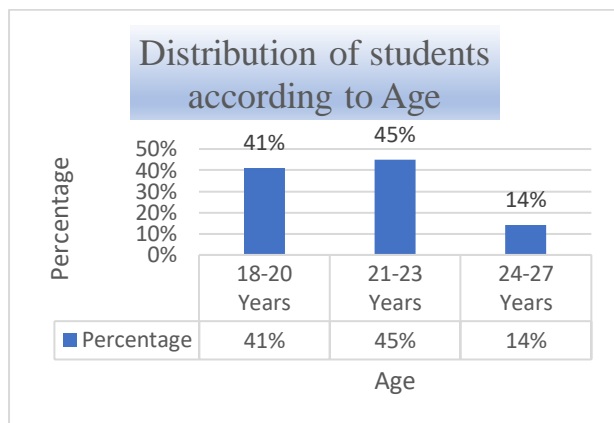


Figure 1: Distribution of students according to age

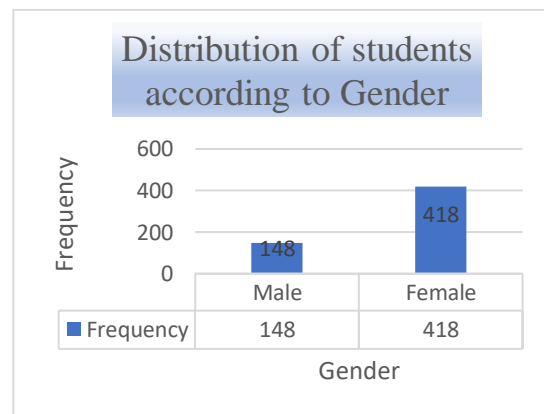


Figure 2: Gender wise distribution of students