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## Maneesha Bhatt

Ph.D. Research Scholar,  
Department of Human  
Development and Family  
Studies, College of Community  
Science, University of  
Agricultural Sciences, Dharwad,  
Karnataka, India

## Lata Pujar

Professor and Head, Department  
of Human Development and  
Family Studies, College of  
Community Science, University  
of Agricultural Sciences,  
Dharwad, Karnataka, India

## Nithyashree DA

Professor, Department of  
National Rural Management,  
College of Forestry, Sirsi,  
Karnataka, India

## Corresponding Author:

### Maneesha Bhatt

Ph.D. Research Scholar,  
Department of Human  
Development and Family  
Studies, College of Community  
Science, University of  
Agricultural Sciences, Dharwad,  
Karnataka, India

## Age and gender comparison on emotional intelligence of pre-university college students

Maneesha Bhatt, Lata Pujar and Nithyashree DA

### Abstract

Present study assessed and compared the emotional intelligence of adolescents by their age and gender. It was conducted among urban and rural PUC students of Dharwad and Tanakpur in the age group of 16-18 years who were randomly selected from four science coaching institutes of Dharwad (Karnataka) and three science coaching institutes of Tanakpur (Uttarakhand). Samples included 10 to 15 per cent students from each class (PUC-I and PUC-II) of coaching institutes that constituted an overall 592 students. Baron Emotional Quotient-inventory: Youth Version was used to assess emotional intelligence of respondents. The results of the present study revealed that, majority of students from both Dharwad and Tanakpur were in medium level of all emotional intelligence dimensions. Emotional intelligence of students increased with increase in their age. Significant gender difference was observed in emotional intelligence of Dharwad PUC students from both urban and rural localities. However, no significant gender difference was observed among Tanakpur PUC students.

**Keywords:** Age, gender, emotional intelligence and puc students

### 1. Introduction

The higher secondary school students aged 16-18 years pass through a crucial period of adolescence, which is a unique time in human development. It is a transitional period from childhood to adulthood during which emotional intelligence plays a major role. Salovey and Mayer (1990) [16] were among the earliest to propose the term “emotional intelligence” to represent the ability of people to deal with their emotions.

Goleman (2000) [9] defined emotional intelligence in terms of four domains *viz.*, self-awareness, self-management, social awareness and relationship management. According to Coleman and Andrew (2008) [5] “Emotional intelligence (EI) is the ability of an individual to recognize their own and other person’s emotions, to discriminate between different feelings felt by the person and to label them appropriately and to use emotional information to guide thinking and behaviour.”

Taylor (2001) [19] argued that if you are emotionally intelligent then you can cope better with life’s challenges and control your emotions more effectively, both of which contribute to good mental and physical health. Emotional intelligence enhances adolescents ability to use emotions effectively and productively in an adaptive way (Sekhri, 2017) [18].

### 1.1 Age and Emotional intelligence

Most of the research studies correlating emotional intelligence with age have revealed that emotional intelligence increases with increase of age. Goleman (1998) [8] stated that emotional intelligence increases with age and it can be learned, cultivated and increased in adulthood. It was shown that people can change their emotional intelligence competencies over two to five years (Boyatzis, 2000) [4]. In another study, Mayer *et al.* (2000) [12] also explored that emotional intelligence increases with age and experience, which qualifies it as ability rather than a personality trait. Based on a research observation carried out by Bar-On and Parker (2000) [3], there was a similar increase in emotional intelligence with age in children and adults.

In contrast, Esnaola *et al.* (2017) [6] assessed the development of the different dimensions of emotional intelligence of adolescents and observed that, except stress management dimension in females, none of the dimensions of emotional intelligence undergo substantial changes in relation to age which suggests that one school year is not a sufficiently long time period for significant change in emotional intelligence of adolescents.

## 1.2 Gender difference and emotional intelligence

Gender has its significant influence on emotional intelligence of adolescents. Ahmed *et al.* (2009) <sup>[1]</sup> noticed higher emotional intelligence of male adolescents than females which was primarily due to the fact that males were better able to manage and express their emotions. Aiyappa and Acharya (2014) <sup>[2]</sup> studied the gender differences in emotional intelligence of adolescents. The results of the study revealed significant difference between males and females only in two components of emotional intelligence where, male adolescents had higher intrapersonal awareness which means they had higher understanding of their own emotions and female adolescents showed higher ability to manage emotions in interpersonal relationships. These findings suggested a gender-based emotional socialization reflective of Indian culture. Hence, present study was taken to study the influence of age and gender on emotional intelligence of Pre-University College students of Dharwad and Tanakpur.

## 2. Materials and methods

### 2.1 Research Design

A quantitative research method involving cross-sectional research design was used. Under it, firstly, a differential research design was used to know the differences in emotional intelligence of urban and rural Dharwad and Tanakpur PUC students by their age and gender. Secondly, a correlational research design was used to know the relationship between age and gender with emotional intelligence of PUC students.

### 2.2 Measurement

Baron Emotional Quotient-inventory: Youth Version developed by Bar-On and Parker (2000) <sup>[3]</sup> was used to assess the emotional intelligence of adolescents. Scale consists of six dimensions that is, intrapersonal, interpersonal, stress management, adaptability, good mood and total emotional intelligence. It is a self-report rating scale which consists of 60 items rated on a four point Likert-scale where, scores ranged from 1 to 4 (1-“very seldom true of me”, 2 - “seldom true of me”, 3 - “often true of me” and 4 “very often true of me”). Total emotional intelligence was calculated by using the formula:  $A/6+B/12+C/12+D/10 = F$

Where, A = Intrapersonal dimension, B = Interpersonal dimension, C = Stress management dimension, D = Adaptability dimension and F = Total emotional intelligence. The scores that were obtained after the calculation were then converted to scale score and were classified under high, medium and low category as follows:

Category	Range
High	≥ 110
Medium	90-110
Low	≥ 90

### 2.3 Population and Sample

The target population for the present study comprised of Pre-University College students (PUC-I and PUC-II) from urban and rural background. Students were in the age range of 16 to 18 years who were studying in different science coaching institutes of Dharwad (Karnataka) and Tanakpur (Uttarakhand). An overall, 18 PUC science coaching institutes in Dharwad taluk (Karnataka) and 12 PUC science coaching institutes in Tanakpur taluk (Uttarakhand) were identified. Out of overall identified science coaching institutes, 4 from Dharwad and 3 coaching institutes from Tanakpur were randomly selected. A class wise list of coaching students studying in PUC-I and PUC-II was made and prior permission from head of each coaching institute was taken to carry out the research work. Among PUC students, rural samples comprised of those students, who had completed their school education till Class-10th in their village and had come for PUC studies in coaching institutes of Dharwad. A random sample of 10 to 15 per cent were drawn from each class summing up to a total of 156 PUC-I and 156 PUC-II students from Dharwad coaching institutes and 150 PUC-I and 130 PUC-II students from Tanakpur coaching institutes and thus, constituting an overall sample size of 592 students.

### 2.4 Data Analysis

The collected data was analysed by using ANOVA, modified  $\chi^2$  and correlation in SPSS package.

## 3. Results

**Table 1a:** Percentage distribution of dimensions of emotional intelligence of Dharwad PUC students, N = 312

Dimensions of emotional intelligence	Levels			Levels		
	Low	Medium	High	Low	Medium	High
	Urban (N=150)			Rural (N=130)		
Intrapersonal	25 (15.63)	88 (55)	47 (29.38)	26 (17.11)	87 (57.24)	39 (25.66)
Interpersonal	42 (26.25)	72 (45)	46 (28.75)	54 (35.52)	76 (50)	22 (14.47)
Stress management	22 (13.75)	96 (60)	42 (26.25)	22 (14.47)	90 (59.21)	40 (26.32)
Adaptability	16 (10)	74 (46.25)	70 (43.75)	22 (14.47)	70 (46.05)	60 (39.47)
Total emotional intelligence	30 (18.75)	69 (43.13)	61 (38.13)	30 (19.74)	70 (46.05)	52 (34.21)

Figures in parenthesis indicate percentage.

Results presented in Table 1a depicts the percentage distribution of emotional intelligence dimensions of Dharwad PUC students which clearly illustrates that maximum percentage of Dharwad PUC students from both localities were in medium level of all emotional intelligence dimensions. Among urban PUC students, 55 percent of students in intrapersonal dimension, 45 percent in interpersonal dimension, 60 percent in stress management

dimension, 46.25 percent in adaptability dimension and 43.13 percent in total emotional intelligence were in medium level. Similarly, majority of rural PUC students were also in medium level of all emotional intelligence dimensions *viz.*, 57.24 percent students in intrapersonal dimension, 50 percent in interpersonal dimension, 59.21 percent in stress management dimension and equal number of students (46.05 %) in adaptability dimension and total emotional intelligence.

**Table 1b:** Percentage distribution of dimensions of emotional intelligence of Tanakpur PUC students, N=280

Dimensions of emotional intelligence	Levels			Levels		
	Low	Medium	High	Low	Medium	High
	Urban (N=150)			Rural (N=130)		
Intrapersonal	15 (10)	78 (52)	57 (38)	14 (10.77)	71 (54.62)	45 (34.62)
Interpersonal	44 (29.33)	73 (48.67)	33 (22)	65 (50)	49 (37.69)	16 (12.31)
Stress management	25 (16.67)	81 (54)	44 (29.33)	30 (23.08)	87 (66.92)	13 (10)
Adaptability	24 (16)	60 (40)	66 (44)	40 (30.77)	55 (42.31)	35 (26.92)
Total emotional intelligence	45 (30)	54 (36)	51 (34)	52 (40)	59 (45.38)	19 (14.62)

Figures in parenthesis indicate percentage.

Table 1b depicts the percentage distribution of emotional intelligence dimensions of Tanakpur PUC students. In an urban area, maximum percentage of PUC students were in medium level of intrapersonal dimension (52 %), interpersonal dimension (48.67 %), stress management dimension (54 %), adaptability (40 %) and total emotional intelligence (36 %). Similarly, maximum percentage of rural

PUC students were also in medium level with regard to all the emotional intelligence dimensions that is, intrapersonal (54.62 %), stress management (66.92 %), adaptability (42.31 %) and total emotional intelligence (45.38 %) except in interpersonal dimension where, half of the students (50 %) were in medium level.

**Table 2a:** Influence of age on emotional intelligence of urban and rural PUC students of Dharwad, N = 312

Locality	Age	Emotional intelligence			Total	Modified $\chi^2$	r value	Mean $\pm$ SD	F value
		Low	Medium	High					
Urban (n=160)	16 years	11 (23.91)	23 (50.00)	12 (26.09)	46 (100)	21.78*	0.29**	99.93 $\pm$ 14.06	9.10*
	17 years	15 (21.74)	35 (50.72)	19 (27.54)	69 (100)				
	18 years	4 (8.89)	11 (24.44)	30 (66.67)	45 (100)				
Rural (n=152)	16 years	17 (40.48)	16 (38.10)	9 (21.42)	42 (100)	33.23*	0.21**	96.88 $\pm$ 14.41	6.53*
	17 years	6 (8.45)	45 (63.38)	20 (28.17)	71 (100)				
	18 years	7 (17.95)	9 (23.08)	23 (58.97)	39 (100)				

**Table 2b:** Influence of age on emotional intelligence of urban and rural PUC students of Tanakpur, N = 280

Locality	Age	Emotional intelligence			Total	Modified $\chi^2$	r value	Mean $\pm$ SD	F value
		Low	Medium	High					
Urban (n=150)	16 years	29 (46.03)	24 (38.10)	10 (15.87)	63 (100)	18.30*	0.36**	94.78 $\pm$ 17.71	11.47*
	17 years	15 (25)	27 (45)	18 (30)	60 (100)				
	18 years	1 (3.70)	3 (11.11)	23 (85.19)	27 (100)				
Rural (n=130)	16 years	35 (48.61)	31 (43.06)	6 (8.33)	72 (100)	11.67*	0.27**	89.59 $\pm$ 19.00	3.91*
	17 years	17 (36.96)	21 (45.65)	8 (17.39)	46 (100)				
	18 years	-	7 (58.33)	5 (41.67)	12 (100)				

Figures in parenthesis indicate percentage.

\*Significant at 0.05 level, \*\*Significant at 0.01 level.

A close perusal of Table 2a and 2b depicts the influence of age on emotional intelligence of urban and rural PUC students of Dharwad and Tanakpur. It clearly reveals a significant association and relationship between age and emotional intelligence of rural Dharwad PUC students and also, among urban and rural PUC students from Tanakpur where, majority of students in 16 years (40.48 %, 46.03 % and 48.61 %), 17 years (50.72 %, 63.38 %, 45 % and 45.65 %) and 18 years (66.67 %, 58.97 %, 85.19 %) were in low, medium and high level of emotional intelligence respectively. In contrast, half

of the urban Dharwad PUC students (50 %) of 16 years and 58.33 percent rural Tanakpur PUC students of 18 years had medium level of emotional intelligence. A significant difference between emotional intelligence and age of PUC students was also observed where, students in 18 years (M = 111.47 and 107.54 in case of Dharwad PUC students and M = 113 and 104.64 in case of Tanakpur PUC students) had higher emotional intelligence than 16 years and 17 years old students.

**Table 3:** Influence of gender on emotional intelligence of urban and rural PUC students, N = 592

Locality	Gender	Emotional intelligence				Modified $\chi^2$	Mean $\pm$ SD	t-value
		Low	Medium	High	Total			
<b>Dharwad (N = 312)</b>								
Urban (n=160)	Boys	8 (10)	34 (42.5)	38 (47.5)	80 (100)	10.24 N.S.	107.64 $\pm$ 14.28	3.38*
	Girls	22 (27.5)	35 (43.75)	23 (28.75)	80 (100)			
Rural (n=152)	Boys	22 (28.57)	33 (42.86)	22 (28.57)	77 (100)	7.97*	99.75 $\pm$ 13.79	2.78*
	Girls	8 (10.67)	37 (49.33)	30 (40)	75 (100)			
<b>Tanakpur (N = 280)</b>								
Urban (n=150)	Boys	27 (36)	20 (26.67)	28 (37.33)	75 (100)	5.92*	99.28 $\pm$ 18.73	0.54 N.S.
	Girls	18 (24)	34 (45.33)	23 (30.67)	75 (100)			
Rural (n=130)	Boys	28 (43.08)	25 (38.46)	12 (18.46)	65 (100)	2.99 N.S.	93.72 $\pm$ 16.00	0.21 N.S.
	Girls	24 (36.92)	34 (52.31)	7 (10.77)	65 (100)			

Figures in parenthesis indicates percentage.

N.S. - Non-significant, \*Significant at 0.05 level.

A close perusal of Table 3 clearly highlights that, there was significant association ( $\chi^2 = 7.97$  and  $5.92$ ,  $p \leq 0.05$ ) between gender and emotional intelligence of rural Dharwad and urban Tanakpur PUC students where, almost equal percent of rural Dharwad PUC students (42.86 % boys and 49.33 % girls) were in medium level of emotional intelligence while among urban Tanakpur PUC students, 37.33 percent boys and 45.33 percent girls were in high and medium level of emotional intelligence respectively. However, no significant association was observed between gender and emotional intelligence of Dharwad and Tanakpur PUC students from urban and rural background respectively.

A significant gender difference in emotional intelligence of urban and rural Dharwad PUC students was also noticed where, among urban PUC students boys had higher emotional intelligence (107.64) than girls (99.76) while, it was vice-versa in case of rural PUC students. However, no significant gender difference in emotional intelligence of urban and rural Tanakpur PUC students was found.

#### 4. Discussion

Age had its significant influence on emotional intelligence of Dharwad and Tanakpur PUC students from both localities. Present results are congruent to the findings of Nasir and Iqbal (2011)<sup>[13]</sup> who revealed significant relationship between age and total emotional intelligence of adolescents. Fariselli *et al.* (2006)<sup>[7]</sup> also stated that emotional intelligence at early age may be low due to pragmatic behavioural pattern and less experience and learning of an individual to deal with various outer world challenges in an emotionally stable manner. Gender difference in emotional intelligence of Dharwad PUC students was also observed where, among urban group, boys had higher emotional intelligence than girls and vice-versa among students from rural background (Table 3). A study conducted by Maria *et al.* (2015)<sup>[10]</sup> also revealed higher emotional intelligence of boys than girls which was primarily due to the fact that boys were better able to manage and express their emotions. In contrast, findings of Reddy and Venu (2010)<sup>[15]</sup> study a revealed higher emotional intelligence of girls than boys. Sanchez *et al.* (2008)<sup>[17]</sup> stated that gender difference on emotional intelligence may be attributed to the varying socialization and emotional teachings of girls and boys in childhood. They supported that girls receive greater amount of emotional support from parents than boys which make girls more adapt at recognizing and expressing emotions.

#### 5. Conclusion

Majority of PUC students were in medium level of all emotional intelligence dimensions. With increase in age, emotional intelligence of students also increased. Gender also plays an important role in determining emotional intelligence of adolescents.

#### 6. References

1. Ahmed S, Bangash H, Khan SA. Emotional intelligence and gender difference. *J Agric.* 2009; 25(1):127-130.
2. Aiyappa S, Acharya YT. Gender differences in emotional intelligence of adolescents. *Psych.* 2014; 3(5):255-256.
3. Bar-On R, Parker DA. Emotional Quotient Inventory: Youth Version. *J Adolesc.* 2000; 2(5):84-89.
4. Boyatzis RE. Clustering competence in emotional intelligence: Insights from the Emotional Competence Inventory. In R. Bar-On and J.D.A. Parker (eds.),

Handbook of emotional intelligence. San Francisco: Jossey-Bass, 2000, 343-362.

5. Coleman and Andrew. *A Dictionary of Psychology* (3 ed.). Oxford University Press, 2008.
6. Esnaola I, Revuelta L, Ros I, Sarasa M. The development of emotional intelligence in adolescence. *Psychol.* 2017; 33(2):327-333.
7. Fariselli E, Lorena R, Marta S. The development of emotional intelligence in adolescence. *Psychol.* 2006; 33(2):327-333.
8. Goleman D. *Working with emotional intelligence.* New York: Bantam, 1998.
9. Goleman D. Emotional intelligence. *Comprehensive Book of Psychiatry* (Ed. Lippincott, W.W.), Philadelphia, 2000, 570-574.
10. Maria S, Ekaterini K, Efterpi K. Research on the association between emotional intelligence and educational achievement: A case study of the pupils in the senior high schools of Sparta. *Int. J Caring Sci.* 2015; 8(1):9-20.
11. Mayer JD. Emotional intelligence. *Imagin. Cogn. Pers.* 1990; 9(3):185-211.
12. Mayer JD, Caruso DR, Salovey P, Formica SA, Woolery A. Emotional intelligence. In J. P. Forgas (Ed.), *Handbook of Affect and Social Cognition.* Mahwah, 2000, 410-431.
13. Nasir M, Iqbal S. Relationship of demographic factors with emotional intelligence of university students. *New Horti. Sci. Techn.* 2011; 1(1):17-21.
14. O' Donohue W, Tolle LW. *Behavioral approaches to chronic disease in adolescence: A guide to integrative care.* New York: Springer, 2009.
15. Reddy BS, Venu P. Impact of gender and locality on emotional intelligence of secondary school students. *J Comm. Gui. Res.* 2010; 27(3):331-336.
16. Salovey P, Mayer JD. Emotional intelligence. *Imagin. Cogn. Pers.* 1990; 9(3):185-211.
17. Sanchez MT, Fernandez BP, Montanes DJ, Latorre JM. Does emotional intelligence depend on gender? The socialization of emotional competencies in men and women and its implications. *Electr. J Res. Edu. Psy.* 2008; 6(2):455-474.
18. Sekhri P. Emerging Understanding of Emotional Intelligence of Teenagers. *Int J Clin. Pediatr. Dent.* 2017; 10(3):289-292.
19. Taylor GJ. The relationship between emotional intelligence and alexithymia. *Personality and Individual Differences.* 2001; 30(1):107-115.