Emotional Health of Science and Agriculture Undergraduate Students

Jakkaraddi Arati¹*, V.S. Yadav² and P.B. Khadi¹

¹Department of Human Development and Family Studies, College of Community Science, University of Agricultural Sciences, Dharwad Karnataka, India
²Department of Agricultural Extension Education, college of Agriculture, Dharwad, Karnataka, India

*Corresponding author

ABSTRACT

The study on emotional health of science and agriculture undergraduate students was aimed to understand their emotional health status. Study was conducted in Dharwad district of Karnataka state, sample comprised of 300 science undergraduates and 351 Agriculture undergraduate students, in the age range of 19 to 23 years. About 40 per cent of the samples were boys and 60 per cent were girls. The Emotional Health Scale (EHS) by Angadi, A. S. (2011) and general information schedule were used for collecting data. The data was subjected to frequency distribution, and t test analysis. The results revealed that around 94.80 per cent of them were having low level of emotional health and only 5.20 per cent had high level of emotional health. About 94.30 percent of science and 95.15 per cent of Agriculture students had low level of emotional health. The t test analysis revealed that there was a significant difference between Agriculture and Science students on emotional health and all its dimensions. t value on gender inferred that there was significant difference between boys and girls on emotional health and its dimensions.

Keywords: Emotional health, Home science, Agriculture, Emerging adults

Article Info
Accepted: 10 July 2019
Available Online: 10 August 2019

Introduction

In everyday life, emotions play a very important role in deciding the behavior of human beings and how they react in various situations. The capacity of recognizing our own feelings and those of the others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships assumes great importance in our lives. The ability to monitor feelings from moment to moment is crucial for psychological insight and self-understanding (Sowmya and Betsur, 2010). An emotionally stable person can deal with problems more effectively than an emotionally disturbed person. Emotions can be shown in different ways or feelings. Emotional characteristics like self-confidence and empathy differ from other cognitive abilities because they are...
drawn on different brain areas. Different kinds of personalities are developed through utilization of different emotions. Emotional health refers to our sense of well-being and our ability to cope with life events, emotional health is about our ability to acknowledge and respect our own emotions as well as those of others (Samaritans, 2008). Emotional health is fundamental for young people as they have to make choices about studying, careers and other areas of their lives. At the same time, young people are also developing greater independence and responsibilities and experiencing changes in the way they think and feel (Samaritans, 2008). Emotional health is generally considered a component of well-being and quality of life. It can be considered as a predictor, as an outcome; or as a mediator for other types of health and satisfaction in life. Many emerging adults believe emotions run on a continuum from normal to pathological. Any emotion, positive or negative, in the extreme is probably detrimental. This suggests that a definition of emotional health should say something about the ability of the emotional system to help emerging adults regulate and negotiate their environment in an adaptive way.

According to theories of brain function, a high emotional quotient means someone is self-confident, self-aware, and able to navigate through trying emotional times. EQ is often tied directly to the degree of success one may have in the workplace and in personal relationships.

The emerging adults face a number of psychological and emotional problems such as that of identity, inadequate self-concept and variety of role expectations. At this stage, an emerging adult is neither an adolescent nor an adult (Saini and Gill, 2007). Young adulthood is a time of major life transitions and risk of poor mental health may affect emotional well-being throughout adult life (Lee and Gramotnev, 2007). Young people are more prone to psychological problems and affect their emotional health. Healthy socialization builds young people’s sense of self-mastery, self-esteem and social inclusion as well as their capacity to cope with adversity (The National Academies, 2009).

Emotional health is a part of mental health. It is a state or the degree to which individuals feel secure, stable and relaxed in everyday life. Healthy emotional expression is a sign of emotional health. Various risk factors in emotional health of young people are low self-esteem, lower awareness about self, improper emotional regulation and management, lack of self-confidence and poor social relations. Emotional health refers to the presence of positive characters. Hence, the present study is undertaken to study the prevalence of Emotional Health dimension among students of Science and Agriculture students studying in science colleges and Agriculture University.

Materials and Methods

The study was a part of research conducted on emotional health of emerging adults which was an exploratory research. Emotional health of undergraduate students of Science and Agriculture disciplines was analysed. Students comprised from science and agriculture college, Dharwad between the ages ranging from 19 through 23 years.

Study was conducted in Dharwad district of Karnataka state, the total sample comprised of 651 undergraduate students among which 300 were Science students and 351 were Agriculture students. About 40 per cent of the sample was boys and 60 per cent were girls. The Emotional Health Scale (EHS) developed by Angadi (2011) and general information schedule were used for collecting data. The data was subjected to frequency distribution and t test analysis.
The Emotional Health Scale (EHS) measures five aspects of emotional health such as self-awareness, emotional management, self-confidence, social relation self-esteem. In this investigation, Emotional Health is operationalized as “potentiality of one’s own understanding and managing emotions in social relations”.

Self-awareness is the capacity about awareness of one’s own emotions and their effects on thoughts and behaviour.

Emotional management which is the experiencing management of one’s own mode of judgment to negative emotional states.

Self-confidence is the tendency of commitment to an action and relations in the process of challenge to attain success.

Social relations are the disposition for willingness to involve, being aware of emotions of others and reflecting on and helping others in decision-making and solving problems.

Self-esteem is the perceived self-worth and competence of oneself in social relations.

The inventory consisted of 80 statements, 16 statements of each dimension measure each aspect. Each statement has 5 alternative answers viz., Always, Most of the times, Sometimes, Rarely and Never with the scoring of 5, 4, 3, 2 and 1 respectively. There are 47 positive statements and 33 negative statements.

The negative statements were reversely scored. The score ranges from 80 to 400.

The summation of the scores obtained by the respondents on 16 items of each dimension indicates each dimension score. The total score ranges from 16 to 80.

Data analysis and interpretation

The collected data was analyzed for testing the significance of difference between the overall emotional health scores of the under graduate students of Science and Agriculture disciplines.

Results and Discussion

The undergraduate students were classified according to their academic disciplines into Science and Agriculture. The emerging adults of each discipline were categorized into high and low levels of emotional health.

Demographic characteristics of the respondents

The results in table 1 reveal the demographic characteristics of undergraduates of science and agriculture students. The total sample comprised of 651 undergraduate students among whom 39.78 percent were boys and 60.21 percent were girls. Among the total sample, 46.1 percent belonged to science discipline and, 63.9 percent belonged to agriculture discipline. Among the sample around 40.9 percent had completed their primary schooling in rural areas and 59.1 percent had completed in urban areas. Among undergraduate students, 31.6 percent of them were living in joint family and 68.4 percent were living in nuclear family system.

Regarding occupation of father, most of them were labourers (35.9%), followed by agriculturists (33.5%), Business/Private (14%), government employees (11.2%), Agriculturists (14.8%) and unemployed (5.4%). Regarding occupation of mothers, most of them i.e., 47.8 percent were homemakers and 52.2 percent were employed.

More number of undergraduate students was residing in hostels (50.5%) followed by
paying guest or rooms (43.2%) and home (6.3%).

**Status of emotional health of undergraduate students**

The results in table 2 indicate the emotional health status of science and agriculture students. Among science undergraduates, majority of them i.e., 90 percent were having low level of self-awareness and very few i.e., only 10 percent were having high level of self-awareness. Majority (97.6%) of them were having low level of emotional management and only 2.4 per cent were having high level of emotional management. Also, most of them i.e., 70 percent and few of them i.e., 30 percent were having low and high level of self-confidence respectively. With regard to the social relations dimension of emotional health, most of them (72.3%) were in the low level and few (17.7%) were in the high level. Also, 92.6 percent and 7.4 percent were found to have low level and high level of self-esteem respectively. On total emotional health, around 94.3 percent were having low emotional health and only 5.7 percent were having high emotional health.

Among Agriculture undergraduates, majority of them i.e., 80.03 percent were having low level of self-awareness and 11.96 percent were having high level of self-awareness; w.r.t emotional management around 92.59 percent were having low level and 7.41 percent were having high level. Also, most of them i.e., 68.09 percent and few of them i.e., 31.91 percent were having low and high level of self-confidence respectively. With regard to the social relations dimension of emotional health, majority (98.29%) were high and very few (1.70%) were high. Also, 92.30 percent and 7.70 percent were found to have low level and high level of self-esteem respectively. On total emotional health, around 95.15 percent were having low emotional health and only 4.85 percent were having high emotional health. These results are supported by the results of the study conducted by Muktamath and Khadi (2016) on Emotional intelligence and general intelligence among staff and students of University of Agricultural Sciences, Dharwad also found that most of the students fell in the category of low EQ range (46 per cent), 44.7 per cent in average and 9.30 per cent in high EQ range. Majority (62.2 per cent) were in the average EQ range 21.1 per cent in low and 16.7 per cent in High EQ range. Overall sample inferred that around 11.10 percent of undergraduate students were having high self-awareness, 5.10 percent were high on emotional management, 27.30 percent were high on self-confidence, 13.7 percent were high on self-esteem and 7.5 percent were high on social relations and 5.2 percent were high on emotional health.

These results are on par with the findings of Biradar and Shashikumar (2014) who found that among the respondents only about 7-15 per cent had developed high level of the emotional components but about 54-75 per cent of the respondents had developed low level of the emotional components except intuitiveness. The study finding revealed a highly significant association between science and agriculture disciplines and all dimensions of emotional health with chi-square value of 38.22** for self-awareness, 25.34** for emotional management, 51.47** for self-confidence, 39.61** for social relations, 55.96** for self-esteem and 229.23** for total Emotional health.

The results in table 3 reveal the difference between disciplines of Science and Agriculture on emotional health of undergraduate students. It was found that there was highly significant difference between emotional health dimensions of emotional management (t=-2.957*), self-confidence (t=-2.841*), and social relations (t=10.35**).
Table 1: Frequency and percentage of the undergraduate student’s demographic characteristics

| Gender                  | Bachelor of science (N=300) | Agriculture (N=351) | Total (N=651) |
|-------------------------|------------------------------|---------------------|---------------|
|                         | Low (90.0)                  | High (10.0)         | Low (80.03)   | High (11.96) |
| Boys                    | 101 (39.0)                  | 158 (61.0)          | 259 (39.78)   |
| Girls                   | 198 (50.51)                 | 194 (49.48)         | 392 (60.21)   |
| Academic discipline     | 300 (46.10)                 | 351 (53.90)         |               |
| Schooling               |                              |                     |               |
| Urban                   |                              |                     | 385 (59.1)    |
| Rural                   |                              |                     | 266 (40.9)    |
| Family                  |                              |                     |               |
| Joint                   |                              |                     | 206 (31.6)    |
| Nuclear                 |                              |                     | 445 (68.4)    |
| Occupation of father    |                              |                     |               |
| Government Employee     |                              |                     | 73 (11.20)    |
| Labourer                |                              |                     | 234 (35.90)   |
| Business/Private        |                              |                     | 91 (14.0)     |
| Agriculture             |                              |                     | 218 (33.50)   |
| Unemployed              |                              |                     | 35 (5.40)     |
| Occupation of mother    |                              |                     |               |
| Home-maker              |                              |                     | 311 (47.80)   |
| Employed                |                              |                     | 340 (52.20)   |
| Stay                    |                              |                     |               |
| Home                    |                              |                     | 41 (6.30)     |
| Hostel                  |                              |                     | 329 (50.50)   |
| Paying guest/room       |                              |                     | 281 (43.20)   |

Figures in parenthesis indicate percentage.

Table 2: Status of emotional health among graduates of Science and Agriculture disciplines

| Emotional health Dimensions | Bachelor of Science (N=300) | Agriculture (N=351) | Total (N=651) | Chi-square (Modified) |
|-----------------------------|-----------------------------|---------------------|---------------|-----------------------|
|                             | Low (90.0)                  | High (10.0)         | Low (80.03)   | High (11.96)          | 38.22** |
| Self-awareness              | 270 (97.60)                 | 7 (2.40)            | 309 (92.59)   | 26 (7.41)             | 618 (94.9) |
| Emotional management        | 293 (78.0)                  | 66 (22.0)           | 239 (68.09)   | 112 (31.91)           | 473 (72.7) |
| Self-confidence             | 234 (72.30)                 | 83 (17.70)          | 345 (98.29)   | 66 (1.70)             | 562 (86.3) |
| Social relations            | 217 (92.6)                  | 22 (7.40)           | 324 (92.30)   | 27 (7.70)             | 602 (92.5) |
| Self-esteem                 | 278 (94.30)                 | 17 (5.70)           | 334 (95.15)   | 17 (4.85)             | 617 (94.8) |
| Emotional health            | 283 (93.30)                 | 17 (6.70)           | 334 (95.15)   | 17 (4.85)             | 617 (94.8) |

Figures in parenthesis indicate percentages. ** p<0.01, *p<0.05
### Table 3. t-test results of Science and Agriculture students

| Emotional health       | Graduates of Science (N=300) | Agriculture (N=351) | t-value |
|------------------------|-----------------------------|---------------------|---------|
|                        | (Mean ± SD)                 | (Mean ± SD)         |         |
| Self-awareness         | 52.76 ± 8.17                | 55.36 ± 7.35        | -0.796  |
| Emotional management   | 43.31 ± 7.64                | 48.98 ± 9.18        | -2.957* |
| Self-confidence        | 58.93 ± 7.59                | 60.49 ± 6.81        | -2.841* |
| Social relations       | 54.70 ± 1.14                | 53.56 ± 8.77        | 10.35** |
| Self-esteem            | 53.58 ± 7.40                | 54.32 ± 6.92        | -0.173  |
| Emotional health       | 263.30 ± 3.25               | 272.73 ± 28.58      | 0.470   |

**p<0.01, *p<0.05**

### Table 4. Gender difference on emotional health of science and agriculture undergraduate students

| Emotional health       | Boys (N=260)     | Girls (N=391)    | t value | Chi-square (Modified) |
|------------------------|------------------|------------------|---------|-----------------------|
|                        | (Mean ± SD)      | (Mean ± SD)      |         |                       |
| Self-awareness         | 55.34 ± 6.75     | 55.37 ± 7.74     | -1.46   | 39.49**               |
| Emotional management   | 49.79 ± 8.44     | 48.45 ± 9.62     | -0.43   | 52.56**               |
| Self-confidence        | 59.45 ± 7.09     | 61.17 ± 6.54     | -1.99   | 13.36**               |
| Social relations       | 53.37 ± 7.58     | 53.68 ± 9.49     | -3.41** | 34.36**               |
| Self-esteem            | 54.17 ± 6.92     | 54.42 ± 6.92     | -0.77   | 46.697**              |
| Emotional health       | 272.15 ± 27.04   | 273.12 ± 29.58   | -1.28   | 52.21**               |

**p<0.01, *p<0.05**

The categorization of the students under each dimension is as follows:

|       | Low  | High |
|-------|------|------|
|       | 16-64| 65-80|

The categorization of the students for emotional health is:

|       | Low  | High |
|-------|------|------|
|       | 80-320| 321-400|
It is also observed that female agriculture undergraduate’s mean scores were higher than the male students which was significant. These results are well supported by the study conducted on Social Intelligence of Undergraduate Students In Relation To Their Gender and Subject Stream by Saxena and Jain (2013) which revealed that indicates that there exists significant difference between male and female undergraduate students on overall social intelligence. Significant difference is also found in dimension-Patience, cooperativeness, sensitivity, recognition of social environment, Tactfulness and Memory, but not in confidence level and sense of humor. It means that arts undergraduate students are more socially intelligent than science students.

The results in table 4 reveal the mean differences between gender on emotional health of Science and Agriculture undergraduate students. It was found that there was a highly
significant gender difference on social relations dimension, with statistically significant t value - 3.41**.

These results are supported by the results of the study conducted by Saxena and Jain (2013) on Social Intelligence of undergraduate Students in relation to their gender and subject stream which indicates that females are more socially intelligent than males. Also, females have more patience and sensitivity, better cooperativeness and recognition of social environment than their counterparts. The mean values indicate that there was not much difference between boys and girls on emotional health dimensions, but girls were found to be having greater mean score than boys.

These results were found to be on par with the results of study conducted by Bibi et al., (2016) which proved that there exists positive relationship between self-esteem and emotional intelligence among Pakistani university students and it was found that females are more emotionally intelligent as compared to males but there does not exist any statistically significant gender difference in self-esteem among university students. Emotional intelligence is intensively studied in the contexts of working organizations and educational institutes, including gender differentiation. Makvana (2014) and Rooy, Alonso & Viswesvaran (2004) explored that females exhibited superior level of emotional intelligence. Conversely, Cakan and Altun (2005) did not find any difference of emotional intelligence in terms of gender, age and job experience.

Emotions and emotional capacity play a vital role in a person’s life. Comfort, higher accomplishment and coping with life challenges is possible due to this aptitude (Shahzad et al., 2014). It is significant in sustaining warm social relations with friends, family, colleagues and others. Emotional intelligence is also viewed as superior to cognition in clutching achievements. The upshots of this study assert that female students show pre-eminence in emotional intelligence, which may be due to the fact that females are usually preeminent in sensing, appraising and dealing emotions.

The superiority of females over males in terms of emotional intelligence is also acknowledged by Brackett, Mayer & Warner (2004), Chaudhry et al., (2013), Makvana (2014) and Rooy, Alonso and Viswesvaran (2004), but denied by Shahzad and Bagum (2012) who accredited males being better in emotional cognizance. Majid (2012) studied emotional intelligence in terms of gender. They identified variations of emotional intelligence on different aspects of male and female learners.

Acknowledgements

I would like to thank the major advisor Dr. Yadav and other committee members who gave their valuable opinions and suggestions for furthering the present research. Also I would like to thank the respondents who actively participated in the research study and gave their valuable responses.

Recommendations and Implications

The results of present study point towards lower levels of emotional health in the lives of undergraduate students. Future researches to enhance their emotional health and increase their quality of life and relationships can be undertaken.

The present study also reveals that females were having higher mean scores on all the dimensions of emotional health as compared to males. This can be taken as a marker for future research in undertaking the factors which influence the development of emotional health on gender.

There is more need to bring about sensitization of developing emotional health for both genders and especially the male gender since these undergraduates will be the future stake holders of relationship management both in family as well as professional circumstances.
References

Angadi A.S., Yadav V.S., and Khadi P.B. 2011. Emotional health of emerging adults. Thesis submitted and published in University of agricultural sciences, Dharwad, Karnataka.

Bibi S, Saqlain S, Mussawar B. 2016. Relationship between Emotional Intelligence and Self Esteem among Pakistani University Students. *J. Psychol. Psycho. Therapy*, 6:279.

Biradar, S.; Shashikumar, S. 2014. Status of emotional intelligence among the college students. *Asian. J. of H.Sc. 9*(1): pp.241-245

Brackett, M. A., Mayer, J. D., and Warner, R. M. (2004). Emotional intelligence and its relation to everyday behavior. *Personality and Individual Differences, 36*, 1387- 1402.

Cakan, M., and Altun, S. A. (2005). Adaptation of an emotional intelligence scale for Turkish educators. *International Education Journal, 6* (3), 367-372.

Chaudhry, A. A., Ali, F., Jan, F. A., Sajjad, M. & Ali, S. (2013). Emotional intelligence and students: A Pakistani perspective. *World Applied Sciences Journal, 22* (3), 319- 325.

Lee, C., and Gramotnev, H., 2007. Life transitions and mental health in a national cohort of young Australian women. *Developmental Psychol., 43*: 877-888.

Majid, S. (2012). A study of emotional intelligence and social behaviour of 11th class students. (Unpublished Doctoral Dissertation). Allama Iqbal Open University, Islamabad. Retrieved from http://eprints.hec.gov.pk/7966/

Makvana, S. M. (2014). Emotional intelligence as related to difference areas, stream’ and sex’ among school student. *The International Journal of Indian Psychology, 2*(2), 5-18.

Muktamath V.U., and Khadi P. B., 2016. Emotional intelligence and general intelligence: A comparative study among staff and students of University of Agricultural Sciences, Dharwad. *J. Farm Sci. Spl. Issue 29*(5): (685-687).

Rooy, D. V., Alonso, A., and Viswesvaran, C. (2004). Group differences in emotional intelligence scores: Theoretical and practical implications. *Personality and Individual Differences, 1*-12, Available from www.sciencedirect.com

Saini, S. K., and Gill, T. K., 2007. Understanding adolescence: A period of stresses and strains. *Indian Psy. Rev. 69*:261-268.

Saxena, S., and Jain, R.K., 2013. Social Intelligence of Undergraduate Students In Relation To Their Gender and Subject Stream. *IOSR Journal of Research & Method in Education (IOSR-JRME) Volume 1, Issue 1* (Jan. – Feb. 2013), PP www.iosrjournals.org

Shahzad, S., Riaz, Z., Begum, N. and Khanum, S. J. (2014). Urdu translation and psychometric properties of trait emotional intelligence questionnaire short form (TEIQue-SF). *Asian Journal of Management Sciences & Education, 3*(1), 130 – 140.

Sowmya, S. and Betsur, N. (2010). Emotional Intelligence in Relation to Personality, *Psycho-lingua*, Vol. 40 (1&2).

The National Academies, 2009. Washington, D C. www.nap.edu

Young people’s emotional health. http://www.samaritans.org

How to cite this article:

Jakkaraddi Arati, V.S. Yadav and Khadi, P.B. 2019. Emotional Health of Science and Agriculture Undergraduate Students. *Int.J.Curr.Microbiol.App.Sci.* 8(08): 1130-1138.
doi: [https://doi.org/10.20546/ijemas.2019.808.132](https://doi.org/10.20546/ijemas.2019.808.132)