



Emotional Intelligence among Higher Education Students: A Study of the University of Lucknow

Harender Pal Patel
Research Scholar
Faculty of Library and Information Science
School of Social Science
Indira Gandhi National Open University, New Delhi
Email: harenderbhu@gmail.com

Abstract

Emotional intelligence plays an important role in students' academic, personal, and social development. Examining emotional intelligence among higher education students can provide useful information regarding their emotional competence and development. This study assessed the emotional intelligence of higher education students at the University of Lucknow and examined the differences across selected demographic variables. A quantitative descriptive cross-sectional survey design was adopted. Data were collected from 147 higher education students using the 60-item Emotional Intelligence Scale developed by Singh (2004). Descriptive statistics, independent-samples *t*-tests, and Welch's one-way analysis of variance (ANOVA), followed by Games–Howell post hoc tests, were conducted using Jamovi (version 2.6). The findings showed overall high emotional intelligence ($M = 231.0$, $SD = 29.2$). All five dimensions—self-awareness, self-regulation, motivation, social awareness, and social skills—were classified as being high. Significant differences in emotional intelligence were found across age groups ($p = 0.048$) and academic levels ($p = 0.013$), whereas no significant differences were found by gender, academic discipline, residential background, and accommodation status. Overall, the higher-education students at the University of Lucknow demonstrated a high emotional intelligence. The findings provide information that may be useful for student support and emotional development initiatives in higher-education institutions

Keywords: Emotional intelligence, Higher education students, Emotional intelligence dimensions, University of Lucknow

Introduction

Higher education students not only acquire disciplinary knowledge but also adapt to academic, social and emotional challenges. Consequently, the ability to recognise, understand, and regulate emotions is important for students' academic experiences, interpersonal relationships, and personal development. Emotional intelligence (EI) refers to “the ability to perceive, understand, and manage emotions in oneself and others” (Mayer & Salovey, 1997). Salovey and Mayer (1990) formally introduced the concept and defined it in terms of the ability to monitor one's own and others' emotions, distinguish among them, and use this information to guide thinking and actions. Goleman (1995) later popularised the concept, and his work on emotional competencies was further developed in his book “*Working with Emotional Intelligence*” (Goleman, 1998). These competencies are relevant to students' learning, decision-making, communication, and psychological well-being in higher education.

The transition to higher education is an important period in students' academic and personal lives. During this stage, students need to cope with increasing academic demands, establish new social relationships, adapt to unfamiliar learning environments, and make important decisions about their future careers. Managing these challenges involves not only intellectual ability but also emotional competence. In this context, emotional intelligence may help students regulate their emotions, cope with stress, communicate effectively, and respond to academic and social demands. Research on emotional intelligence among university students has been conducted across different educational systems and cultural contexts (Navarro et al., 2022; Vallejos Valdivia, 2022; Santos et al., 2023; Calle-Ramírez et al., 2023).

Research on emotional intelligence among university students has also examined differences in reported levels across educational and cultural contexts. Overall, the available evidence shows variation in emotional intelligence levels among higher education students, with reported levels varying according to institutional context, academic discipline, and measurement instruments employed (Navarro et al., 2022; Vallejos Valdivia, 2022; Santos et al., 2023; Calle-Ramírez et al., 2023; Moreira Choez et al., 2024). Research has also shown that emotional intelligence may vary across its dimensions, with different patterns observed

across student samples and measurement instruments (Fernández-Martínez et al., 2023; Moreira Choez et al., 2024). Therefore, examining both overall emotional intelligence and its dimensions can provide a fuller picture of students' emotional competencies than relying on an overall score alone.

Previous studies have reported inconsistent findings regarding demographic differences in the emotional intelligence. Several studies have reported significant differences in emotional intelligence across selected demographic characteristics, including gender, age, academic year or stage of study, and academic discipline (Shahin, 2020; Benjamin et al., 2024; Suberviola, 2026). Other studies have reported no significant differences in particular demographic variables, contributing to inconsistencies in the evidence (Navarro et al., 2022). In contrast, residential backgrounds and other living-related characteristics have received relatively little attention, and the available evidence is limited (Benjamin et al., 2024; Sathya&Velmurugan, 2022). These mixed findings indicate that demographic differences in emotional intelligence require further examination in different higher education settings.

Although emotional intelligence has been examined among higher education students, important gaps remain in the literature. Much of the available evidence comes from specific disciplines, particularly health sciences (Navarro et al., 2022; Shahin, 2020; Benjamin et al., 2024; Fernández-Martínez et al., 2023), while less evidence is available from multidisciplinary university settings. Findings on demographic differences are also mixed, with the direction and significance of differences varying across gender, age, academic stage, and discipline. Evidence concerning residential background and other living-related characteristics is limited. In addition, the available literature shows considerable variation in EI measures and study populations, which makes direct comparisons across studies difficult. Therefore, further research in multidisciplinary higher education settings is needed to examine overall emotional intelligence, its dimensions, and relevant demographic characteristics among students.

The present study examined emotional intelligence among higher education students at the University of Lucknow, a multidisciplinary public university in India. It assessed overall emotional intelligence and its five dimensions and examined differences across selected

demographic variables. This study provides evidence of students' emotional competencies in a multidisciplinary university setting in India. The findings may be useful to educators, counsellors, and university administrators in planning activities that support students' emotional development. The study may also provide a basis for future research on emotional intelligence among higher education students.

Objectives

- To determine the level of emotional intelligence among higher education students.
- To assess the levels of self-awareness, self-regulation, motivation, social awareness, and social skills among higher education students.
- To examine differences in emotional intelligence among higher education students across gender, age, academic level, academic discipline, residential background, and accommodation status.

Hypotheses

H1: There is no significant difference in emotional intelligence between male and female higher education students.

H2: There is no significant difference in emotional intelligence across the age groups of higher education students.

H3: There is no significant difference in emotional intelligence across academic levels of higher education students.

H4: There is no significant difference in emotional intelligence across the academic disciplines of higher education students.

H5: There is no significant difference in emotional intelligence between higher-education students from urban and rural backgrounds.

H6: There is no significant difference in emotional intelligence between hostellers and day scholars.

Methodology

This study adopted a quantitative, descriptive, cross-sectional survey design to assess emotional intelligence among higher education students and examine differences across selected demographic variables. A cross-sectional survey design was appropriate because it allowed the collection of quantitative data from a defined population at a single point in time without manipulating the study variables.

This study was conducted among higher-education students at the University of Lucknow, Uttar Pradesh, India. The target population comprised undergraduate, postgraduate, and research scholars enrolled in various academic disciplines. Convenience sampling was used to enlist students who voluntarily agreed to participate in this study. Data were collected using a self-administered structured questionnaire, which was distributed personally after the purpose of the study was explained to the respondents. A total of 250 questionnaires were distributed, of which 185 were returned, resulting in a 74.0% overall response rate. Following data screening, 38 questionnaires were excluded because they were incomplete or contained inconsistent responses. Consequently, 147 valid questionnaires were retained for final analysis.

The questionnaire consisted of two sections: Section A collected demographic information, including gender, age, academic level, academic discipline, residential background and accommodation status. Section B comprised the 60-item Emotional Intelligence Scale developed by Singh (2004). The instrument measures five dimensions of emotional intelligence: self-awareness, self-regulation, motivation, social awareness, and social skills, with 12 items representing each dimension. Responses were recorded using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

For descriptive interpretation, the possible score range was divided into five equal intervals, corresponding to the five response categories of the Likert scale. The interpretation criteria used in this study are presented in Table 1.

Table 1
Interpretation Criteria for Emotional Intelligence Scores

Scale	Possible Score Range	Very Low	Low	Moderate	High	Very High
Overall Emotional Intelligence (60 items)	60–300	60–108	109–156	157–204	205–252	253–300
Each EI Dimension (12 items)	12–60	12.0–21.6	21.7–31.2	31.3–40.8	40.9–50.4	50.5–60.0

Note. The interpretation ranges were developed solely for descriptive purposes by dividing the possible score range into five equal intervals based on the five-point Likert response scale.

The Emotional Intelligence Scale demonstrated excellent internal consistency (Cronbach's $\alpha = 0.940$) among the study participants.

Participation was voluntary, and respondents were informed of the study's purpose before completing the questionnaire. They were assured that their responses would remain anonymous and confidential and would be used only for academic purposes.

The collected data were coded and screened using Microsoft Excel before being analysed using Jamovi (version 2.6). Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to summarise the demographic characteristics and emotional intelligence scores. Independent-samples *t*-tests were used to examine the differences in emotional intelligence between the two groups. Welch's one-way analysis of variance (ANOVA), followed by the Games–Howell post hoc test, was used to compare emotional intelligence across the three groups. Statistical significance was set at $P < 0.05$.

Results and Discussion

Demographic Profile of the Respondents

Table 2
Demographic Profile of the Respondents (N = 147)

Variable	Category	N	Percentage
Gender	Male	97	66.0
	Female	50	34.0
Age Group	Less than 20 years	28	19.0
	20–25 years	89	60.5
	26–30 years	30	20.4
Academic Level	Undergraduate	47	32.0
	Postgraduate	62	42.2
	Research Scholar	38	25.8
Academic Discipline	Arts & Social Sciences	84	57.1
	Science & Engineering	50	34.0
	Commerce & Management	13	8.8
Residential Background	Urban	59	40.1
	Rural	88	59.9
Accommodation Status	Hosteller	53	36.1
	Day Scholar	94	63.9

Table 2 presents the demographic characteristics of the respondents. Of the 147 participants, 66.0% were male and 34.0% were female. The majority (60.5%) belonged to the 20–25 years age group. Postgraduate students constituted the largest proportion of the sample (42.2%), followed by undergraduate students (32.0%) and research scholars (25.8%). More than half of the respondents (57.1%) were from Arts and Social Sciences, while 34.0% and 8.8% were from Science and Engineering and Commerce and Management, respectively. Most participants were from rural backgrounds (59.9%), and 63.9% were day scholars. Overall, the sample included students from different demographic and academic backgrounds.

Emotional Intelligence among Higher Education Students

Table 3
Descriptive Statistics of Emotional Intelligence Scores (N = 147)

Emotional Intelligence Dimension	Mean	SD	Minimum	Maximum	Interpretation
Self-Awareness	47.5	6.33	30	60	High
Self-Regulation	47.3	6.11	31	60	High
Motivation	46.3	6.94	28	60	High
Social Awareness	45.0	7.17	28	60	High
Social Skills	44.7	8.14	19	60	High
Overall Emotional Intelligence	231.0	29.2	171	289	High

Note: Interpretation is based on the criteria presented in Table 1.

Table 3 presents the descriptive statistics for overall emotional intelligence and its five dimensions. The respondents obtained a high overall emotional intelligence score ($M = 231.0$, $SD = 29.2$). Among the five dimensions, self-awareness recorded the highest mean score ($M = 47.5$, $SD = 6.33$), followed by self-regulation ($M = 47.3$, $SD = 6.11$), motivation ($M = 46.3$, $SD = 6.94$), social awareness ($M = 45.0$, $SD = 7.17$) and social skills ($M = 44.7$, $SD = 8.14$). All five dimensions were classified as high according to the interpretation criteria presented in Table 1.

The results indicate that the respondents reported high levels across all five dimensions of emotional intelligence. Self-awareness and self-regulation had the highest mean scores, whereas social skills had the lowest mean score. However, social skills also fell within the high category.

Differences in Emotional Intelligence by Gender

Table 4
Comparison of Emotional Intelligence Scores by Gender ($N = 147$)

Gender	n	Mean	SD	<i>T</i>	df	<i>p</i>
Male	97	229.0	29.1	-1.04	145	0.300
Female	50	234.0	29.4			

Note. *t* = independent-samples *t*-test statistic; *df* = degrees of freedom; $p < 0.05$ indicates statistical significance

Table 4 compares the emotional intelligence scores of male and female students. Female students obtained a slightly higher mean emotional intelligence score ($M = 234.0$, $SD = 29.4$) than male students ($M = 229.0$, $SD = 29.1$). However, the independent-samples *t*-test indicated that the observed difference was not statistically significant ($t(145) = -1.04$, $p = 0.300$). These findings indicate that emotional intelligence was comparable between male and female students in the present study. Accordingly, the null hypothesis (H_{01}) stating that

there is no significant difference in emotional intelligence between male and female higher education students was not rejected.

Although female students recorded a marginally higher mean score than male students, the difference was insufficient to indicate a meaningful variation in emotional intelligence. The findings suggest that emotional intelligence was comparable between male and female students within the study population.

Differences in Emotional Intelligence by Age Group

Table 5
Comparison of Emotional Intelligence Scores across Age Groups (N = 147)

Age Group	n	Mean	SD	Welch's F	df	P
Less than 20 years	28	230.0	30.7	3.20	2, 55.5	0.048
20–25 years	89	235.0	28.8			
26–30 years	30	220.0	27.1			

Table 5 presents the comparison of emotional intelligence scores across the three age groups. Students aged 20–25 years had the highest mean emotional intelligence score ($M = 235.0$, $SD = 28.8$), followed by those aged less than 20 years ($M = 230.0$, $SD = 30.7$) and those aged 26–30 years ($M = 220.0$, $SD = 27.1$). Welch's ANOVA revealed a statistically significant difference in emotional intelligence scores across the age groups, $F(2, 55.5) = 3.20$, $p = .048$. The Games–Howell post-hoc test indicated that students aged 20–25 years had significantly higher emotional intelligence scores than those aged 26–30 years (mean difference = 14.77, $p = .037$), whereas no significant differences were observed between the remaining age groups. Therefore, the null hypothesis (H_{02}) was rejected.

The results indicate that emotional intelligence scores differed significantly across the age groups, with a significant difference observed only between students aged 20–25 years and

26–30 years. Students aged 20–25 years had higher emotional intelligence scores than those aged 26–30 years, whereas no significant differences were found between the other age groups. These findings suggest that the observed variation was limited to the specific comparison between the 20–25-year and 26–30-year groups rather than reflecting a consistent age-related trend across all three groups.

Differences in Emotional Intelligence by Academic Level

Table 6

Comparison of Emotional Intelligence Scores across Academic Levels (N = 147)

Academic Level	<i>n</i>	Mean	SD	Welch's <i>F</i>	<i>Df</i>	<i>p</i>
Undergraduate	47	234.0	30.1	4.57	2, 87.9	0.013
Postgraduate	62	236.0	28.1			
Research Scholar	38	219.0	27.4			

Table 6 presents the comparison of emotional intelligence scores across academic levels. Postgraduate students had the highest mean emotional intelligence score ($M = 236.0$, $SD = 28.1$), followed by undergraduate students ($M = 234.0$, $SD = 30.1$), whereas research scholars had the lowest mean score ($M = 219.0$, $SD = 27.4$). Welch's ANOVA indicated a statistically significant difference in emotional intelligence scores across academic levels, $F(2, 87.9) = 4.57$, $p = .013$. Games–Howell post-hoc analysis showed that postgraduate students had significantly higher emotional intelligence scores than research scholars (mean difference = 16.60, $p = .013$). The differences between undergraduate and postgraduate students (mean difference = -2.13 , $p = .925$) and between undergraduate students and research scholars (mean difference = 14.50, $p = .059$) were not statistically significant. Therefore, the null hypothesis (H_{03}) was rejected.

The findings indicate a statistically significant difference in emotional intelligence scores across academic levels. However, the Games–Howell post-hoc analysis showed that this

difference was limited to the comparison between postgraduate students and research scholars. Although research scholars had a lower mean emotional intelligence score than undergraduate students, this difference did not reach statistical significance ($p = .059$). Thus, the findings do not indicate a consistent difference in emotional intelligence across all academic levels.

5.6 Differences in Emotional Intelligence by Academic Discipline

Table 7

Comparison of Emotional Intelligence Scores across Academic Disciplines (N = 147)

Academic Discipline	<i>n</i>	Mean	SD	Welch's <i>F</i>	df	<i>P</i>
Arts & Social Sciences	84	228.0	29.9	0.925	2, 33.8	0.406
Science & Engineering	50	235.0	28.4			
Commerce & Management	13	230.0	27.8			

Note: *n* = number of respondents; *SD* = standard deviation; *F* = Welch's ANOVA statistic; *df* = degrees of freedom; *p* = probability value; Statistical significance was determined at $p < 0.05$.

Table 7 presents the comparison of emotional intelligence scores across different academic disciplines. Students from Science and Engineering obtained the highest mean emotional intelligence score ($M = 235.0$, $SD = 28.4$), followed by those from Commerce and Management ($M = 230.0$, $SD = 27.8$) and Arts and Social Sciences ($M = 228.0$, $SD = 29.9$). However, Welch's ANOVA revealed no statistically significant difference in emotional

intelligence across the three academic disciplines (Welch's $F(2, 33.8) = 0.925, p = 0.406$). Therefore, the null hypothesis (H_{04}) was not rejected.

The findings suggest that emotional intelligence was comparable among students from different academic disciplines. Although slight variations in the mean scores were observed, these differences were not statistically significant. This indicates that academic discipline was not associated with differences in emotional intelligence within the study population.

5.7 Differences in Emotional Intelligence by Residential Background

Table 8

Comparison of Emotional Intelligence Scores by Residential Background (N = 147)

Residential Background	N	Mean	SD	t	Df	P
Urban	59	227.0	30.9	-1.38	145	0.170
Rural	88	233.0	27.9			

Note: n = number of respondents; SD = standard deviation; t = Student's t -test statistic; df = degrees of freedom; p = probability value. Statistical significance was determined at $p < 0.05$.

Table 8 compares the emotional intelligence scores of students from urban and rural backgrounds. Students from rural areas obtained a slightly higher mean emotional intelligence score ($M = 233.0, SD = 27.9$) than those from urban areas ($M = 227.0, SD = 30.9$). However, the independent-samples t -test indicated that the difference was not statistically significant ($t(145) = -1.38, p = 0.170$). Therefore, the null hypothesis (H_{05}) was not rejected.

The findings suggest that emotional intelligence was comparable between students from urban and rural backgrounds. Although rural students recorded a marginally higher mean score, the observed difference was not statistically significant. These results indicate that

residential background was not associated with differences in emotional intelligence within the study population.

5.8 Differences in Emotional Intelligence by Accommodation Status

Table 9

Comparison of Emotional Intelligence Scores by Accommodation Status (N = 147)

Accommodation Status	<i>n</i>	Mean	SD	<i>T</i>	<i>Df</i>	<i>P</i>
Hosteller	53	235.0	27.9	1.22	145	0.226
Day Scholar	94	228.0	29.8			

Note. *n* = number of respondents; SD = standard deviation; *t* = Student's *t*-test statistic; *df* = degrees of freedom; *p* = probability value. Statistical significance was determined at $p < 0.05$.

Table 9 compares the emotional intelligence scores of hostellers and day scholars. Hostellers obtained a slightly higher mean emotional intelligence score ($M = 235.0$, $SD = 27.9$) than day scholars ($M = 228.0$, $SD = 29.8$). However, the independent-samples *t*-test revealed that the observed difference was not statistically significant ($t(145) = 1.22$, $p = 0.226$). Therefore, the null hypothesis (H_{06}) was not rejected.

The findings indicate that emotional intelligence was comparable between hostellers and day scholars. Although hostellers recorded a marginally higher mean score, the difference was insufficient to indicate a statistically significant variation in emotional intelligence. These results suggest that accommodation status was not associated with emotional intelligence among the respondents.

Conclusion

This study assessed emotional intelligence among higher education students at the University of Lucknow and examined differences across selected demographic variables. The results showed a high level of overall emotional intelligence, with all five dimensions—self-

awareness, self-regulation, motivation, social awareness, and social skills—falling in the high category. Self-awareness had the highest mean score, while social skills had the lowest, although both remained in the high category.

Emotional intelligence differed significantly across age groups and academic levels, while no significant differences were found by gender, academic discipline, residential background, or accommodation status. This study provides evidence of emotional intelligence among higher education students in a multidisciplinary university setting in India. Future research could include students from multiple institutions and larger and more diverse samples to determine whether similar findings are observed across different higher education settings.

References

- Benjamin, L. S., Pasay An, E., Vijayalakshmi, K., Alqarni, A. S., Aseeri, A., Alsulami, A., Gonzales, F., Mostoles, R., Maestrado, R., Areola, B., Gonzales, A., & Shanmugam, S. R. (2024). Emotional intelligence and self-esteem among Saudi Arabian and Indian nursing students: Findings from two countries. *BMC Nursing*, 23(1), 349. <https://doi.org/10.1186/s12912-024-02022-8>
- Calle-Ramírez, X. M., Ronald M. Hernández, Olaya-Olaya, C., Tarrillo, S. J. S., Escobedo, F., & Saavedra-López, M. A. (2023). Emotional Intelligence in Times of Covid-19: A Comparative Study in Peruvian Universities. *Revista de Gestão Social e Ambiental*, 17(3), e03370. <https://doi.org/10.24857/rgsa.v17n3-008>
- Fernández-Martínez, E., Sutil-Rodríguez, E., & Liébana-Presa, C. (2023). Internet Addiction and Emotional Intelligence in university nursing students: A cross-sectional study. *Heliyon*, 9(9), e19482. <https://doi.org/10.1016/j.heliyon.2023.e19482>
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- Goleman, D. (1998). *Working with emotional intelligence*. Bantam Books.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–31). Basic Books.
- Moreira-Choez, J. S., Lamus De Rodríguez, T. M., Espinoza-Solís, E. J., & Castro-Castillo,

- G. J. (2024). Comparative Analysis of Psychological Well-Being and Emotional Education in Graduate Students. *F1000Research*, 12, 1403. <https://doi.org/10.12688/f1000research.141849.2>
- Navarro, N., Illesca, M., Rojo, R., González, L., Gittermann, R., Garrido, R., & Rascón, C. (2022). Inteligencia emocional y perfil sociodemográfico en estudiantes de primer año de una facultad de Medicina. *Revista Médica de Chile*, 150(1), 54–61. <https://doi.org/10.4067/S0034-98872022000100054>
- Revelle, W. (2023). *psych: Procedures for Psychological, Psychometric, and Personality Research*. [R package]. Retrieved from <https://cran.r-project.org/package=psych>.
- R Core Team (2024). *R: A Language and environment for statistical computing*. (Version 4.4) [Computer software]. Retrieved from <https://cran.r-project.org>. (R packages retrieved from CRAN snapshot 2024-08-07).
- Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211. <https://doi.org/10.2190/DUGG-P24E-52WK-6CDG>
- Santos, E., Ferreira, M., Ribeiro, C., Cardoso, A. P., Cunha, M., & Campos, S. (2023). Inteligência emocional em estudantes do ensino superior. *Millenium - Journal of Education, Technologies*, e29759 Páginas. <https://doi.org/10.29352/MILL0213E.29759>
- Sathya, A., & Velmurugan, V. P. (2022). A Study on Influence of Personal Profile Variables on Emotional Intelligence Of arts and Science College Students. *International Journal of Professional Business Review*, 7(2), e0435. <https://doi.org/10.26668/businessreview/2022.v7i2.435>
- Shahin, M. A. (2020). Emotional intelligence and perceived stress among students in Saudi health colleges: A cross-sectional correlational study. *Journal of Taibah University Medical Sciences*, 15(6), 463–470. <https://doi.org/10.1016/j.jtumed.2020.09.001>
- Singh, S. (2004). *Development of emotional intelligence scale*. National Psychological Corporation.
- Suberviola, I. (2026). An emotional competences in higher education: An multidimensional study on gender, academic discipline and educational stage. *European Journal of Psychology of Education*, 41(1), 3. <https://doi.org/10.1007/s10212-025-01054-1>
- The jamovi project (2024). *jamovi*. (Version 2.6) [Computer Software]. Retrieved from <https://www.jamovi.org>.
-



Vallejos Valdivia, C. D. (2022). Levels of emotional intelligence in psychology students at a Peruvian public university. *Revista de La Facultad de Medicina Humana*, 22(3), 556–563. <https://doi.org/10.25176/RFMH.v22i3.5015>