

# Emotional Intelligence Among B.Sc. Nursing Students In Selected Nursing Colleges Of Surat City

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## Abstract

### Background:

Emotional intelligence (EI) — the capacity to recognize, understand and manage one's own and others' emotions — is important for nursing students' personal development and professional functioning.

### Objectives:

To assess the level of emotional intelligence among B.Sc. Nursing students in selected nursing colleges of Surat city and to determine the association between EI and selected demographic variables.

### Methodology:

A quantitative research approach with a descriptive research design was employed to assess the variables under study. The research was conducted among 3rd-year B.Sc. Nursing students in selected nursing colleges of Surat, namely Government College of Nursing, T & T.V. Institute of Nursing, and Kiran College of Nursing. The target population consisted of students enrolled in these institutions. A total of 60 samples were selected using a non-probability purposive sampling technique after obtaining informed consent. Data were collected in the natural classroom setting using structured tools, and both descriptive and inferential statistics were applied for analysis.

### Results:

Most students (75.0%) had high emotional intelligence, 20.0% had average levels, and 5.0% had low levels. Significant associations were observed between EI and age ( $p = 0.0056$ ), gender ( $p = 0.0187$ ), type of family ( $p = 0.0396$ ), and family income ( $p = 0.0493$ ). No significant association was found with religion, parents' education and area of residence.

**Conclusions:** The majority of nursing students showed high emotional intelligence. Age, gender, family type and family income were significantly associated with EI. Incorporating EI development in nursing curricula and student-support programs may further enhance students' emotional competencies and future professional performance.

**Keywords:** Emotional intelligence, B.Sc. Nursing students.

## Introduction

Emotional intelligence (EI) — the ability to perceive, understand, regulate, and use one's own and others' emotions adaptively — has gained increased importance in nursing education and practice. Nurses with higher emotional intelligence are better equipped to manage stress, communicate empathetically, foster teamwork, and provide higher-quality patient care. These skills are especially crucial for nursing students,

who must develop not only technical competencies but also emotional and interpersonal skills as they transition from academic training to clinical environments (Dou et al., 2022; Shubayr & Dailah, 2025).

Several recent studies have found positive associations between emotional intelligence and clinical competence among nursing students. Dou et al. (2022) reported that EI significantly predicts both academic ability and clinical practice effectiveness in nursing students. Similarly, Alharbi et al. (2025) in a study of 181 nursing students found moderate levels of EI that correlated positively with clinical competence measures. These findings suggest that EI is not just a personality trait but a key factor tied to performance and readiness in clinical settings.

In addition to competence, EI is also associated with reduced stress, enhanced self-efficacy, and better coping strategies among nursing students. Shubayr & Dailah (2025) found that higher EI was positively associated with self-efficacy and negatively correlated with perceived stress in students engaged in clinical practice. Training programmes aimed at improving EI have also shown positive effects; for instance, Pareek (2023) developed an EI training programme that significantly improved soft skills among nursing students.

Despite these findings globally, there is relatively limited research in India—especially in Gujarat—regarding the level of emotional intelligence among nursing students and how demographic variables might influence EI. Understanding these associations locally is important for educators to design tailored interventions that bolster EI and, by extension, support academic success, clinical competence, and job satisfaction.

Given this background, the present study aims to assess the level of emotional intelligence among B.Sc. Nursing students of selected nursing colleges in Surat city, and to examine the association of EI with selected demographic variables. “In this study, emotional intelligence refers to the total score obtained on the Emotional Intelligence Scale by Hyde, Pethe, and Dhar (2002).”

## **Methods**

### **Study design and setting**

A descriptive cross-sectional study was conducted among B.Sc. Nursing students of selected nursing colleges in Surat city.

### **Sample and sampling technique**

A total of 60 B.Sc. Nursing students participated in the study (N = 60). The participants were selected from the available cohort of third-year students enrolled in the selected nursing colleges of Surat city—Government College of Nursing, T & T.V. Institute of Nursing, and Kiran College of Nursing.

A non-probability purposive sampling technique was employed to select the participants based on their availability and willingness to participate during the data collection period. Inclusion criteria consisted of students currently enrolled in the third year of the B.Sc. Nursing program who provided informed consent. Students who were absent during data collection or declined participation were excluded from the study.

### **Data collection instrument**

Data were collected using a structured proforma that comprised two parts:

**Part I:** Demographic Data Sheet — This section included items on demographic variables such as age, gender, religion, type of family, parents’ education, family monthly income, and area of residence.

**Part II: Emotional Intelligence Assessment Tool** — Emotional intelligence was assessed using a standardized Emotional Intelligence Scale developed by Dr. Hyde, Pethe, and Dhar (2002). The tool consists of 34 items measured on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The scale covers ten dimensions of emotional intelligence, including self-awareness, empathy, self-motivation, emotional stability, managing relations, integrity, self-development, value orientation, commitment, and altruistic behavior.

The total possible score ranges from 34 to 170, with higher scores indicating higher levels of emotional intelligence. The tool has demonstrated good internal consistency, with a Cronbach's alpha reliability coefficient of 0.88, and has been widely used in Indian studies among student populations.

Permission to use the tool was obtained from the author, and confidentiality of responses was maintained throughout the data collection process.

### **Procedure**

After obtaining institutional permission and informed consent from participants, the questionnaires were administered in a classroom setting. Adequate privacy and confidentiality were ensured.

### **Ethical considerations**

Ethical clearance for the study was obtained from the Institutional Ethics Committee of Government College of Nursing, Surat. Written informed consent was obtained from each participant prior to data collection. Confidentiality and anonymity of the participants were strictly maintained throughout the study.

### **Data analysis**

“Data were entered and analyzed using IBM SPSS Statistics version 25.0. Descriptive statistics such as frequencies and percentages were used to describe sample characteristics and EI levels. Inferential statistics (Chi-square test) were used to assess the association between EI and selected demographic variables. A p-value of <0.05 was considered statistically significant.”

## **RESULT**

**Table 1. Frequency and percentage distribution of demographic characteristics (N = 60)**

| <b>Variable</b>     | <b>Category</b> | <b>Frequency (n)</b> | <b>Percentage (%)</b> |
|---------------------|-----------------|----------------------|-----------------------|
| Age (years)         | 18–20           | 15                   | 25.0                  |
|                     | 20–22           | 44                   | 73.3                  |
|                     | 22–24           | 1                    | 1.7                   |
|                     | >24             | 0                    | 0.0                   |
| Gender              | Male            | 17                   | 28.3                  |
|                     | Female          | 43                   | 71.7                  |
| Religion            | Hindu           | 52                   | 86.7                  |
|                     | Muslim          | 7                    | 11.7                  |
|                     | Christian       | 1                    | 1.6                   |
|                     |                 |                      |                       |
| Type of family      | Nuclear         | 46                   | 76.7                  |
|                     | Joint           | 14                   | 23.3                  |
| Education of father | Uneducated      | 22                   | 36.7                  |
|                     | 8th pass        | 20                   | 33.3                  |
|                     | 10th pass       | 14                   | 23.3                  |
|                     | 12th pass       | 3                    | 5.0                   |
|                     | Graduate        | 1                    | 1.7                   |

|                          |               |    |      |
|--------------------------|---------------|----|------|
| Education of mother      | Uneducated    | 24 | 40.0 |
|                          | 8th pass      | 18 | 30.0 |
|                          | 10th pass     | 14 | 23.3 |
|                          | 12th pass     | 4  | 6.7  |
|                          | Graduate      | 0  | 0.0  |
| Family income (Rs/month) | <15,000       | 14 | 23.3 |
|                          | 15,001–30,000 | 21 | 35.0 |
|                          | 30,001–45,000 | 17 | 28.3 |
|                          | >45,000       | 8  | 13.3 |
| Area of residence        | Urban         | 37 | 61.7 |
|                          | Rural         | 23 | 38.3 |

### Demographic Characteristics

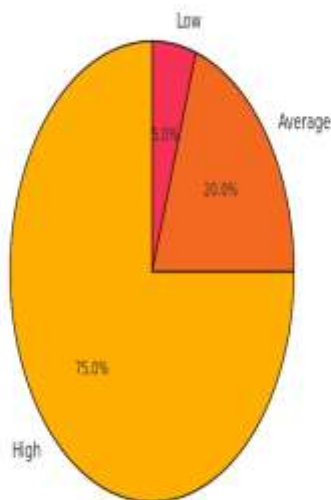
Of the 60 participants, the majority (73.3%) were aged 20–22 years, and 71.7% were female. Most students were Hindu (86.7%) and from nuclear families (76.7%). Regarding parents' education, 36.7% of fathers and 40% of mothers were uneducated. Family income ranged mostly between Rs. 15,001–30,000 (35%). Urban students comprised 61.7% of the sample.

**Table 2.** Distribution of Emotional Intelligence levels (N = 60)

| Level of EI | Frequency (n) | Percentage (%) |
|-------------|---------------|----------------|
| High        | 45            | 75.0           |
| Average     | 12            | 20.0           |
| Low         | 3             | 5.0            |

The majority (75%) of B.Sc. Nursing students scored in the high EI category, 20% were average and 5% low.

Distribution of Emotional Intelligence Levels among B.Sc. Nursing Students (N=60)



Distribution of Emotional Intelligence Levels (N=60)

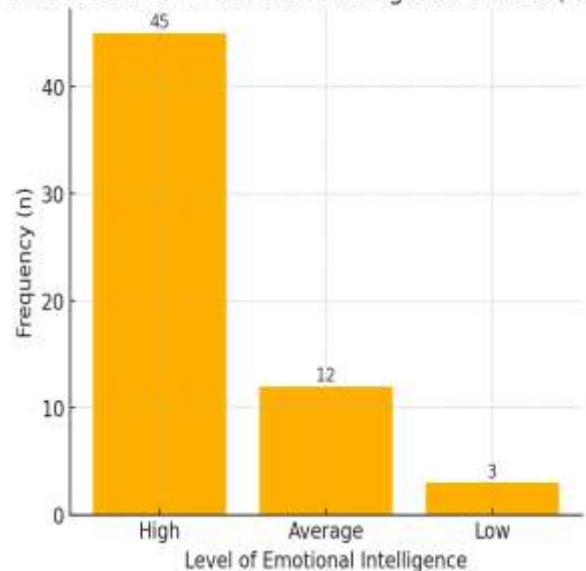


Figure:1 Distribution of emotional intelligence

showing the percentage distribution of High, Average, and Low EI.

Figure:2 Distribution of emotional intelligence showing the frequency (n) distribution for each EI category.

**Table 3.** Association (Chi-square) between EI level and selected demographic variables

| Demographic variable | Df | $\chi^2$ | p-value | Inference       |
|----------------------|----|----------|---------|-----------------|
| Age                  | 4  | 14.593   | 0.0056  | Significant     |
| Gender               | 2  | 8.650    | 0.0187  | Significant     |
| Religion             | 4  | 8.759    | 0.0674  | Not significant |
| Type of family       | 2  | 6.459    | 0.0396  | Significant     |
| Father's education   | 8  | 10.846   | 0.2105  | Not significant |
| Mother's education   | 6  | 3.795    | 0.8751  | Not significant |
| Family income        | 6  | 17.051   | 0.0493  | Significant     |
| Area of residence    | 2  | 0.095    | 0.9536  | Not significant |

Emotional intelligence was significantly associated with age, gender, type of family and family income ( $p < 0.05$ ). No statistically significant association was observed with religion, parents' education and area of residence.

#### Association between EI and Demographic Variables

Significant associations were found between EI and age ( $p = 0.0056$ ), gender ( $p = 0.0187$ ), type of family ( $p = 0.0396$ ), and family income ( $p = 0.0493$ ). No significant associations were found with religion, parents' education and area of residence.

#### Discussion

The present study assessed the level of emotional intelligence (EI) among B.Sc. Nursing students in selected colleges of Surat city and explored its association with demographic variables. The findings revealed that three-fourths (75%) of students demonstrated high EI, while 20% had average EI and only 5% reported low EI. Statistically significant associations were observed between EI and age, gender, family type, and family income, whereas religion, parental education, and area of residence showed no significant relationship.

The predominance of high EI among the participants is encouraging, as EI is widely recognized as a key determinant of academic achievement, clinical competence, and effective interpersonal communication.

Similar findings have been reported internationally, with Dou et al. (2022) demonstrating that EI positively predicts clinical abilities among nursing interns in China, and Alharbi et al. (2025) reporting a positive correlation between EI and clinical competence among Saudi nursing students. Indian studies have also highlighted comparable trends, though with varied prevalence. For instance, a study conducted at JIPMER, Puducherry, reported that 62.8% of nursing students had average EI and 37.2% had high EI, with none in the low category, suggesting differences in distribution across institutional settings. Another study from Bagalkot region similarly emphasized variability in EI levels and recommended structured interventions for its enhancement.

The association between EI and age in this study may reflect greater emotional maturity and exposure to clinical practice as students progress through their training. These findings are consistent with prior literature suggesting that emotional regulation and empathy improve with increasing age and experience. Gender differences were also noted, with female students exhibiting higher EI than males. This finding resonates with both international and Indian evidence indicating that women tend to display greater emotional awareness and empathy, likely due to sociocultural expectations and gender-specific communication patterns. The association between family type and EI suggests that students from nuclear families may benefit from opportunities for independent decision-making and self-expression, thereby strengthening emotional competencies. Similarly, higher family income was associated with higher EI, which may be explained by reduced psychosocial stressors and more supportive environments. Shubayr and Dailah (2025) also reported that supportive environments enhance self-efficacy and reduce stress, positively influencing EI.

In contrast, no significant associations were observed between EI and religion, parental education, or area of residence. This aligns with the JIPMER study, which also reported no significant relationship between EI and sociodemographic variables. These findings suggest that individual experiences, coping mechanisms, and institutional support may play a more substantial role in shaping EI than demographic factors alone. Importantly, Pareek (2023) highlighted that EI can be improved through structured educational interventions, indicating that curricular strategies may be more effective than demographic predictors in enhancing emotional competencies. Supporting this, an Indian study reported a significant positive correlation between EI and academic performance among final-year B.Sc. Nursing students, while Kumar et al. found similar results, emphasizing that EI is both a personal attribute and a skill that can be nurtured through training.

Overall, the results underscore the importance of integrating EI development into nursing education. Periodic assessment of EI, incorporation of structured training modules, and provision of psychosocial support for students from lower socioeconomic backgrounds may further strengthen emotional competencies and professional preparedness. While the study provides valuable insights, it is limited by its sample size and focus on selected colleges within one city, which may affect generalizability. Future research with larger, multi-centric samples and interventional designs is recommended to further explore predictors of EI and to evaluate the effectiveness of EI-focused educational strategies in nursing education.

## **Conclusion**

The study concludes that most B.Sc. Nursing students in Surat exhibit high levels of emotional intelligence. Age, gender, family type, and family income were significantly associated with EI. The findings suggest that integrating EI training and support programs into nursing curricula can further enhance students' emotional and professional competencies.

## **Recommendations**

1. Integrate EI development modules (communication skills, stress management, reflective practice) in nursing curricula.
2. Conduct longitudinal and multi-institutional studies to explore EI growth over time.

3. Implement student counseling and mentorship programs to support students from disadvantaged backgrounds.
4. Encourage EI-focused workshops and simulation training to prepare students for emotionally demanding clinical roles.

### Limitations of the Study

1. **Sample size and setting:** The study was conducted among 60 nursing students from three colleges in Surat city, which may limit the generalizability of findings to other regions or larger populations.
2. **Cross-sectional design:** Since data were collected at a single point in time, causal relationships between emotional intelligence and demographic variables could not be established.
3. **Self-reported responses:** Emotional intelligence was assessed through a self-report tool, which may be subject to social desirability bias or inaccurate reporting.
4. **Limited variables:** The study explored associations with selected demographic factors only. Other influential variables such as personality traits, coping mechanisms, or academic stress were not examined.
5. **No interventional component:** While the study identified levels and associations of EI, it did not assess the impact of any structured training or intervention to enhance EI.

### Acknowledgements

The author thanks the participating students and the faculty of the selected nursing colleges in Surat for their cooperation.

### Conflict of Interest

The author declares no conflict of interest.

### Funding

No external funding was received for this study.

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