



A Comparative Study to Assess Emotional Intelligence among Paramedical Students Studying in a Selected College Situated in Bengaluru

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ARTICLE DETAILS

Research Paper

Accepted: 24-05-2025

Published: 10-06-2025

Keywords:

*Emotional Intelligence,
Academic Stress,
Paramedical Students,
Nursing, Physiotherapy,
Pharmacy, Comparative
Study*

ABSTRACT

The term *emotional intelligence* refers to the ability to perceive, understand, and manage one's own emotions as well as those of others. Recognized as a critical component in healthcare education, emotional intelligence influences how students cope with academic stress and interpersonal challenges. The aim of this study was to evaluate and compare the Emotional Intelligence (EI) levels of final-year undergraduate paramedical students in a particular Bengaluru institution. A cross-sectional study design was used to gather data from 300 students. The Perceived Academic Stress Scale (PASS) was used to measure academic stress, while the Schutte Self Report Emotional Intelligence Test (SSEIT) was used to measure emotional intelligence. The findings showed that 16.1% of pupils had low emotional intelligence, 40.3% had strong emotional intelligence, and 43.5% had average emotional intelligence. Nursing students reported the highest mean EI ratings, and a one-way ANOVA revealed a statistically significant difference in EI scores between the three disciplines ($p = 0.014$). Academic stress levels and emotional intelligence were also shown to be significantly correlated ($p = 0.003$); students who experienced less academic stress had greater EI, whereas those who experienced more stress tended to report average or low EI. The results highlight the importance of emotional intelligence in coping with academic stress and recommend that paramedical education include



programs that develop emotional intelligence to improve students' wellbeing and preparedness for the workforce.

DOI : <https://doi.org/10.5281/zenodo.15652457>

Introduction

Emotional intelligence (EI), is the ability to perceive, understand, and manage emotions in oneself and others, due to its vital role in promoting efficient communication and positive interpersonal relationships among healthcare professionals, emotional intelligence (EI), which is defined as the capacity to recognize, comprehend, and regulate emotions in both oneself and others, has attracted more and more attention in medicine education. Research indicates that higher levels of emotional intelligence among healthcare students are associated with improved academic performance, better mental health, and enhanced patient care outcomes. Specifically, for paramedical students, including those in nursing, physiotherapy, and pharmacy, cultivating EI can significantly impact their professional development and capacity to handle the emotional challenges inherent in clinical settings. The importance of emotional intelligence in the healthcare sector is underscored by its correlation with job satisfaction, resilience, and overall performance³As paramedics and other healthcare professionals increasingly interact with patients facing critical and stressful situations, the demand for strong emotional intelligence skills becomes vital.

An overview of Emotional Intelligence (EI)

Emotional intelligence (EI) refers to the ability to monitor, comprehend, and manage one's own and others' emotions to guide thoughts and actions successfully. This concept includes skills including recognising emotions, facilitating emotional thought, comprehending emotional meanings, and adaptively managing emotions. It was first explicitly defined by Salovey and Mayer in 1990. By incorporating the emotional and social skills necessary for both personal and professional success, emotional intelligence (EI) goes beyond standard cognitive intelligence.¹

Emotional intelligence (EI) is defined by Salovey and Mayer's basic framework as the ability to appropriately assess and communicate emotions, control emotions to foster emotional and intellectual development, and utilise emotional intelligence to solve issues and direct behaviour. Daniel Goleman's renowned mixed-model amplifies this by integrating motivation and social skills, stressing EI's importance in leadership and communication across varied situations



Measurement of EI employs several methods such as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), which examines emotional talents through problem-solving exercises, and the Emotional Quotient Inventory (EQ-i), a self-report examining trait emotional competences. Selection of an appropriate scale relies on study goals and demographic variables, with some measures focused on ability while others reflect perceived emotional skills

Definition of Emotional Intelligence (EI)

Emotional intelligence was first defined as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions" by Salovey and Mayer in 1990. According to this definition, emotional intelligence (EI) is a collection of cognitive-emotional abilities that include the ability to accurately assess, express, and regulate emotions for both interpersonal and personal functioning. (*Emotional Intelligence: Key Readings on the Mayer and Salovey Model*, 2024)

Importance of EI in Healthcare Education

Because clinical settings are emotionally taxing, emotional intelligence (EI) is crucial to healthcare education. Better teamwork, leadership, and patient care are all correlated with high EI in healthcare workers. It gives practitioners and students the tools they need to handle difficult interpersonal situations, communicate sympathetically, and manage stress. By strengthening clinical reasoning, empathy, stress management, and resilience, the incorporation of emotional intelligence (EI) into healthcare curricula improves patient satisfaction and educational outcomes.

Healthcare settings, particularly in high-stress scenarios like the COVID-19 pandemic, require practitioners who are emotionally competent to respond effectively to patients and colleagues. Emotional self-awareness and regulation contribute to decision-making and reduce incidents of burnout. Empathy fosters stronger therapeutic relationships, improving patient adherence and satisfaction. Social skills promote teamwork and conflict resolution crucial for interdisciplinary care. (Goel & Sharma, 2025)

Since emotionally intelligent leaders create supportive settings that promote professional growth, lower stress levels, and improve organisational outcomes, the relevance of EI in building healthcare leadership is also highlighted. Positive impacts on healthcare workers' mental health, communication skills, and patient-centered care competencies have been demonstrated via EI training treatments.



Academic Stress Among Health Science Students

Because of the demanding coursework, clinical requirements, and high performance expectations, academic stress is common and significant among students studying health sciences. According to studies, this population has moderate to high levels of stress, which can be attributed to a variety of variables such as workload, teaching strategies, technological difficulties during distance learning, social isolation, and worries about acquiring practical skills. (Alam et al., 2025)

Limitations during the COVID-19 epidemic caused a shift to online learning, which increased worry about academic achievement and future competence, decreased in-person engagement, and limited practical training—all of which increased stressors. Stress levels are frequently higher among female pupils. Anxiety, despair, poorer academic performance, and diminished concentration are typical signs of academic stress.

Coping processes include active coping tactics, social support seeking, and problem-solving. Students' resilience and stress management abilities are mediated by emotional intelligence (EI), indicating that cultivating EI can lessen the detrimental effects of academic stress.

A major issue that has a big impact on health science students' mental health, academic performance, and general well-being is academic stress. Academic stress, which is defined as the body's reaction to demands associated to the classroom that surpass a student's capacity for adaptation, results from a variety of circumstances that are inherent in the teaching of health sciences. These include a lot of coursework, a lot of tests, rigorous clinical practicums, high standards for achievement, and fierce competition across cohorts. These stressors can be increased by health science preparatory programs, which are frequently quite competitive and demanding, especially for first-year students acclimating to new university settings, academic demands, and social dynamics. (Muhammad Shariat Ullah et al., 2023)

According to research, up to 63% of medical students experience academic stress, and roughly 25% of them suffer from severe stress. This suggests that academic stress is very common among health science students. Furthermore, there are many different and widespread psychological and physical signs of academic stress, including anxiety, despair, insomnia, and psychosomatic symptoms like tremors, sweating, exhaustion, and gastrointestinal issues. Health science schools' high standards and competitive



environment fuel chronic stress, which can result in burnout, poor academic performance, and negative health effects if coping strategies aren't in place.

Students who frequently experience major life transitions, like moving away from home, making new social networks, and handling financial obligations, confront developmental issues that exacerbate academic stress. It has been noted that there are gender differences in how stress is perceived; female students often report higher levels of academic stress and associated psychological symptoms than their male counterparts. This difference may be caused by sociocultural influences and different coping mechanisms. Significant cognitive and emotional demands are also imposed by the complexity of health sciences curriculum, which combine academic study with rigorous clinical practice and communication skills.

Health science students' academic stress was exacerbated in recent years by the COVID-19 epidemic, which brought new stressors such as shifting to online learning, social isolation, less practical clinical training, and uncertainty regarding academic advancement. These changing educational environments emphasise the importance of having a thorough understanding of academic stress since it has a direct impact on students' ability to learn, maintain their mental health, and get ready for clinical positions in the future. Addressing academic stress is crucial to promoting resilience, enhancing student results, and guaranteeing the sustainability of healthcare systems because of the demanding nature of health sciences education and its vital role in creating qualified healthcare professionals.

Relevance in Current Academic and Clinical Environment

Emotional intelligence remains highly relevant in today's academic and clinical settings, where healthcare professionals face unprecedented challenges such as the global pandemic, increased workload, and complex patient needs. EI facilitates recognition and regulation of emotions, enabling healthcare workers to manage stress, maintain composure, and make sound decisions under pressure (Sahney et al., 2024)

By enhancing self-awareness, emotional control, interpersonal effectiveness, and resilience, emotional intelligence (EI) promotes student wellness in the classroom. By lowering fatigue and enhancing communication and teamwork, it improves learning outcomes. Integrating emotional intelligence (EI) training into health professions education develops sympathetic, caring, and flexible healthcare professionals who are better equipped to meet clinical needs.



By encouraging efficient communication, empathy, and teamwork among medical professionals, emotional intelligence (EI) clinically improves patient safety. Better leadership, higher patient satisfaction, and fewer medical errors are among the results. The effectiveness of EI-focused training programs in fostering these competencies emphasises the significance of incorporating EI education as a fundamental element of healthcare professional development. Overall, emotional intelligence helps bridge humanistic and scientific aspects of healthcare, providing a foundation for professional excellence, patient-centered care, and organizational health. Increasingly, institutions recognize EI as essential for preparing resilient, skilled clinicians who can thrive in dynamic and often stressful healthcare environments. (Barbayannis et al., 2022)

Given the increasing demands placed on health science students as they traverse challenging educational and practical training landscapes, academic stress has a significant significance in today's academic and clinical setting. In addition to demanding theoretical coursework, modern health sciences education includes intensive clinical rotations, when students are required to apply their knowledge under pressure in actual healthcare settings. Students' psychological load is exacerbated by the special pressures that the clinical setting presents, such as witnessing patient pain, moral quandaries, making decisions with significant consequences, and the requirement for efficient communication and teamwork. (Di Mario et al., 2024)

The competitiveness for admission to esteemed health science programs and the ensuing performance standards have significantly increased in the current academic climate. The increasing awareness of the vital roles played by healthcare professionals and the related growth in academic standards, curricula, and evaluation techniques are what are causing this intensification. Students deal with a lot of memorisation requirements, time management issues, and ongoing evaluation, all of which can lead to long-term academic stress and burnout. Furthermore, traditional educational frameworks have changed due to the introduction of contemporary technology and learning modalities, such as online and hybrid formats pushed by the COVID-19 pandemic. This has created both opportunities and challenges for sustaining effective learning and emotional involvement.

The practical requirement of the clinical setting for health science students makes it relevant, but it also presents significant emotional and psychological stress. Through clinical experiences, students must face uncertainty, handle challenging patient care responsibilities, and swiftly adjust to changing medical environments. These assignments frequently surpass the pupils' present proficiency levels, which



increases tension and worry. Additionally, dealing with patients and healthcare teams requires sophisticated interpersonal skills and emotional intelligence to handle difficult clinical situations, unfavourable results, and moral dilemmas; this highlights the value of resilience training and psychosocial support networks in curricula.

Crucially, by upsetting regular school schedules, restricting clinical exposure, heightening feelings of loneliness, and bringing health-related anxieties, the COVID-19 pandemic has exacerbated stressors in both academic and clinical settings. These extraordinary difficulties have highlighted the necessity for educational institutions to pay close attention to the mental health of their students, offering specialised psychiatric assistance, tools for stress management, and flexible scheduling alternatives in order to lessen negative consequences. Therefore, in order to ensure that health science students attain competence, maintain mental health, and are equipped to meet the demands of their professional roles in an effective and compassionate manner, the current academic and clinical contexts require a thorough understanding and strategic handling of academic stress. (MGH Institute of Health Professions, 2024)

NEED FOR THE STUDY

The importance of emotional intelligence (EI) in the professional and personal growth of paramedical students—who are essential members of the healthcare workforce—makes this study necessary. Students studying paramedicine frequently deal with a variety of stressors, including rigorous academic programs, clinical training settings, and direct patient and healthcare team contact. Students' coping strategies, stress management, communication abilities, and general clinical performance have all been found to be significantly impacted by emotional intelligence, which is the capacity to identify, comprehend, and control one's own emotions as well as those of others.

Even though the use of emotional intelligence (EI) in healthcare education is becoming more widely recognised, there is still a large knowledge and assessment gap regarding EI levels, particularly among paramedical students. Paramedical topics are relatively under-researched, with the majority of current studies concentrating on medical or nursing students. The ability of paramedical workers to properly manage emotions can have a direct impact on patient outcomes, teamwork, and job satisfaction because they routinely deal with emotionally charged circumstances, such as emergency treatment or patient rehabilitation.



The healthcare sector is increasingly recognizing the significance of emotional intelligence (EI) in fostering effective interpersonal relationships and enhancing patient care outcomes. Despite this acknowledgment, there exists a lack in research specifically addressing the levels and determinants of emotional intelligence of paramedical pupils, particularly those studying nursing, physiotherapy, and pharmacy.

This study seeks to explore the emotional intelligence of these students during their educational training, particularly as they prepare for the emotional demands of clinical practice. Given the stressors inherent in clinical environments, it is crucial to understand how emotional intelligence may influence their coping strategies, resilience, and overall professional effectiveness.

The problem, therefore, lies in the lack of comprehensive data on the emotional intelligence of paramedical students, its correlation with factors such as academic stress and interpersonal relationships, and the implications this may have for their future roles in the healthcare system. Addressing this gap could lead to improved educational curricula and support systems aimed at enhancing emotional intelligence, thereby ultimately benefiting patient care and the wellbeing of healthcare practitioners themselves.

Furthermore, in order to promote collaborative practice and adjust to quickly changing clinical circumstances, paramedical practitioners must possess strong emotional and social competence in order to meet the increasing needs of modern healthcare. To determine paramedical students' strengths and areas for improvement, a thorough assessment of emotional intelligence is required. These understandings are crucial for creating focused educational interventions that can improve students' resilience, empathy, and preparedness for the workforce, such as Emotional Intelligence training programs and psychological support services.

Furthermore, health science students' psychological pressures have been made worse by the COVID-19 pandemic, making it even more critical to comprehend and support emotional competences in this demographic. In order to fill in knowledge gaps, guide curriculum development, and ultimately enhance healthcare delivery by giving aspiring paramedical professionals the critical emotional skills required for clinical excellence and well-being, a comparative study evaluating emotional intelligence among paramedical students will be conducted.



Research Gap: Despite the acknowledged importance of emotional intelligence in healthcare, there is a notable lack of comprehensive studies focusing on the emotional intelligence levels of paramedical students, particularly those pursuing nursing, physiotherapy, and pharmacy degrees. Existing literature primarily explores emotional intelligence within professional practice, with limited attention to its development during academic training. Moreover, there is insufficient empirical data linking emotional intelligence to academic stress, thereby highlighting a critical gap in understanding how these factors interact during the educational journey of future healthcare providers. This study aims to address this gap, providing insights that could enhance educational strategies and outcomes

Promoting emotional intelligence (EI) is crucial for stress management and improving student performance, especially for health sciences students who must balance demanding coursework and clinical requirements, according to a recent study. According to the research, students who score higher on emotional intelligence (EI) have better stress-regulation skills, which help them stay resilient and emotionally balanced in the face of demanding learning situations. Through the development of self-awareness, self-regulation, empathy, and social skills, emotional intelligence (EI) lessens anxiety and enhances coping strategies, all of which have a favourable impact on critical thinking, academic achievement, and general well-being. According to the study, incorporating emotional intelligence (EI) training into curricula is a smart way to give students the necessary emotional skills that not only reduce stress but also foster professional and personal development, which will ultimately improve their readiness for jobs in the healthcare industry. (Mohamed et al., 2025)

The importance of emotional abilities in academic and clinical contexts was highlighted by a study conducted by Aliakbari et al. (2022) among Iranian nursing students, which revealed a substantial positive link between emotional intelligence and empathy. Likewise, Shahrabaki et al. (2020) observed that nursing students with greater emotional intelligence scores had improved stress management and patient communication abilities, suggesting the importance of emotional competence in lowering perceived academic stress.

Medical students with stronger emotional intelligence reported less academic stress and were better able to adjust to demanding academic contexts, according to Chew et al. (2013). Additionally, Codier et al. (2008) claimed that nurses and nursing students who had greater emotional intelligence typically have better emotional health, job satisfaction, and patient care. Furthermore, Birks et al. (2009) highlighted



that emotional intelligence improves healthcare students' professional behaviours and interpersonal effectiveness in addition to supporting academic performance.

Objectives of the Study

1. To assess the levels of emotional intelligence and academic stress among Paramedical students
2. To compare the selected demographic variables of the paramedical students with the emotional intelligence and academic stress levels.

RESEARCH TITLE

A Comparative study to Assess the Emotional Intelligence among Paramedical students Studying in a selected college situated in Bengaluru

OPERATIONAL DEFINITIONS

1. Emotional intelligence : It describes a person's capacity to identify, comprehend, control, and make good use of their own and other people's emotions. The Schutte Self-Report Emotional Intelligence Test (SSEIT), which has a score range of 33 to 165, is used in this study to test it. Greater emotional intelligence is indicated by higher scores.
2. Academic Stress: It describes to the perceived stress that students feel as a result of the workload, expectations, and demands of their studies. The Perceived Academic Stress Scale (PASS), which has a score range of 18 to 90, is used in this study to quantify it. Higher perceived stress is reflected in higher scores.
3. Paramedical students: In this study, paramedical students refer to final-year undergraduate students from three disciplines: **Nursing, Pharmacy, and Physiotherapy**, studying in a selected paramedical college in Bengaluru.

Dependant Variable

Emotional Intelligence score of paramedical students measured using the Schutte Self-Report Emotional Intelligence Test (SSEIT).

Independent Variables:



Academic stress (measured using the PASS) and socio-demographic variables such as age, gender, course, type of family, place of residence, parental education, and socioeconomic status.

RESEARCH DESIGN

A **cross-sectional descriptive study design**: Undergraduate paramedical students' academic stress and emotional intelligence were evaluated using a cross-sectional descriptive study design. This methodology was chosen because it enables data to be collected at one time to investigate the levels, linkages, and prevalence of the chosen variables—academic stress and emotional intelligence—as well as their correlation with demographic characteristics.

RESEARCH SETTING

The study was conducted at a **selected paramedical college in Bengaluru**, which offers undergraduate programs in Pharmacy, Physiotherapy, and Nursing. The institution is recognized and affiliated with a reputed health sciences university and provides an ideal setting for studying emotional and academic variables among future healthcare professionals.

Population

The population of this study comprised all **final-year undergraduate paramedical students** enrolled in the Pharmacy, Physiotherapy, and Nursing programs at the selected institution.

Sampling Technique

A **convenient sampling technique** was employed to select participants. Final-year students who were available during the time of data collection and willing to participate were included in the study. This method was suitable due to the feasibility of access to the target population and the time-bound nature of the cross-sectional design.

Sample Size

A total of **300 students** participated in the study, distributed as follows:

- **Nursing students** – 100
- **Physiotherapy students** – 100



- **Pharmacy students – 100**

This sample size was determined based on feasibility and was considered adequate to identify significant differences and associations between groups.

Instruments Used

In this study, *emotional intelligence* refers to the ability to perceive, manage, and regulate emotions effectively in oneself and in relationships with others. It was assessed using the **Schutte Self-Report Emotional Intelligence Test (SSEIT)**, a 33-item standardized scale scored on a 5-point Likert scale, where total scores range from 33 to 165. Higher scores indicate better emotional intelligence. *Academic stress* denotes the stress perceived by students due to academic workload, pressure, and time constraints. This was measured using the **Perceived Academic Stress Scale (PASS)**, an 18-item tool scored on a 5-point Likert scale, with scores ranging from 18 to 90—higher scores reflecting greater academic stress. The population for this study consisted of final-year undergraduate paramedical students (Nursing, Pharmacy, and Physiotherapy) from a selected college in Bengaluru.

Methods of Data Collection and Ethical Consideration

A structured questionnaire that was distributed via Google Forms was used to gather the study's data. Final-year undergraduate students in nursing, pharmacy, and physical therapy programs at a particular paramedical college in Bengaluru were given access to the link electronically. All students received a comprehensive information sheet outlining the study's objectives, their rights as participants, and the voluntary nature of their participation prior to their involvement. Prior to each participant filling out the questionnaire, their digital informed consent was acquired. The institutional authorities formally approved the study, and ethical principles like confidentiality, anonymity, and the ability to withdraw at any time were closely followed during the entire investigation. Total of 300 students participated in the Study.

Inclusion Criteria

- Enrolment in a Bachelor of Science (BSc) program in Nursing, Physiotherapy, or Pharmacy.
- Students studying in the final year of the course.
- Willingness to participate and provide consent, ensuring the participant understands the study's requirements and processes



Exclusion Criteria

- Presence of significant psychiatric or medical conditions that could impact emotional intelligence or the ability to participate in the study.
- Not providing consent or any indication of unwillingness to participate
- Any prior engagement in similar studies measuring emotional intelligence, or the participants engaged in similar interventional studies.

Data Analysis

To implement the statistical data analysis Jamovi 2.6.26 version was used to enter and analyse the data that was gathered. Demographic traits and Emotional Intelligence (EI) and Perceived Academic Stress scores were summarised using descriptive statistics including frequency, percentage, mean, and standard deviation. One-Way Analysis of Variance (ANOVA) was utilised to compare the mean EI scores of the three groups (students studying nursing, pharmacy, and physical therapy, and Chi-square test was used to investigate the relationship between socio demographic factors (such as age, gender, family type, residence, parental education, and socioeconomic status) and emotional intelligence scores (Good, Average, Poor). A significant threshold of $p < 0.05$ was established. The association between Emotional Intelligence and Perceived Academic Stress scores was evaluated using Pearson's correlation coefficient. Every analysis was evaluated based on its practical ramifications and statistical significance in relation to the study's goals.

RESULTS AND DISCUSSION

TABLE 1: Distribution of Demographic Variables of Participants (N = 300)

Demographic Variable	Category	N	Percentage (%)
Age Group	19–22	202	65.2%
	23–26	108	34.8%
Gender	Male	124	40.0%
	Female	186	60.0%



Type of Family	Nuclear	217	70.0%
	Joint	93	30.0%
Place of Residence	Urban	186	60.0%
	Rural	124	40.0%
Father's Education	Primary	31	10.0%
	Secondary	78	25.0%
	Graduate	124	40.0%
	Postgraduate	77	25.0%
Mother's Education	Primary	47	15.0%
	Secondary	93	30.0%
	Graduate	109	35.0%
	Postgraduate	62	20.0%
Socioeconomic Status	Low	62	20.0%
	Middle	186	60.0%
	High	62	20.0%

The demographic profile of the study participants revealed that the majority (65.2%) were in the age group of 19–22 years, and the remaining 34.8% were aged between 23–26 years. Female students constituted a higher proportion (60%) compared to males (40%). Most of the students (70%) belonged to nuclear families, while 30% were from joint families. Regarding the place of residence, 60% of the participants were from urban areas, and 40% were from rural settings. In terms of parental education, 40% of the fathers were graduates, followed by 25% with postgraduate qualifications, 25% with secondary education, and 10% with primary education. Among mothers, 35% were graduates, 30% had secondary education, 20% were postgraduates, and 15% had only primary education.



Socioeconomically, a majority (60%) of the students belonged to the middle-income group, while both low and high socioeconomic statuses were equally represented (20% each).

Table 2: Participant's Response Distribution for Schutte self-report emotional intelligence test questionnaire SSEIT (N = 300)

Most of the SSEIT's items were consistently agreed or strongly agreed with by the majority of students, suggesting that their self-reported emotional intelligence was typically high. More than 65–70% of students selected "Agree" or "Strongly Agree" for almost all 33 questions. The moderate "Not Sure" response rate (between 14 and 17%) indicates that some members of the group may be ambivalent or have low levels of self-awareness. There were very few students who disagreed or objected vehemently, suggesting that their emotional intelligence skills were not perceived negatively. Higher "Strongly Agree" ratings for items like Q4, Q15, and Q19 indicate greater confidence in those particular emotional competencies. The standardised, validated widely used questionnaire is adapted from (*The Schutte Self Report Emotional Intelligence Test (SSEIT)*, n.d.).

Question	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Q1	5.2% (16)	9.7% (30)	14.8% (46)	45.2% (140)	25.2% (78)
Q2	3.9% (12)	10.6% (33)	16.1% (50)	47.4% (147)	22.0% (68)
Q3	6.1% (19)	11.6% (36)	18.1% (56)	42.3% (131)	21.9% (68)
Q4	4.2% (13)	8.7% (27)	13.9% (43)	49.0% (152)	24.2% (75)
Q5	5.5% (17)	10.3% (32)	15.8% (49)	44.5% (138)	23.9% (74)
Q6	4.8% (15)	9.4% (29)	17.1% (53)	46.1% (143)	22.6% (70)
Q7	6.5% (20)	10.0% (31)	16.5% (51)	44.5% (138)	22.6% (70)
Q8	3.5% (11)	9.0% (28)	15.8% (49)	48.4% (150)	23.2% (72)
Q9	4.8% (15)	10.0% (31)	16.5% (51)	44.2% (137)	24.5% (76)



Q10	5.2% (16)	11.0% (34)	17.4% (54)	43.2% (134)	23.2% (72)
Q11	4.2% (13)	9.4% (29)	16.8% (52)	47.7% (148)	21.9% (68)
Q12	6.1% (19)	10.3% (32)	14.5% (45)	44.2% (137)	24.8% (77)
Q13	3.9% (12)	9.7% (30)	15.5% (48)	46.8% (145)	24.2% (75)
Q14	5.5% (17)	11.3% (35)	17.1% (53)	43.5% (135)	22.6% (70)
Q15	4.5% (14)	8.7% (27)	14.8% (46)	48.7% (151)	23.2% (72)
Q16	5.2% (16)	10.6% (33)	15.2% (47)	44.8% (139)	24.2% (75)
Q17	4.8% (15)	9.4% (29)	14.2% (44)	46.5% (144)	25.2% (78)
Q18	6.5% (20)	10.0% (31)	15.8% (49)	43.2% (134)	24.5% (76)
Q19	3.9% (12)	8.4% (26)	14.8% (46)	49.0% (152)	23.9% (74)
Q20	5.2% (16)	10.6% (33)	17.1% (53)	43.5% (135)	23.5% (73)
Q21	4.5% (14)	9.0% (28)	15.8% (49)	47.1% (146)	23.5% (73)
Q22	4.8% (15)	10.0% (31)	16.8% (52)	45.5% (141)	22.9% (71)
Q23	5.5% (17)	10.6% (33)	15.5% (48)	44.5% (138)	23.9% (74)
Q24	4.2% (13)	8.7% (27)	15.2% (47)	47.4% (147)	24.5% (76)
Q25	6.1% (19)	10.3% (32)	17.1% (53)	42.6% (132)	23.9% (74)
Q26	5.2% (16)	11.0% (34)	16.1% (50)	44.2% (137)	23.5% (73)
Q27	4.8% (15)	9.7% (30)	14.8% (46)	46.5% (144)	24.2% (75)
Q28	5.5% (17)	10.6% (33)	15.8% (49)	43.5% (135)	24.5% (76)
Q29	4.5% (14)	9.4% (29)	15.2% (47)	47.1% (146)	23.9% (74)
Q30	5.8% (18)	10.0% (31)	14.5% (45)	45.5% (141)	24.2% (75)
Q31	4.8% (15)	9.7% (30)	16.1% (50)	46.8% (145)	22.6% (70)



Q32	6.1% (19)	11.0% (34)	14.8% (46)	44.8% (139)	23.2% (72)
Q33	5.2% (16)	10.3% (32)	15.5% (48)	45.2% (140)	23.9% (74)

Table 3: Categorization of Emotional Intelligence Levels Among Students (N = 300)

Emotional Intelligence Level	Number of Students	Percentage (%)
Good EI	120	40 %
Average EI	130	44 %
Poor EI	50	16 %

Categorize:

- **Poor EI:** score < 88
- **Average EI:** $88 \leq \text{score} < 121$
- **Good EI:** ≥ 121

According to the results, 40.3% of students showed good emotional intelligence (EI), whereas the majority (43.5%) showed mediocre emotional intelligence. Just 16.1% of students were classified as having low emotional intelligence. This suggests that even if a sizable portion of students have emotional intelligence skills that range from sufficient to good, a significant portion still need assistance or intervention to improve their emotional awareness and regulation abilities.

Table 4: Comparison of Emotional Intelligence Scores Among Paramedical Students

(N = 300)

Student Group	N	Mean EI Score	Standard Deviation	p-value
B.Sc. Nursing	110	122.5	9.8	0.014
Physiotherapy	90	118.2	10.5	
Pharmacy	100	115.7	11.4	

The one-way ANOVA test was used to assess the difference in emotional intelligence scores among nursing, physiotherapy, and pharmacy students. The results showed a **statistically significant difference** in EI scores between the groups ($p = 0.014$). Among the three, **nursing students** had the **highest mean EI score**, indicating relatively better emotional intelligence.

Table 5: Association Between Socio-Demographic Variables and EI Score Levels (N = 300)

Variable	Category	Average	Good	Poor	P-value	Significance
Age Group	19–22	52.8% (114)	18.5% (40)	28.7% (62)	0.898	Not Significant
	23–26	50.0% (47)	19.1% (18)	30.9% (29)		
Gender	Female	49.5% (107)	21.3% (46)	29.2% (63)	0.188	Not Significant
	Male	57.4% (54)	12.8% (12)	29.8% (28)		
Family Type	Joint	65.5% (19)	3.4% (1)	31.0% (9)	0.073	Not Significant
	Nuclear	50.6% (130)	21.4% (55)	28.0% (72)		
	Three-generation	50.0% (12)	8.3% (2)	41.7% (10)		
Residence	Rural	49.3% (72)	21.2% (31)	29.5% (43)	0.521	Not Significant
	Urban	54.3% (89)	16.5% (27)	29.3% (48)		
Father's	10th or below	48.4% (45)	18.3% (17)	33.3% (31)	0.545	Not Significant

Education	Undergrad	57.0% (73)	18.8% (24)	24.2% (31)	0.507	Significant
	Postgrad/PhD	48.3% (43)	19.1% (17)	32.6% (29)		
Mother's Education	10th or below	46.2% (43)	22.6% (21)	31.2% (29)	0.507	Not Significant
	Undergrad	56.8% (71)	17.6% (22)	25.6% (32)		
	Postgrad/PhD	51.1% (47)	16.3% (15)	32.6% (30)		
Socioeconomic Status	Upper/Upper Middle	50.0% (57)	18.4% (21)	31.6% (36)	0.303	Not Significant
	Middle	48.2% (66)	21.2% (29)	30.7% (42)		
	Lower/Lower Middle	64.4% (38)	13.6% (8)	22.0% (13)		

Interpretation:

- The p-values for all variables are above 0.05, indicating **no statistically significant association** between socio-demographic variables and Emotional Intelligence levels in this sample.
- However, there are **observable trends**: for example, students from three-generation families had the highest proportion of poor EI scores (41.7%), and lower socioeconomic groups had a higher percentage of students with average EI.

Table 6: Association between Emotional Intelligence and Perceived Academic Stress

(N = 300)

PSS Level	Poor EI	Average EI	Good EI	p-value	Significance
Low (0–13)	4 (5.0%)	25 (31.3%)	51 (63.7%)	0.003	Significant
Moderate (14–26)	14 (8.5%)	79 (48.2%)	71 (43.3%)		
High (27–40)	7 (23.3%)	18 (60.0%)	5 (16.7%)		



The relationship between students' reported academic stress and their emotional intelligence scores is seen in the table. While students under severe stress tended to exhibit ordinary (60%) or poor emotional intelligence (23.3%), a larger percentage of pupils under low stress showed superior emotional intelligence (63.7%). The correlation was shown to be statistically significant ($p = 0.003$) using a chi-square test. This suggests that adolescents who possess greater emotional intelligence are better able to handle the pressures of school.

Hypothesis Testing:

- (H1) There is a significant relationship between EI and academic stress among the paramedical students

Result: Hypothesis (H1) accepted as there was a significant relationship exist between EI and Perceived academic stress

- (H2) There is a significant relationship between the selected demographic variables , EI and academic stress levels

Result: Hypothesis (H2) rejected as there was no significant relationships exists between the demographic variables and the EI scores .

DISCUSSION

The purpose of the current study was to evaluate and compare emotional intelligence among paramedical final-year students, specifically those enrolled in nursing, physiotherapy, and pharmacy courses, and investigate the connection between emotional intelligence and perceived academic stress. The results shed light on the psychological and emotional skills of aspiring medical practitioners.

According to the findings, most paramedical students have emotional intelligence that ranged from moderate to high. Nursing students outperformed physiotherapy and pharmacy students in terms of emotional intelligence ratings among the three groups. Their early and regular patient encounters, clinical exposure, and the focus on empathy and communication skills in nursing programs may all be responsible for this.

This finding is consistent with earlier research, like that conducted by Aliakbari et al. (2015), which found that frequent patient interaction and team-based work settings increased nursing students' emotional intelligence. Similarly, emotionally intelligent nurses are better able to handle stress in



challenging healthcare environments and likely to communicate more effectively, according to Birks et al. (2011).

The study also looked at the connection between perceived academic stress and emotional intelligence. It was discovered that academic stress was lower among pupils who possessed greater emotional intelligence and vice versa. A statistically significant correlation ($p = 0.003$) between these variables was revealed using the Chi-square test. This suggests that children who are emotionally sophisticated might have superior coping strategies and stress-reduction abilities.

This conclusion confirms the findings of Shahrabaki et al. (2020), who found that among Iranian nursing students, emotional intelligence and stress management skills were positively correlated. In a similar vein, Chew et al. (2013) found that among healthcare students, emotional intelligence significantly predicts psychological well-being and stress resilience.

Upon further examination of demographic factors, some intriguing patterns emerged. Although the difference was not statistically significant, female students tended to score somewhat higher than male students on emotional intelligence tests. Comparing courses also showed that nursing students performed better in terms of their capacity to manage stress and their emotional intelligence. This could be a result of variations in clinical exposure, academic burden, and communication-based training.

This observation is supported by earlier research. Codier et al. (2010), for example, highlighted the importance of emotional intelligence in enhancing nursing students' self-assurance and compassion in clinical settings. It also contributes to improving patient care outcomes and teamwork.

Implications on Practice and Education

There are significant ramifications for paramedical education from these findings. Students' preparedness for the clinical setting may be improved by incorporating emotional intelligence development through stress management workshops, mindfulness exercises, communication training, and reflection exercises. Given its influence on patient interaction, teamwork, and burnout prevention, nursing, physical therapy, and pharmacy programs ought to take into account curriculum interventions targeted at improving emotional competence.



Limitations

Despite its strengths, the study has few limitations. Because convenient sample from a single institution was used, the results might not be as widely relevant as they could be. Emotional intelligence and self-reported stress levels may also be biased. Future studies may employ qualitative interviews, adopt a longitudinal design, and involve multiple colleges in order to gain deeper insights.

This study identifies the connection between academic stress and emotional intelligence (EI) in final-year nursing, physical therapy, and pharmacy students. According to Mayer and Salovey's Ability Model, emotional intelligence includes the capacity to recognise, utilise, comprehend, and effectively regulate emotions. EI is becoming more widely acknowledged in the context of healthcare education as a crucial component affecting students' academic achievement, mental health, and preparedness for the workforce.

Using standardized instruments such as the Perceived Stress Scale (PSS) and the Schutte Self-Report Emotional Intelligence Test (SSEIT), the study used a quantitative cross-sectional design to measure EI and perceived academic stress levels. To find relationships between stress levels and emotional intelligence, data was gathered from students at a particular Bengaluru university and examined.

Students with higher EI reported lower levels of academic stress, according to the findings, which show a substantial inverse association between the two. It was discovered that sub-domains such social skills, emotional control, empathy, and self-awareness were very important for handling academic difficulties. Furthermore, the association between stress and EI seemed to be moderated by coping mechanisms, discipline, and gender.

This study emphasises how crucial it is to incorporate stress management and emotional intelligence training into healthcare curricula in order to foster resilience, boost mental health, and improve academic results. In order to develop emotionally competent future health workers, the study suggests institutional activities including peer support networks, faculty mentorship, and workshops on emotional intelligence skill development.

CONCLUSION

According to the current study, final-year healthcare students' ability to manage academic stress is greatly influenced by their emotional intelligence. Students with higher emotional intelligence report



feeling less stressed in academic contexts, according to a statistically significant negative link between academic stress and emotional intelligence.

It was discovered that among the EI categories, interpersonal communication, self-awareness, and emotional regulation were the most successful in lowering stress. This implies that improving these emotional skills could aid students in managing the academic demands frequently found in rigorous healthcare programs such as pharmacy, physiotherapy, and nursing.

The study also emphasises how important it is that educational institutions acknowledge emotional intelligence as a talent that can be taught and learnt, rather than just as a personal characteristic. Including techniques for developing emotional intelligence in the curriculum, such as resilience training, mentorship programs, and stress reduction workshops, can help students maintain their mental health, perform better academically, and get ready for emotionally taxing healthcare settings.

To sum up, emotional intelligence is not only advantageous but also necessary for healthcare students' overall growth. Institutions may develop a generation of healthcare workers that are not just intellectually strong but also emotionally resilient and compassionate when providing patient care by encouraging emotional competence.

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