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A Study to Assess the Effectiveness of Emotional Intelligence in Coping with Academic Stress Among Nursing Students at Narayan Nursing College, Rohtas, Bihar

Prof. Dr. K. Latha[1]

Dean cum Principal, Narayan Nursing College, Gopal Narayan Singh University, Rohtas, Bihar

Mr. Mohit Kumar Gupta[2]

Assistant Professor, Department of Mental Health Nursing, Narayan Nursing College, Gopal Narayan Singh University, Rohtas, Bihar

Divya Bharti[3], **Pallavi Jyoti**[4], **Jyoti Rani**[5], **Ritika Shree**[6], **Pragya Mehta**[7], **Kumari Rajani**[8]

Post Basic B.Sc. Nursing Students, Narayan Nursing College, Gopal Narayan Singh University, Rohtas, Bihar

Abstract

Background

Academic stress is one of the most common psychological problems experienced by nursing students due to demanding academic schedules, clinical postings, examinations, assignments, and professional expectations. Persistent academic stress may negatively influence students' emotional well-being, academic performance, and professional competence. Emotional intelligence has emerged as an important psychological construct that enables individuals to recognize, understand, regulate, and manage emotions effectively, thereby enhancing coping abilities during stressful situations.

Objectives

1. To assess the pre-test level of academic stress among nursing students.
2. To assess the post-test level of academic stress after emotional intelligence intervention.
3. To determine the effectiveness of emotional intelligence in coping with academic stress.

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4. To determine the association between post-test academic stress and selected socio-demographic variables.

Methods

A quantitative pre-experimental one-group pre-test and post-test research design was adopted among 100 nursing students studying at Narayan Nursing College, Rohtas, Bihar. Participants were selected using a non-probability convenience sampling technique. Academic stress was assessed using a structured Academic Stress Scale before and after an emotional intelligence intervention focusing on self-awareness, self-regulation, motivation, empathy, communication skills, relaxation techniques, and adaptive coping strategies. Data were analyzed using descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (paired t-test and Chi-square test).

Results

The pre-test assessment showed that 55% of nursing students had moderate academic stress, 30% had severe stress, and 15% had mild stress. Following the emotional intelligence intervention, 60% of students demonstrated mild stress, 30% moderate stress, and only 10% severe stress. The mean academic stress score significantly decreased from **68.42 ± 8.56** during the pre-test to **48.16 ± 7.24** during the post-test. The calculated paired t-value was **18.72 ($p < 0.001$)**, indicating a statistically significant reduction in academic stress following the intervention. Significant associations were observed between post-test academic stress and age, course of study, monthly family income, and previous academic performance.

Conclusion

The emotional intelligence intervention was highly effective in reducing academic stress among nursing students. Integrating structured emotional intelligence training into nursing education may enhance students' coping abilities, emotional well-being, academic achievement, and professional competence.

Keywords: Emotional Intelligence, Academic Stress, Nursing Students, Coping Strategies, Stress Management, Nursing Education

Introduction

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Academic stress has become an important concern in nursing education because students are required to balance theoretical learning, laboratory training, clinical practice, patient care responsibilities, assignments, examinations, and interpersonal interactions. These multiple academic demands often exceed students' coping capacities, resulting in psychological distress, anxiety, emotional exhaustion, reduced academic performance, and impaired professional development. Nursing students experience higher levels of stress than many other university students because of the additional responsibility of acquiring clinical competence while providing safe patient care.

Emotional intelligence (EI), introduced by Salovey and Mayer and later popularized by Daniel Goleman, refers to the ability to recognize, understand, regulate, and appropriately use emotions in oneself and others. Emotional intelligence comprises five major components: self-awareness, self-regulation, motivation, empathy, and social skills. Individuals possessing higher emotional intelligence demonstrate better resilience, emotional regulation, interpersonal relationships, problem-solving abilities, and stress management. These competencies are particularly important in nursing education, where students encounter emotionally demanding situations during both classroom instruction and clinical practice.

Several studies have demonstrated that emotional intelligence is positively associated with psychological well-being, academic success, leadership abilities, and professional competence among nursing students. Conversely, inadequate emotional intelligence has been linked to increased stress, burnout, emotional instability, and poor academic performance. Educational interventions designed to enhance emotional intelligence have been reported to improve coping skills, reduce perceived stress, and promote resilience among nursing students.

Considering the increasing academic demands placed upon nursing students and the growing importance of emotional intelligence in healthcare education, the present study was undertaken to evaluate the effectiveness of an emotional intelligence intervention in reducing academic stress among nursing students at Narayan Nursing College, Rohtas, Bihar.

Background of the Study

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Academic stress is recognized as one of the most significant psychological challenges affecting nursing students worldwide. The rigorous nature of nursing education exposes students to continuous examinations, clinical postings, practical assessments, heavy academic workloads, and interpersonal challenges within healthcare settings. These stressors may adversely affect learning outcomes, clinical competence, emotional stability, and future professional performance.

Emotional intelligence has gained considerable attention in nursing education because emotionally intelligent students are more capable of understanding their emotions, regulating emotional responses, communicating effectively, and maintaining resilience during stressful situations. Daniel Goleman's theory emphasizes that emotional intelligence extends beyond intellectual ability and plays a crucial role in personal adjustment, professional success, and leadership development.

Recent research has demonstrated that nursing students with higher emotional intelligence report lower levels of academic stress, greater psychological well-being, improved clinical performance, and enhanced coping abilities. Emotional intelligence enables students to respond constructively to academic pressure through adaptive coping strategies such as positive thinking, emotional regulation, problem-solving, and seeking appropriate social support. Therefore, integrating emotional intelligence training into nursing education has become an important strategy for promoting students' mental health and academic success.

Need for the Study

Academic stress among nursing students has emerged as a growing educational and mental health concern because prolonged stress negatively influences concentration, confidence, decision-making, communication, clinical competence, and academic achievement. If left unaddressed, excessive stress may contribute to anxiety, depression, burnout, absenteeism, reduced academic performance, and decreased quality of patient care.

Emotional intelligence has been identified as a protective psychological resource that enables individuals to recognize emotional responses, regulate negative emotions, maintain motivation, develop empathy, and adopt effective coping strategies. Previous research indicates that educational interventions designed to strengthen emotional intelligence

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significantly improve students' resilience and reduce perceived stress. However, limited evidence is available regarding the effectiveness of emotional intelligence interventions among nursing students in Bihar. Therefore, the present study was undertaken to evaluate whether a structured emotional intelligence intervention could effectively reduce academic stress among nursing students at Narayan Nursing College, Rohtas, Bihar.

Materials and Methods

Research Design: A quantitative research approach with a pre-experimental one-group pre-test and post-test design was adopted to evaluate the effectiveness of an Emotional Intelligence (EI) intervention in reducing academic stress among nursing students. **Setting and Participants:** The study was conducted at Narayan Nursing College, Gopal Narayan Singh University, Rohtas, Bihar**,** among nursing students enrolled in General Nursing and Midwifery (GNM), Basic B.Sc. Nursing, and Post Basic B.Sc. Nursing programmes**. Sample Size and Sampling Technique:** A total of 100 nursing students participated in the study**.** Participants were selected using **a** non-probability convenience sampling technique**.**

Research Instruments

Data were collected using a structured research instrument developed after an extensive review of literature and consultation with experts. The instrument consisted of two sections: **Section A: Socio-demographic Profile**: This section included information regarding: Age ,Gender , Course of study ,Year of study ,Residence ,Family type ,Monthly family income ,Previous academic performance. **Section B: Academic Stress Scale**: Academic stress was assessed using a structured Academic Stress Scale consisting of items related to: Examination stress, Assignment stress, Clinical posting stress ,Academic workload , Performance anxiety ,Higher scores indicated greater academic stress. Stress levels were categorized as **mild, moderate, and severe** according to the total obtained score.

Emotional Intelligence Intervention: The intervention focused on: Self-awareness , Self-regulation ,Motivation, Empathy, Social skills, Positive thinking, Relaxation techniques, Effective communication, Problem-solving strategies, Healthy coping mechanisms. The educational programme was delivered using lectures, interactive discussions, demonstrations,

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practical examples, and question–answer sessions to facilitate active participation and improve understanding. Participants were encouraged to apply these emotional intelligence strategies in their academic and clinical activities. **Validity and Reliability:** The research instrument was reviewed and validated by experts from the fields of Mental Health Nursing, Nursing Education, Psychology, and Research Methodology to ensure content validity. **Pilot Study** A pilot study was conducted among approximately **10% of the study sample** to assess the feasibility, clarity, and practicality of the research methodology and data collection tool. Data were analyzed using descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (paired *t*-test and Chi-square test). A **p-value < 0.05** was considered statistically significant.

Results

Demographic Characteristics of Participants

Table 1. Distribution of Nursing Students According to Selected Demographic Variables (N = 100)

Variables	Categories	Frequency (f)	Percentage (%)
Age	17–19 years	30	30
	20–22 years	50	50
	Above 22 years	20	20
Gender	Male	25	25
	Female	75	75
Course	GNM	40	40
	B.Sc. Nursing	60	60
Year of Study	First Year	35	35
	Second Year	30	30
	Third Year	20	20
	Fourth Year	15	15
Residence	Rural	65	65
	Urban	35	35
Family Type	Nuclear	60	60
	Joint	40	40
Monthly Family Income	Less than ₹10,000	25	25
	₹10,001–20,000	45	45
	Above ₹20,000	30	30
Previous Academic Performance	<60%	20	20
	60–75%	55	55
	>75%	25	25

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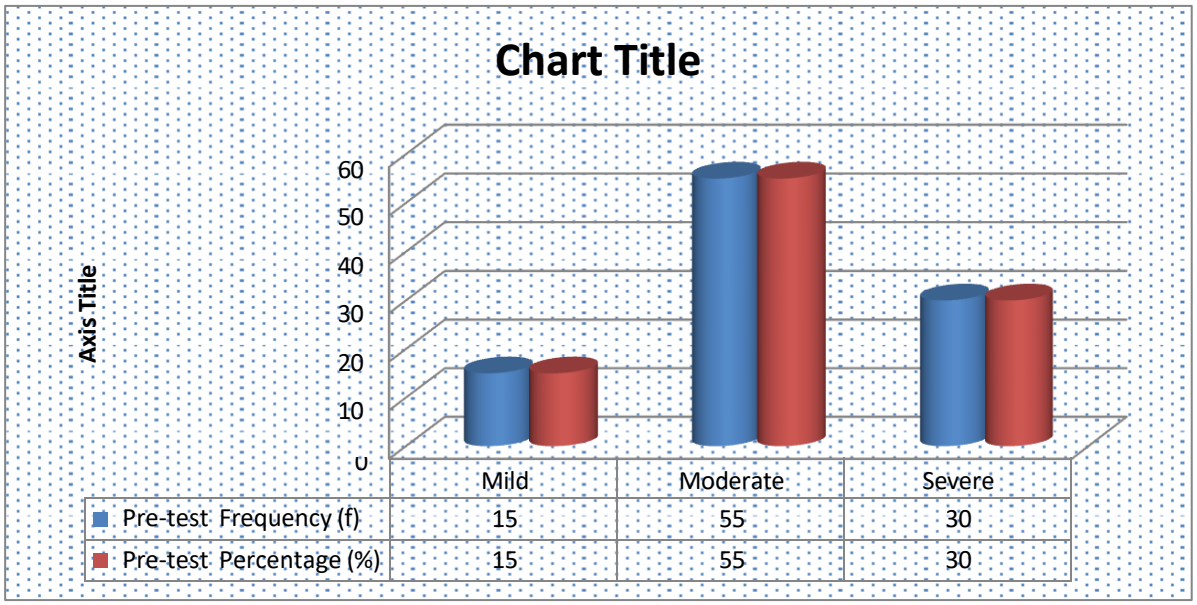
Pre-test Level of Academic Stress

Table 2. Distribution of Nursing Students According to Pre-test Level of Academic Stress (N = 100)

Level of Academic Stress	Frequency (f)	Percentage (%)
Mild	15	15
Moderate	55	55
Severe	30	30
Total	**100**	**100**



The pre-test assessment revealed that **55%** of nursing students experienced **moderate academic stress**, **30%** experienced severe stress, while only **15%** demonstrated mild stress before the emotional intelligence intervention.

Post-test Level of Academic Stress

Table 3. Distribution of Nursing Students According to Post-test Level of Academic Stress (N = 100)

Level of Academic Stress	Frequency (f)	Percentage (%)
Mild	60	60
Moderate	30	30

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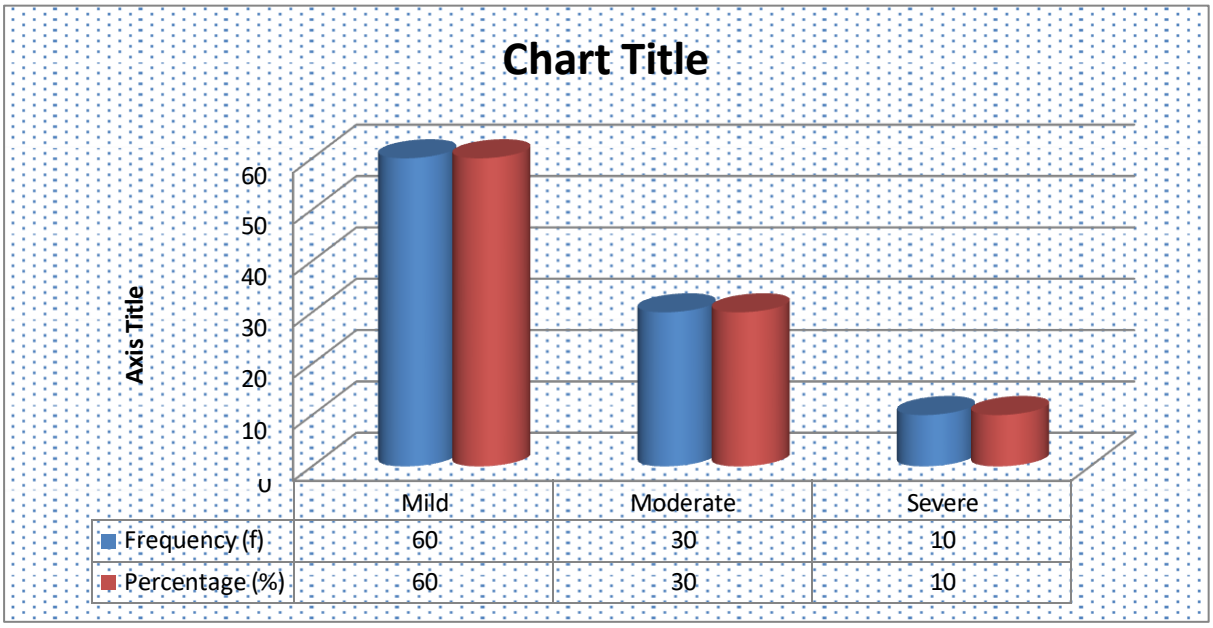
Severe	10	10
Total	**100**	**100**



Interpretation: Following the emotional intelligence intervention, **60%** of students demonstrated **mild academic stress**, while the proportion of students with severe stress decreased to **10%**, indicating a marked improvement in stress management following the intervention.

Effectiveness of Emotional Intelligence Intervention

Table 4. Comparison of Pre-test and Post-test Academic Stress Scores (N = 100)

Test	Mean	SD	Mean Difference	t-value	p-value
Pre-test	68.42	8.56			
Post-test	48.16	7.24	20.26	18.72	<0.001*

***Statistically significant**

Interpretation: The mean academic stress score decreased from **68.42 ± 8.56** during the pre-

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test to **48.16 ± 7.24** following the emotional intelligence intervention. The calculated paired **t-value (18.72)** was statistically significant (**p < 0.001**), indicating that the intervention effectively reduced academic stress among nursing students.

Association between Post-test Academic Stress and Selected Demographic Variables

Table 5. Association Between Post-test Academic Stress and Selected Demographic Variables (N = 100)

Variables	χ^2 Value	df	p-value	Interpretation
Age	8.45	4	0.038	Significant
Gender	2.14	2	0.343	Not Significant
Course of Study	6.82	2	0.033	Significant
Year of Study	9.76	6	0.135	Not Significant
Residence	5.94	2	0.051	Not Significant
Family Type	1.88	2	0.39	Not Significant
Monthly Family Income	10.24	4	0.036	Significant
Previous Academic Performance	7.92	4	0.048	Significant

Interpretation: Chi-square analysis revealed statistically significant associations between post-test academic stress and **age (p = 0.038)**, **course of study (p = 0.033)**, **monthly family income (p = 0.036)**, and **previous academic performance (p = 0.048)**. However, no significant association was observed with gender, year of study, residence, or family type (p > 0.05).

Summary of Findings

The present study demonstrated that nursing students experienced **moderate to severe academic stress** before the emotional intelligence intervention. Following the intervention,

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there was a substantial reduction in stress levels, with the majority of students reporting **mild academic stress**. The paired *t*-test confirmed that the reduction in academic stress was statistically significant ($t = 18.72$, $p < 0.001$). Furthermore, age, course of study, monthly family income, and previous academic performance were significantly associated with post-test academic stress. These findings indicate that the structured emotional intelligence intervention was effective in enhancing students' coping abilities and reducing academic stress.

Discussion

The present study found that the **Emotional Intelligence intervention** significantly reduced academic stress among nursing students. The decrease in pre-test and post-test stress scores indicates that the intervention was effective in improving students' coping abilities. These findings are consistent with previous studies reporting that emotional intelligence enhances stress management and emotional well-being among nursing students. The study supports the integration of Emotional Intelligence training into nursing education to promote better academic performance and mental health**.**

Conclusion

The present study concluded that nursing students experienced considerable academic stress before the Emotional Intelligence intervention. After participation in the structured intervention programme, a significant reduction in academic stress was observed. The paired *t*-test confirmed that the intervention was highly effective in improving students' coping abilities. Emotional Intelligence training enhanced students' self-awareness, emotional regulation, motivation, empathy, communication skills, and adaptive coping strategies, enabling them to respond more effectively to academic and clinical stressors. Therefore, Emotional Intelligence should be considered an essential component of nursing education for promoting students' mental health, academic achievement, resilience, and professional competence.

Recommendations

Based on the findings of the study, the following recommendations are proposed:

1. Emotional Intelligence training programmes should be incorporated into undergraduate and

diploma nursing curricula.

2. Periodic workshops and continuing education programmes should be organized to strengthen emotional intelligence and stress management skills among nursing students.
3. Similar studies should be conducted with larger sample sizes and participants from multiple nursing institutions to improve the generalizability of findings.
4. Randomized controlled trials should be undertaken to compare Emotional Intelligence interventions with other stress management strategies.
5. Longitudinal studies should be conducted to assess the long-term effectiveness of Emotional Intelligence training.
6. Future research should include additional psychological variables such as resilience, emotional well-being, self-esteem, anxiety, burnout, and academic performance.
7. Qualitative studies may be conducted to explore nursing students' experiences regarding Emotional Intelligence and coping with academic stress.

Limitations of the Study

- The study was conducted in a single nursing college, limiting the generalizability of the findings.
- A non-probability convenience sampling technique was used.
- The absence of a control group limited comparison of outcomes.
- Academic stress was assessed using self-reported responses, which may be subject to response bias.
- The study evaluated only short-term effectiveness of the intervention.

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