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A Study To Correlate Self-Esteem And Stress Among Nursing Students In A Selected Nursing College, Aizawl.

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Abstract:
Background*: Coping skills and mental health are significantly impacted by stress and self-esteem. Tension can result in psychological and physical issues (Feldman et al., 2008), whereas Nathaniel's definition of self-esteem. According to Branden (1994), a person's sense of competence and self-worth affects how they respond to obstacles. The American Psychological Association (2020) states that people with low self-esteem encounter reduced coping and increased stress. Research indicates a negative relationship between self-esteem and stress especially among nursing students, where elevated stress is associated with diminished self-worth and a higher chance of depression and exhaustion.*
Materials and Methods: *College of Nursing, Synod Hospital, Durtlang was the site of this study. Nursing students in the third and fifth semesters were being selected from this institution. A method of quantitative research was adopted, and 50 pupils were chosen by basic random sampling according to predetermined inclusion and criteria of exclusion. The study's main variables included demographics, stress, and self-esteem. Factors like residential area, family income, family type, gender, age, and semester. Facts were gathered using the 10-item Perceived Stress Scale, a structured demographic questionnaire, and the Ten-item Rosenberg Self-Esteem Scale. The instruments' content validity was confirmed by experts to keep the measurements accurate and consistent, review and reliability were guaranteed.*
Results: *The average stress score was 22.98 ± 4.06 and the average self-esteem score was 17.48 ± 3.48. An H_1 was accepted since there was a significant correlation between stress and self-esteem at the 0.05 level. Family income had a significant correlation with self-esteem ($p = 0.04$), but not with age, gender, semester, or type of a household or neighbourhood. Stress and semester were substantially correlated ($p = 0.02$), but not with other demographic aspects. Chi-square tests and ANOVA were employed in the analysis.*
Conclusion: *Stress is linked to lower self-esteem in nursing students, underscoring the necessity for methods to reduce stress and boost self-esteem.*
Keyword: *Stress, Self-Esteem, Nursing Students, Perceived Stress Scale, Rosenberg Self-Esteem Scale, Mental Health, Coping, Academic Stress.*

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I. Introduction

In today's world, stress and low self-esteem have a significant impact on coping skills, mental health and general wellbeing. Stress is a physiological and psychological reaction to perceived demands or dangers that can arise from interpersonal, academic, clinical, or personal pressures and are linked to mental and physical(Feldman et al., 2008) health issues. People's sense of competence and self-worth affect how they handle difficulties, with low self-esteem rising susceptibility to stress and unpleasant emotional reactions (APA, 2020; Rosenberg & Kaplan, 1982). In nursing, students are especially impacted because of how difficult their coursework and clinical training. Stressors like lengthy study sessions, frequent tests, failure-related anxiety, a lack of real-world experience, and handling with critically ill patients, supervisor assessment, as well as adjustment challenges like living in a hostel and homesickness (Jose & Bhat, 2013; Kumar et al., 2009; Jose & Bhat, 2013; Kaur et al., 2015). Some research reveals a negative relationship between stress and self-esteem, with higher stress being linked to lower self-esteem, making anxiety, depression, burnout, and subpar academic performance more likely. Stress assessment and self-worth, as well as comprehending how nursing students relate to one another, is essential for developing counselling, stress management courses, and mentorship are examples of successful interventions that support mental resilience, well-being, and professional proficiency.

II. Material And Methods

From September 1st to September 6th, this study was conducted on IIIrd and V year B.Sc. nursing students at College of Nursing, Synod Hospital, Durtlang. This study involved 50 nursing students, both male and female, ages 18 to 30.

Study Design: Descriptive Correlational Research Design

Study Location: College of Nursing, Synod Hospital, Durtlang, Aizawl

Study Duration: 1st- 6th September 2025

Sample Size: 50 nursing students

Sample Size Calculations: The sample size was estimated by selecting the two semesters, IIIrd and Vth Semester students of B.Sc. Nursing and used simple random sampling technique, the lottery method to select the participants.

Subjects and Selection Method: Simple random sampling technique was used for selection of participants.

Inclusion Criteria:
1. IIIrd and Vth Semester students at College of Nursing, Synod Hospital, Durtlang, who are available.
2. IIIrd and Vth Semester students at College of Nursing, Synod Hospital, Durtlang, who are willing to participate.

Exclusion Criteria:
1. IIIrd and Vth Semester students of College of Nursing, Synod Hospital, Durtlang, who are not willing to participate.
2. Students of College of Nursing, Synod Hospital who are in Ist, IInd, IVth, VIth,VIIth, VIIIth

Procedure Methodology:

The Perceived Stressed Scale and Rosenberg Self-Esteem Scale were used to gather data from the population after written informed consent was obtained from the relevant faculties. Demographic variables included age, gender, semester, family type, family income, and residential area.

Ten questions make up the Perceived Stress Scale. 0 is never, 1 is almost never, 2 is occasionally, 3 is fairly often, and 4 is very often.

In Rosenberg Self-Esteem Scale, it contains 10 questions. The scoring is divided into 1 = Strongly agree, 2 = Agree, 3 = Disagree, 4 = Strongly disagree

Statistical Analysis:

Data was analyzed by using Descriptive (frequency, percentage, mean, SD) and Inferential (Chi – square, ANOVA) statistics. The data were gathered, compiled, and presented in six sections: results pertaining to demographic variables in terms of frequency, percentage, mean, and standard deviation; results pertaining to the range, mean, and standard deviation of the Rosenberg Self-Esteem scale score; results pertaining to the range, mean, and standard deviation of the Perceived Stress scale score; results pertaining to the mean, standard deviation, and r value between self-esteem and stress; and results pertaining to the relationship between self-esteem and stress among demographic variables using the Chi-Square test and ANOVA test.

III. Results

The data gathered to evaluate stress and self-esteem among nursing students and ascertain their relationship is analyzed and interpreted in this chapter. The Rosenberg Self-Esteem Scale, Perceived Stress Scale, and demographic questionnaire were used to collect data from nursing students in their third and fifth semesters. Descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (Karl Pearson correlation, Chi-square, and ANOVA) are used to analyze the results.

Table 1 (a) indicates that majority 43(86%) belong to the age group 20 – 30 years (21.46±2.34), majority 46(92%) were female and 25(50%) belong to each semester (IIIrd and Vth semester).

Table 1 (a): Frequency, Percentage distribution, Mean and Standard Deviation of subjects according to demographic variables (age, gender, semester).

n = 50

Sl.No.	Variables	Frequency (f)	Percentage (%)	Mean	SD
1.	**Age (in years)**				
	a.Below 20 years	5	10		
	b.20 – 30 years	43	86	21.46	2.34
	c.Above 30 years	2	4		
2.	**Gender**				
	a.Male	4	8		
	b.Female	46	92		
3.	**Semester**				
	a.IIIrd Semester	25	50		
	b.IVth Semester	25	50		

Table 1 (b) indicates that majority 23(46%) income belong to Rs 20,000 – 50,000, 42(84%) belong to nuclear family, 28(56%) belong to urban residential area.

Table 1 (b): Frequency and Percentage distribution of subjects according to demographic variables (family income, type of family, residential area).

n = 50

Sl.No.	Variables	Frequency (f)	Percentage (%)
1.	**Family income (in Rs)**		
	a. <20,000	9	18
	b. 20,000 – 50,000	23	46
	c. >50,000	18	36
2.	**Type of family**		
	a. Nuclear family	42	84
	b. Joint family	8	16
3.	**Residential area**		
	a. Urban	28	56
	b. Rural	22	44

Table 2 shows that Rosenberg self – esteem total mean score is 17.48±3.48

Table 2: Range, mean and standard deviation of Rosenberg self – esteem scale score among nursing students.

n = 50

Variable	Min	Max	Range	Mean	SD
Rosenberg Self – Esteem total score	10	40	12 - 27	17.48	3.48

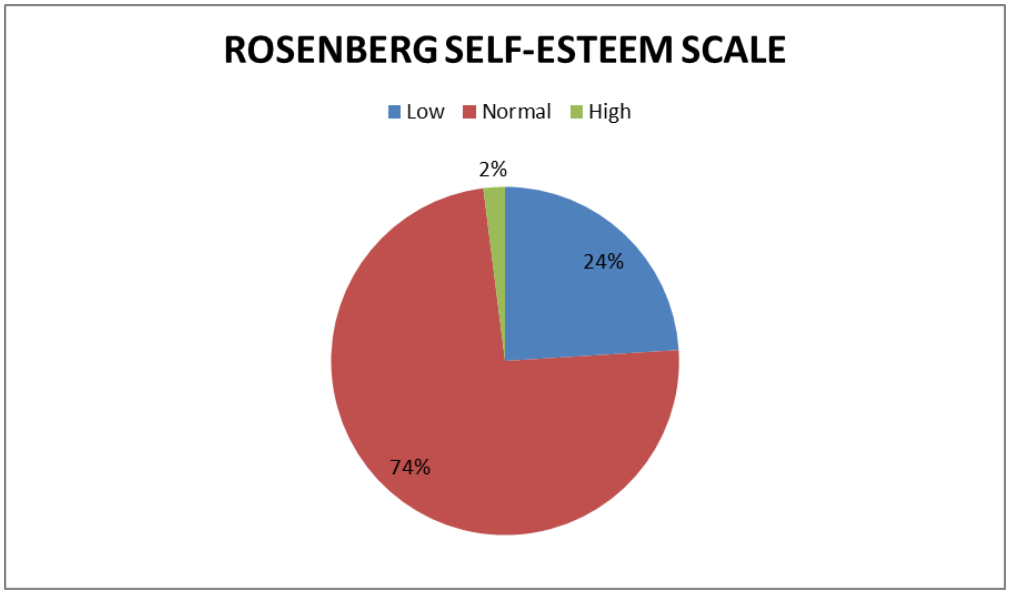

Figure 2: Percentage distribution of subjects according to Rosenberg Self – Esteem score.

Table 3 shows that Perceived Stress scale mean score is 22.98±4.06.

Table 3: Range, mean and standard deviation of Perceived Stress scale score among nursing students.
n=50

Variable	Min	Max	Range	Mean	SD
Perceived Stress Scale total score	0	40	12 - 30	22.98	4.06

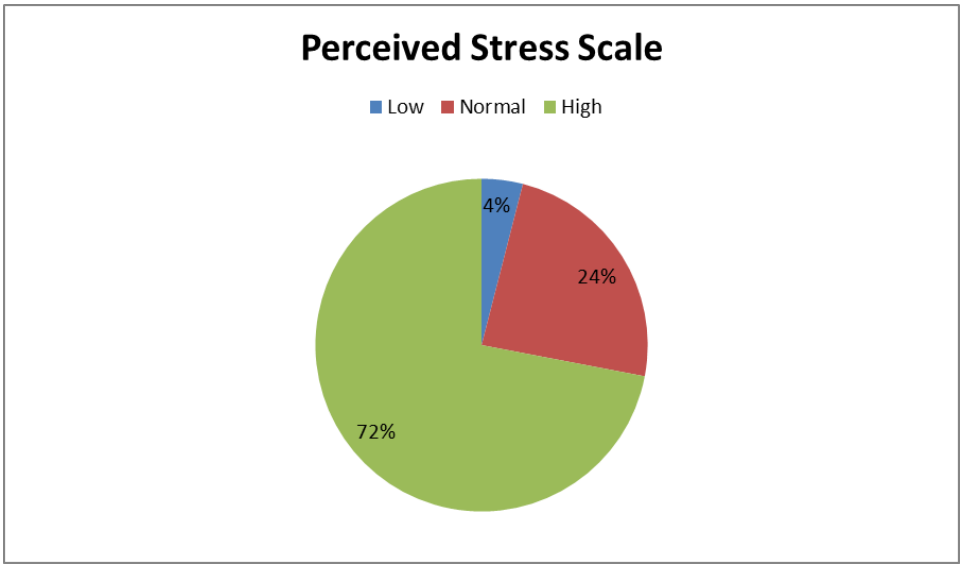

Figure 3 : Percentage distribution of subjects according to Perceived Stress Scale score.

Table 4 shows that there is a significant correlation between self – esteem and stress among nursing students at 0.05 level of significance. Therefore, H1 is accepted.

Table 4: Mean, Standard Deviation, r value between self – esteem and stress among nursing students.
n=50

Variables	Mean	SD	r value	p value
Self – esteem	17.48	3.48	1	**<0.00001**
Stress	22.98	4.06		

Table 5 (a) shows that there is no significant association between self – esteem and age, gender and semester among nursing students.

Table 5 (a): Association of self-esteem with selected demographic variables (age, gender, semester).
n=50

Sl. No.	Variables	Low self – esteem f (%)	Normal self – esteem f (%)	High self – esteem f (%)	Test of significa nce	df	Tab. value	p value
1.	**Age (in years) α**							
	a)Below 18 years	3 (60)	2(40)	0				
	b) 18-30	9 (21)	33(77)	1(2)	0.99	2	5.99	0.42
	c)Above 30 years	0	2(100)	0				NS
2.	**Gender β**							
	a. Male	1(25)	3(75)	0	0.181	2	5.99	0.91
	b. Female	11(24)	33(72)	2(4)				NS
3.	**Semester β**							
	a. IIIrd semester	3(12)	20(80)	2(8)				
	b. Vth semester	8(32)	17(68)	0	4.51	2	5.99	0.104 NS
	NS: Not significant, **α**: ANOVA, **β**:Chi square							

Table 5 (b) shows that there is a significant association between self – esteem and family income (p=0.04), but no significant association between self – esteem and type of family, residential area.

Table 5 (b): Association of self-esteem with demographic variables (family income, type of family, residential area).

n=50

Sl. No.	Variables	Low self – esteem f (%)	Normal self – esteem f (%)	High self – esteem f (%)	Test of significa nce	df	Tab. value	p value
1.	**Family income (in Rs) α**							
	a. <20,000	5(56)	4(44)	0				
	b. 20,000 – 50,000	3(13)	19(83)	1(4)	5.23	2	5.99	**0.04***
	c. >50,000	4(22)	13(72)	1(6)				
2.	**Type of family β**							
	a. Nuclear family	10(24)	30(71)	2(5)	0.39	2	5.99	
	b. Joint family	2(25)	6(75)	0				0.82 NS
3.	**Residential area β**							
	a. Urban	4(14)	25(86)	0	5.76	2	5.99	0.055
	b. Rural	8(38)	12(57)	1(5)				NS
NS: Not significant, **α**: ANOVA, **β**: Chi square								

Table 6 (a) shows that there is a statistical significant association between stress and semester among nursing students (p=0.02) but no significant association between stress and age and gender at 0.05 level of significance.

Table 6 (a) : Association of stress with selected demographic variables age, gender, semester.

n=50

Sl. No.	Variables	Low stress f (%)	Normal stress f (%)	High stress f (%)	Test of significa nce	df	Tab. value	p value
1.	**Age (in years) α**							
	d. Below 20	0	2(40)	3(60)				
	e. 20 – 30	2(5)	31(72)	10(23)	0.91	2	5.99	0.44
	f. Above 30	0	2(100)	0				NS
2.	**Gender β**							
	c. Male	0	3(75)	1(25)	0.19	2	5.99	0.90
	d. Female	2(4)	32(70)	12(26)				NS
3.	**Semester β**							
	c. IIIrd semester	0	16(64)	9(36)				
	d. Vth semester	2(8)	21(84)	2(8)	7.13	2	5.99	**0.02***
NS: Not significant, *: Significant, **α**: ANOVA, **β**: Chi square								

Table 6 (b) shows that there is no significant association between stress and family income, type of family and residential area at 0.05 level of significance.

Table 6 (b) : Association of stress with selected demographic variables (family income, type of family, residential area).

n=50

Sl. No.	Variables	Low self – esteem f (%)	Normal self – esteem f (%)	High self – esteem f (%)	Test of significa nce	df	Tab. value	p value
1.	**Family income (in Rs) α**							
	d. <20,000	0	5(56)	4(44)				
	e. 20,000 – 50,000	1(4)	19(83)	3(13)	0.91	2	5.99	0.44 NS
	f. >50,000	1(6)	13(72)	4(22)				
2.	**Type of family β**							
	c. Nuclear family	2(5)	31(74)	9(21)	0.42	2	5.99	0.81
	d. Joint family	0	6(75)	2(25)				NS
3.	**Residential area β**							
	c. Urban				1.02	2	5.99	
	d. Rural	1(3)	23(79)	5(17)				0.59
		1(5)	14(67)	6(29)				NS
NS: Not significant, *: Significant, **α**: ANOVA, **β**: Chi square								

IV. Discussion

The current study looked at 50 nursing students' demographics, stress levels, and self-esteem levels and how they related to each other. The gender distribution in nursing education is typical, with 92% of participants being female and 86% of participants being between the ages of 20 and 30. The IIIrd and Vth Semester students had an equal distribution of students (50% each). In terms of socioeconomic background, the majority of students came from middle-class families, with 46% coming from households making between Rs.20,000 and Rs.50,000 per month, 36% earning more than Rs.50,000, and 18% earning less than Rs.20,000. Furthermore, 56% of students lived in cities, indicating a slightly higher urban representation, and 84% of students came from nuclear families.

In terms of psychological variations, the majority of students (74%) showed normal self-esteem, 24% showed low self-esteem, and only 2% showed high self-esteem in terms of psychological variables. This suggests that most students maintain a balanced perception of their own worth, though a sizable minority may be at risk of diminished confidence. In terms of stress, 72% of students reported normal stress, 4% reported low stress, and 24% reported high stress. This means that almost one-fourth of students experience elevated stress, which may have an impact on their well-being and academic performance. At the 0.05 level of significance, a statistically significant negative correlation between stress and self-esteem was discovered, indicating that students who have higher levels of self-esteem typically have lower levels of stress.

Subsequent investigation showed a significant correlation ($p = 0.04$) between family income and self-esteem, indicating that students' sense of self-worth may be influenced by their socioeconomic status. Self-esteem did not, however, significantly correlate with age, gender, semester, family type, or residential area. Stress levels were found to be significantly correlated with the semester of study ($p = 0.02$), suggesting that clinical exposure and academic workload may differ between semesters. Age, gender, family income, family type, or residential area did not significantly correlate with stress. Overall, the results show that although the majority of nursing students maintain normal levels of stress and self-esteem, family income and academic semester have a significant impact on these psychological factors, highlighting the need for focused interventions to improve stress management and self-esteem. Overall, the results show that although the majority of nursing students maintain normal levels of stress and self-esteem, family income and academic semester have a significant impact on these psychological factors, highlighting the need for focused interventions to improve stress management and self-esteem.

V. Conclusion

The present study concluded that there is a statistically significant relationship between self-esteem and stress among nursing students. Most students had normal levels of self-esteem and stress; however, a considerable proportion experienced low self-esteem and high stress. Family income showed a significant association with self-esteem, and semester was significantly associated with stress

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