



Correlation between Self-Esteem and Academic Achievement among Students of a Selected Nursing College in Mangaluru

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Abstract

Background/Objectives People with high self-esteem see themselves as capable, active individuals who can make changes through hard work and higher goals that lead to learning new things. The results in the classroom that demonstrate how successfully a student has fulfilled their learning objectives are referred to as academic achievement. It could allude to achieving major academic achievements, such as receiving a bachelor's degree. In their capacity as health advocates and qualified health care practitioners, nursing students are essential to the public health movement. The aim of this study was to ascertain whether academic achievement and self-esteem are related.

Methods The study used a correlational descriptive design. The study sample comprised 197 nursing students from a certain college. The technique of proportionate stratified sampling was employed to choose the students. A checklist of academic achievements, the Rosenberg Self-Esteem Scale, and a baseline proforma were used to collect data.

Results Both descriptive and inferential statistics were used in data analysis. The findings of the analysis indicated that there was a marginally favorable correlation between academic success and self-esteem among nursing students. The resulting “*r*” value (0.158) was statistically significant at the 0.05 level of significance. Consequently, the research hypothesis was accepted, and the null hypothesis was rejected.

Conclusion The research project found a weakly positive correlation between academic achievement and self-esteem. The resulting “*r*” value (0.158) was statistically significant at the 0.05 level of significance. There was a weakly positive correlation between academic achievement and self-esteem among nursing students.

Keywords

- nursing students
- academic achievement
- self-esteem

Introduction

A person's sense of self-worth, self-respect, and confidence in oneself are all components of self-esteem. Naturally, a person's definition of it changes over the course of their life. It is regarded as one of the most crucial components of personal growth.¹ People can learn about the world, society, and a variety of fields through education. This knowledge can

help people find their purpose and direction in life, which boosts their self-esteem in general. It is the key factor that differentiates human beings from other creatures on the planet. The future of a nation is shaped in its classrooms. What a student accomplishes during this time forms the foundation of their life's work.² Because of the many changes that occur in the roles and responsibilities of post-adolescents, self-esteem is often unstable.³ Teens with a high sense

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of self-worth are more likely to be in better bodily and mental health, to have wonderful personal experiences, and to have fulfilling interpersonal relationships. A sense of self, a basic psychological building block, can serve as an academic success motivator.⁴

According to the expectation-value theory, a person's self-evaluation can predict academic results, such as academic success. A person's level of academic achievement can be predicted by their level of self-esteem.⁵ Generally speaking, having a high sense of self-worth makes people feel like they are capable and active people. It encourages making changes via work and sets higher objectives that result in learning new things.⁶ The National Association for Self-Esteem states that having self-esteem enables one to overcome challenges. A person's perception of their own value and level of confidence in their skills is known as self-esteem.⁷

Academic achievement is the result that shows how well a student has met their learning objectives and is displayed in the classroom. Students who felt good about themselves had fewer restless nights, less peer pressure, used drugs and alcohol less frequently, persisted longer at challenging activities, were happier and more outgoing, and generally performed better in the class.⁸

Approximately 85% of people worldwide suffer from low self-esteem. Of all the countries in the world, India is home to 243 million teenagers between the ages of 10 and 19 years. Almost 90% of people are in developing nations. According to population, Karnataka is the eighth largest state in India. In the state of Karnataka, adolescents make up roughly 21% of the population.⁹ Studies show that between one-third and half of the teenagers, especially in their early adolescence, struggle with poor self-esteem. Students' daily lives are becoming more and more filled with pressure, stress, and hectic schedules. It ultimately leads to a decline in self-esteem, which is currently a major issue.¹⁰ Consequently, research on the characteristics of nursing students and strategies for boosting self-esteem is required in studies. When the investigators went through journals and articles related to self-esteem, they realized that low self-esteem was one of the major problems among the adolescents today, which may affect their academic achievement. This actually motivated the researchers to choose and conduct their study and work.

Methods

Study Design, Setting, Eligibility Criteria, and Participants

A quantitative research approach was adopted to find the correlation between self-esteem and academic achievement among nursing students from a selected nursing college. A correlational descriptive design was used for the study. The study was conducted among 197 students enrolled in their second, third, and fourth years at the selected nursing college. The nursing students were selected by using the proportionate stratified sampling technique.

The inclusion criteria included the second, third, and fourth year BSc nursing students who had attended the Rajiv Gandhi

University examination in the previous year (2021–2022) and students who had answered all university subjects.

The sample size was calculated based on the relationship between self-esteem and academic motivation conducted by Vahedian-Azimi and Moayed in 2021.¹¹ The number of samples were determined using the formula $N = [(Z\alpha + Z\beta)/C]^2 + 3$, with a test power of 90%. Therefore, the calculated sample size was 197. A sample of 197 will be drawn with a research power of 80%, 95% confidence level, and an alpha error of 0.05.

Data were gathered using a baseline proforma, Rosenberg Self-Esteem Scale, and an academic achievement checklist. Seven experts were consulted in order to determine the content validity of the tool, which included operational definitions, objectives, and hypotheses. Since experts did not recommend any significant corrections, the tool was left as it is. The investigators used the split-half method to test the tools' reliability. Tools and baseline proforma given to 10 students and the results showed that the value of 0.99 was dependable. The pilot study, which involved 20 students in the same environment, was determined to be realistic and doable.

Ethical Permission

Ethical clearance was obtained from the institutional review committee (IRC no. IRC/FMCIN/2023S-10) and the Father Muller Charitable Institutional Ethics Committee (FMIEC/CCM/397/2023). Permission was obtained from the principal of the nursing college. The participants were given an explanation by the investigators of the necessity and significance of the study. The participants gave their informed consent, and confidentiality was guaranteed. The participants were given an explanation of the study's purpose by the investigators.

Data Collection Methods and Statistical Analysis

The data collection was scheduled from August 25 to September 2, 2023. The chosen nursing students were introduced to the researchers and an explanation of the study's goal. The investigators collected the data regarding baseline proforma, self-esteem, and academic achievement by questionnaires. The gathered information was assembled for evaluation.

The data were analyzed using SPSS Statistics version 16. To evaluate the data, both inferential and descriptive statistics were applied. Analysis of the data involved the use of both inferential (chi-squared and Karl Pearson) and descriptive (frequency, percentage, mean, and standard deviation [SD]) statistics. The level of significance was considered at 0.05.

Tools for Data Collection

The baseline proforma included age, gender, year of study, education of parents, birth order, type of family, residing place, and use of leisure time. These details were filled by the

students. Rosenberg created the “Self-Esteem Scale” in 1995. A 10-item test that takes into consideration both positive and negative self-perceptions to assess a person’s overall sense of worth. The scale is believed to be one dimensional. All item responses are on a Likert scale, ranging from strongly agree to strongly disagree. The scoring for items 2, 5, 6, 8, and 9 is inverted. Higher scores are indicative of higher levels of self-esteem.¹ The levels of academic achievement of the students were measured from their marks recorded from the final examination result of the previous class. The marks were categorized into different levels such as distinction, first class, second class, and fail. The scores of each student were counted and tabulated to the corresponding levels of academic achievement.

Results

Among 197 participants, 61.9% of students were in the age group of 21 to 30 years and the females accounted for 89.3% of the students. The majority of the students (33.5%) were studying in the second and third years. Regarding parents’ occupation, 85.3% were employed. More than half (62.9%) of the students were firstborns. In all, 90.9% of the students belonged to a nuclear family and 69.5% of the students were staying in a PG or a hostel. Most of the students (66.5%) were using social media.

The majority (179; 90.8%) of the students had high self-esteem, while 18 (9.1%) of them had normal self-esteem and did not report a low level of self-esteem.

The mean and SD of the self-esteem score was 31.31 ± 4.29 , with a mean percentage of 78.27, and the academic achievement score was 65.4 ± 7.9 , with a mean percentage of 81.

The data in ►Table 1 shows that there was no significant association between self-esteem and baseline variables like age, gender, year of study, education of parents, birth order, type of family, place of residence, and use of leisure time for 0.05 level of significance. Hence, the research hypothesis was rejected and the null hypothesis was accepted.

There was association between academic achievement and selected baseline variables like age (0.001), type of family

(0.000), and place of residence (0.000), as the *p*-value was less than the 0.05 level of significance. Hence, the research hypothesis was accepted for these variables and rejected for other variables.

There was a weak positive correlation between self-esteem and academic achievement ($r = 0.158$; $p = 0.026$).

Discussion

The nursing curriculum plays an important role in preparing students to become a professional nurse. The nursing curriculum should train nurses in inculcating self-esteem, which may enhance their academic achievement. This will help the students to face the world and help them to become competent professional nurses.

The present study revealed that 90.8% had high, 9.1% had normal, and 0.1% had low self-esteem. In a similar study conducted in a Kathmandu nursing college on the self-esteem of 198 nursing students, 95.3% of the students had a high self-esteem, while 4.7% had a low self-esteem.⁷

The study found that there is a weak positive correlation between self-esteem and academic achievement. The Karl Pearson correlation coefficient was $r = 0.158$, and the computed *p*-value was 0.026. A similar study was conducted in Malaysia, a total 220 UG students participated in this study. The results showed that the Pearson correlation coefficient (*r*) computed between self-esteem (mean: 17.44; SD: 3.44) and academic performance (mean: 3.022; SD: 0.41) of the UG students indicated a moderate positive correlation.¹²

The results of this study demonstrated that there was no significant correlation between self-esteem and a number of demographic factors, including age, gender, year of study, family type, parental education, birth order, and leisure time use. Therefore, the null hypothesis was accepted and the research hypothesis was rejected. A comparable study on academic accomplishment and self-esteem among 300 students at Iran’s Kermanshah University of Medical Sciences revealed a statistically significant correlation between parents’ educational attainment and their children’s self-esteem ($p < 0.001$).¹³

Table 1 Association between self-esteem and academic achievement with selected baseline variables among nursing students

N = 197				
Variable	Self-esteem		Academic achievement	
	Chi-squared/Fisher’s exact test	<i>p</i> -value	Chi-squared/Fisher’s exact test	<i>p</i> -value
1. Age (y)	25.763	0.105	1.555	0.001
2. Gender	26.244	0.094	1.082	0.344
3. Year of study	33.753	0.576	(Fisher’s exact)	0.653
4. Education of parents	Fisher’s exact	0.549	1.733	0.953
5. Birth order	42.554	0.210	1.849	0.851
6. Type of family	Fisher’s exact	0.054	(Fisher’s exact)	0.000
7. Residing place	Fisher’s exact	0.504	(Fisher’s exact)	0.000
8. Use of leisure time	32.825	0.620	2.343	0.086

Note: $p < 0.05$ indicates statistical significance.

The results of the current study demonstrated that there was no significant correlation between academic achievement and a few demographic factors, including gender, year of study, parents' educational attainment, birth order, and leisure time use. At the 0.05 level of significance, there was a significant correlation between academic achievement and age (0.001), family type (0.000), and place of residence (0.000). For this variable, the research hypothesis was thus approved. A similar study was done in 2022 in Khyber, Pakistan, to evaluate the academic performance and self-esteem of 185 nursing students. The results showed a significant correlation between academic achievement levels and gender (male).¹⁴

This study will be a motivation and backbone for the nursing students to develop self-esteem. It will help the future generation to develop confidence, self-direction, awareness of personal strength, optimism, and ability to solve problems.

The study has some limitations. The results of the study cannot be broadly applied because it was restricted to a particular region. The participants chosen were only the nursing students, and the study focused on the degree of academic success and self-esteem.

Conclusion

The study shows that self-esteem and academic achievement have a marginally positive correlation. The findings of the study are very useful in the field of nursing research. Several researches can be conducted on the same topic in the future. As we understand, self-esteem is beneficial for increasing academic achievement; however, more advanced research is required to find out whether high self-esteem can lead to high academic achievement. Additionally, the factors that contribute to academic achievement in individuals with high self-esteem need to be identified.

Conflict of Interest

None declared.

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