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Factors contributing to the academic performance of undergraduate nursing students in Sumandeep Nursing College

Patel Swati B, Patel Yashvita B, Patel Zalak R*, Rajbhoi Apeksha I.

Sumandeep Nursing College, Sumandeep Vidyapeeth University, Gujrat, India

Abstract

Background: This study was designed to investigate the factors affecting the academic performance of undergraduate students in Sumandeep Nursing College. Emphasis was put on trying to establish the relationship between age, gender, socioeconomic status, current living pattern, the area of domicile, religion, parents educational status. The validity and reliability of research instruments were established and data were collected from 168 students selected from 2nd year, 3rd year & 4th year B.Sc nursing in Sumandeep Nursing College using the simple random sampling method. To analyze the data, the Pearson product moment correlation statistical tool was used with the aim of establishing to find an association between academic performance with selected demographic variables. This formed the basis for the detailed analysis and conclusions and recommendations. **Aims and objectives:** The aim of this study is to find out the factors contributing to the academic performance of undergraduate nursing students. **Material and method:** Descriptive research design was adopted to achieve the goal of the study. The tool consists of two parts: First part consists demographic data of the sample and second part consists of Self-structured Likert scale. 168 samples were collected from selected classes of Sumandeep Nursing College by simple random sampling technique. **Results:** The findings show that association between factors contributing to the academic performance with their selected demographic variable such as socioeconomic status (22.017), current living pattern (14.050) and religion (17.408) are significant at 0.05 level of significance and variables such as age (2.458), gender (1.886), medium of schooling (0.835), area of domicile (1.233), type of family (1.553) and educational level of parents (2.811) where not significant at 0.05 level of significance. Thus it can be interpreted that there is a significant association between factors contributing to the academic performance with their selected socio demographic variable. The specific factors contributing to the academic performance is interest with the maximum score 33.2159, mean score 32.5952, mean percentage 98.13132 and standard deviation. **Conclusion:** The following conclusion can be drawn from the study findings, which are supported by evidence from the other literature; the self-administered Likert scale has shown a remarkable association between academic performance with selected demographic variables. Using the statistical formula we have computed the association between the demographic variables and academic performance.

Keywords: Factors contributing, Academic performance, Undergraduate nursing students.

*Corresponding author: Ms. Patel Zalak R, Sumandeep Nursing College, Sumandeep Vidyapeeth University, Gujrat, India.
Email: zalakpatel1596@gmail.com

1. Introduction

Students are the key assets of universities. The students' performance plays an important role in producing best

quality graduates who will become great leaders and manpower for the country thus responsible for the country's economic and social development. Academic achievement is one of the major factors considered by

employers in hiring workers, especially for the fresh graduates. Thus, students have to put the greatest effort in their study to obtain good grades and to prepare themselves for future opportunities in their career at the same time to fulfill the employer's demand [1].

Academic performance as the ability of the student to cope with their studies as well as how various tasks assigned to them by their instructors are accomplished, it includes the ability to study and remember facts and to be able to express such knowledge gained either verbally or in writing. Students, academic gain, and learning performance is affected by numerous factors including gender, age, parental social economic status, the medium of teaching, the workload of course of study, student-teacher relationship, college background, academic environment, teaching aids, and infrastructures. [1].

The factors affecting a student's academic performance arise from several reasons. Thinking skills primarily affect student's learning faculties if they do not learn what they need to learn. If teachers do not know how to catch the attention of a student, the more the student cannot make himself attentive to that subject. [1].

A major challenge facing higher education institutions around the world is how to achieve a quality outcome for students in an increasingly globalized and competitive environment. Education is a reciprocal process, during which the learners acquire knowledge, ability, and self-thought. Nursing education is designed to educate and train nursing students to become competent and qualified professional Nurses. In order to provide skilled nursing care, professional Nurses must be educated and trained to make certain skill and be knowledgeable about the science of nursing., these challenges inevitably influence the academic performance of students and ultimately threaten the nursing profession. The typical learning environment comprises of the number of student in the classroom, the academic environment, teaching strategies and the perception of the impact of group size on the learning experience the learning environment, plays an important role in captivating the student interest and in maintaining it [1].

Academic success has a great influence on a student's self-esteem, motivation, and perseverance in higher education. Poor academic performance or high failure rates may result in unacceptable levels of attrition, reduced graduate throughput and increased cost of education. This also reduces admission opportunities for tertiary students seeking higher degrees. Hence, students' academic performance has always been a topic of interest for educators. Educators and researchers have long been interested in identifying and understanding the variables that contribute to academic excellence. Many researchers have identified demographic, socio-economic, family and school factors as variables contributing to students' academic performance [2]. Students, academic gain and learning performance is

affected by numerous factor including gender, age, teaching faculty, students schooling, father/guardian social economic status, residential area of students, the medium of instructions in schools, tuition trend, daily study hour and accommodation as hostels or day scholar. Many researchers conducted detailed studies about the factors contributing student performance at different study levels. Graetz suggested "A student educational success contingent heavily on the social status of student's parents/ guardians in the society. Considine and Zappala noticed the same that parent's income or social status positively affects the student test score in the examination. According to Minnesota "the higher education performance is depending upon the academic performance of graduate students. Durden and Ellis quoted Staffolani and Bratti, observed that "the measurement of students previous educational outcomes are the most important indicators of students future achievement, this refers that as the higher previous appearance, better the student's academic performance in future endeavors. [3].

Teaching is always being important for producing the desired outcomes. Good teaching is important and helpful in multiple ways as students differ from one another and make betterment in learning opportunities for these differences. Many studies conducted in the area of student achievement suggested that a number of factors (previous schooling, parents' educational background, family income, students' self-motivation, students' age, learning preferences, and entry qualification of students) affect student performance at school, college, and even university level. found that "A large number of factors affect the achievement or success interaction of students". A teacher's academic and professional qualification, experience, age, assessment interval, training, and many other factors all affect students' learning discourse and all should function properly for the quality of education. In many research studies, the effect of teachers' qualifications on students' learning achievement has been estimated and several efforts were made to know whether teachers' qualifications putting under the category of independent variables might have any direct or indirect effect on student achievement. Warwick and Riemers found that teachers' qualifications and content knowledge showed a positive relationship with student achievement. Many studies noticed that teachers' academic and professional qualifications had a significant effect on student achievement. Anyone's explanation of supporting this idea of school-level effects of teachers' qualifications is that teachers continuously learned from one another, so any negative effect associated with low-quality teachers might be minimized if other fellows are cooperative having valuable knowledge and expertise. A great number of researchers showed that without proper and continuous learning of teachers, instructors, and school employees, no one can attain a high level of achievement. Duncombe and Armour stated that in the teaching profession, providing high-quality teachers with

higher qualification is more important than anything else and it can only be possible by providing them professional preparation and working condition. A teacher's qualification showed the educational attainments of the teacher. Many studies have examined which qualification of teachers positively related to student achievement. Teachers having a higher qualification or have an advanced degree in their teaching subject has a positive effect on student achievement. Ingersoll described that the good source to improve student achievement is the provision of highly qualified teachers and the major reason of students' low-quality achievement is that a large number of school teachers are not well qualified. Harland and Kinder suggested that in student achievement, well-qualified teachers always develop significant difference and their students were impartial, tolerant, adaptable, and challenging. Among the teacher-related factors affecting student achievement, teachers' qualifications are not only the single factor, many other factors also played an important role in student achievement. Many researchers proved that there is a positive relationship between student achievement and teachers' qualifications, but the teaching force quality is not only governed by the qualification, many other factors, like teaching skills, pedagogical knowledge, experience, training, assessment interval, dedication, and commitment to the profession also have a great influence on the performance of students. The commitment and dedication of teachers for their teaching profession is also an important affective component in teacher development. [4].

2. Materials and methods

This chapter deals with the methodology adopted for assessing the "Factors Contributing to the academic performance of undergraduate nursing students in Sumandeep Nursing College." It includes the research approach, research design, setting of the study, sample and sampling technique, development of data collection tools and questionnaires, procedure for data collection and plan for data analysis.

Further, it also aimed at determining the association between academic performance with selected demographical variables like age, sex, socioeconomic status, current living pattern, medium of schooling, area of domicile, religion, type of family, education level of parents.

- In this study, descriptive survey research design is adopted.
- The study was conducted in Sumandeep Nursing College.

Demographic variables:

The demographic variables in the study are age, gender, socioeconomic status, current living pattern, the medium

of schooling, the area of domicile, religion, types of family, educational level of parents.

The research variables in the study are interest, study habits, social factors, environmental factors.

The population will consist of undergraduate nursing students in selected classes of Sumandeep Nursing College.

The samples of the study will be selected by using probability simple random sampling technique according to inclusive criteria as well as the availability of samples from Sumandeep Nursing College.

The self-structured Likert scale is planned with the statements designed to yield specific information to meet a particular need for research information about a pertinent topic. The research information is attained from respondents normally from a related interested area.

Statistics

Descriptive statistics

1. Frequency and percentage distribution are used to describe the demographic variables.
2. Mean and standard deviation will be used to find out the factors contributing to the academic performance of undergraduate nursing students.

Inferential statistics

1. 't' test will be used to find out the factors contributing to the academic performance of undergraduate nursing students using a self structured Likert scale.
2. Chi-square test will be used to find out the association between factors contributing to the academic performance of undergraduate nursing students.

Scoring procedure:

- There is total of 26 question items.
- 100-130: Excellent
- 66-99: good
- 33-65: average
- <32: poor
- The score range from a minimum of "score 32" and maximum of "score 130".

Scoring interpretation:

The factors contributing to the academic performance is divided into 4 categories based on self-structured Likert scale and accordingly, the scores were allotted.

- Excellent- 86.9%
- Good- 11.9%

- Average- 1.2%
- Poor- 00%

3. Results

The findings shows that association between factors contributing to the academic performance with their selected demographic variable such as socioeconomic status (22.017), current living pattern (14.050) and religion (17.408) are significant at 0.05 level of significance and variables such as age (2.458), gender (1.886), medium of schooling (0.835), area of domicile (1.233), type of family (1.553) and educational level of parents (2.811) where not significant at 0.05 level of significance. Thus it can be interpreted that there is a significant association between factors contributing to the academic performance with their selected socio demographical variable.

The specific factors contributing to the academic performance is interest with the maximum score 33.2159, mean score 32.5952, mean percentage 98.13132 and standard deviation.

4. Discussion and conclusion

Findings and discussion of the study: The following are the major findings of the study with discussion:

Research approach

The research approach is a systemic, objective method of discovery with empirical evidence and rigorous control. The research approach spells out the basic strategies that the researcher adopts to develop information that is accurate and interpretable. The control is achieved by holding conditions constant and varying only the phenomenon under the study. [5].

The research approach is an umbrella that covers the basic procedure for conducting the research. A research approach tells the research so as to what data to collect and how to analyze it. It also suggests possible conclusion to be drawn from data in view of the nature of problem selected for the study and the objectives to be accomplished. In order to achieve the desired objectives of this study quantitative research approach was considered appropriate.

Setting of the study

“Setting” refers to the area where the research is conducted.

The setting is a physical location and condition in which data collection takes place [6].

The study was conducted in Sumandeep Nursing College.

Population

The population is a complete set of individuals or objects that possess some common characteristic of the researcher. By identifying the population, the researcher makes clear the group to which the study results can be applied.⁷

The population will consist of undergraduate nursing students in selected classes of Sumandeep Nursing College.

Demographic data

From selected 168 samples majority 76.2% of the samples belongs to the age group between 19-21 years followed by 14.3% of the samples are in between 22-24 years and only 9.5% of the samples are in between the age group of 16-18 years. Majority 84.5% of the samples are female and 15.5 of them are male samples. 42.3% samples belong to high socioeconomic status, 31.0% of them belongs to second higher socioeconomic status, 19% of them belongs to third higher socioeconomic status and only 7.7% of them belongs to the middle class family. Majority of the samples 59.5% lives in a hostel, 29.2% are day scholar, 7.1% lives in PG and 4.2% of them lives at the relative house. Majority of the samples 72.6% of them are from Gujarati medium, 23.2% of them are from English medium and only 4.2% are from Hindi medium. Majority of the samples 72.6% belongs from an urban area and a minority of the samples 27.4% belongs from a rural area. Majority of the samples 94% are Hindu, 5.4 are Christian and only 0.6% are Muslim. Majority of the samples 53% are from joint family and 47% are from nuclear family. Majority of the samples parents 35.7% are undergraduate, 32.7% are HSC pass, 29.2% are postgraduate and only 2.4% of them are illiterate.

Research variables

According to the mean value among all the factors contributing to the academic performance, interest (32.5952) affects highest to the academic performance, subsequently study habits (29.3810) affects to the second highest to the academic performance, the third factor which affects the academic performance is the environmental factor (24.3869) and lastly social factors (22.6250) affects less to the academic performance.

Conclusion

The following conclusion can be drawn from the study findings, which are supported by evidence from the other literature;

The self-administered Likert scale has shown a remarkable association between academic performance with selected demographic variables. Using the statistical formula, we have computed the association between the demographic variables and academic performance.

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SN	Abbreviation	Full form
1	&	And
2	F	Frequency
3	N	Number of samples
4	NS	Not significant
5	P	Probability value
6	R	Reliability value
7	S	Significant
8	SD	Standard deviation
9	SE	Standard Error
10	$\bar{X}$	Mean
11	χ^2	Chi-square