Factors Affecting Academic Performance of Nursing Students

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Abstract: Academic performance is the ability of nursing students to cope with their studies as well as how various tasks assigned to them by their instructors are accomplished. It also includes the ability to study and remember facts and able to express such knowledge gained either verbally or in-writing theoretically. Numerous factors have influence both positively and negatively on academic performance among nursing studentswhich therefore hinders their success.¹Good academic performance is directly related to good scoring in various entrance exam and job opportunity, so it has been always a matter of concern for both parents as well as students, for the achievement in school which is affected by a number of factors, including the quality of the school, characteristics of the student's family such as socio-economic status and parent's educational level and the characteristics of the child. Motivation and home environment have a positive relationship with academic performance, suboptimal sleep affects student learning process in their academic achievement.² So in this concern, quantitative and correlational research was conducted to assess the factors affecting academic performance, to assess the academic performance of the nursing students and to assess the correlation between factors and the academic performance. The study was conducted on 118 GNM Nursing students studying at Apollo School of Nursing, New Delhi, selected through total enumerative sampling technique. Findings reveal that student-related factors (mean = 22.01) have a very high impact on academic performance of nursing students whereas family related factors (mean =10.34) have least impact on academic performance. The study reveals that students related factors play a crucial role and has a positive influence on the academic performance among nursing student.

Key words: Academic Performance, Nursing Students, Educational Performance, Elements effecting Nursing Education

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I. Introduction

"Education is the ability to listen to almost anything without losing your temper or self -confidence." By Robert Frost

Academic performance is one of the major factors considered by employers in hiring workers especially for the fresh graduates, which help students to put their greatest effort in the 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.³

The success of any educational institution is measured by its academic performance or how will the students meet the standard set out. Currently student's academic performance isaffecting and the factors are identified as influencing the overall performance of students which include socio-economic background of parents or guardians, lecturer- student relationships, academic support services, demographic factors, quality of nurse educators, availability offacilities in the schools, the language of instruction and level of entry qualifications of students. A similar study was conducted on 201 student nurses which reveals that four factors such as teachers- related factor (4.16), students – related factor (3.85), school – related factor (3.85), and home-related factors (3.54) were observed to have varying effect on the academic performance of student nurse.¹

The student performance plays an important role in producing the best quality graduates and is directly linked with social and economic development of any country. Nursing programs across the world use a variety of measures to determine the academic performance of nursing students including grade point average (GPA) empirical studies have proven that numerous factors affected academic performance of nursing students.

Students face some series of challenges and stressors. But more likely, the nursing students are the ones who are at the center of experiencing stress. Many factors have been identified to influence academic performance either positively or negatively, however, much of the recent research indicated that academic motivation is an important underlying factors and component in learning this identified factor which include; socioeconomic background, learning environment exert a degree of influence on academic achievement.²

Many studies were conducted by previous researchers who have discussed about the different factors that affect student's academic performance. There are two types of factors that affect the student academic performance which are internal and external factors. The **internalfactors** come from the class room environment such as class schedules ,class size ,student competence in English, learning facilities ,English text books ,class test result, home-work ,internal access ,complexity of course material ,exam system ,environment of class and others and **externalfactors** include insufficient resource ,lack of university accommodations and socioeconomic factor³

Another study stated that factors such as students, school, home and teachers have an extensive effect on the academic performance of the students. Results further reveal that among four factors, teachers – related factors have the greatest impact on academic performance indicating by mean value of 4.16. This further indicates that the respondents felt that teaching strategies, students – teachers' relationships and communication barrier hinder their academic performance.

II. Material and Methods

The study was conducted in January 2019. Quantitative research approach and correlational research design were used to assess the factors affecting academic performance among 118 GNM students in Apollo School of Nursing, Indraprastha Apollo hospital located in New Delhi.

Total enumerative sampling technique was used. The subjects were given Google form link <u>https://goo.gl/forms/CWazO90WslgcOeZW2</u> to give their responses. Permission from the Principal and ethical clearance from Organizational Review Board was taken before starting the study. Before the questionnaire was given to the participants, consent was taken, aims and objectives were explained to them. A structured opinionnaire (5-Point Likert Scale) was used to assess factors affecting academic performance.

Inclusion Criteria:

- Student who are willing to participate.
- Student who were present during the data collection.

Exclusion Criteria:

- Students who have discontinued the course.
- Students who were absent on that day.
- Students who are not willing to participate in the study.

Data Collection

A written consent was obtained from each subject before administering the tool. Then, a well-designed questionnaire was used to collect the data from nursing students. The questionnaire included socio-demographic characteristics such as age, religion, year of study and stream in 12th standard and family income. A structured opinionnaire (5-Point Likert Scale) was used to assess factors affecting academic performance.

The Structured opinionnaire was used to assess the factors affecting academic performance which comprised of 37 items classified under sections (students related factors, teacher related factor, clinical related factor, health related factor, school related factor, hostel related factor and family related factor). Each item had five responses – strongly agree, agree, neutral, disagree and strongly disagree. The maximum and minimum marks awarded for each item were 5&1 respectively. The other tool structured questionnairewas used to assess academic performance comprised of 6 items classified under academic performance. Each item has five responses – strongly agree, agree, neutral, disagree and strongly disagree. The maximum and minimum marks awarded for each item were 5&1 respectively.

III. Result

Data was analyzed using, Karl Pearson's Coefficient of Skewness(r –value) betweenopinionnaire score and the factorsaffecting academic performance among nursing students. Coefficient of correlation (r) was computed to check the relationship between factors affectingacademic performance with their academic performance.The calculated r-value was 0.67which shows moderate positivecorrelation between factors affectingacademic performance and academic performance of nursing students.Fig. 1-7 show the distribution of background information of nursing students.



TABLE 1 shows item wise frequency and percentage distribution of factors affecting academic performance among nursing students. Among all the 7 factors, the student related factors have high impact on academic performance as it got 1st rank. The teacher related factors and the clinical related factors are in 2nd and 3rd rank. The health-related factors and the school of nursing related factors comes under 4th and 5th rank. Whereas the hostel related factors and the family related factors have low impact on academic performance among nursing students as 6th and 7th rank.

• In student related factors, the statement, I study only before the exam has got the highest mean (4.17).

- In teacher related factors, the statement, Teachers are well prepared for the class has got the highest mean (3.44).
- In clinical related factors, the statement, I prioritize and plan the care for the patient has got high mean (3.88)
- In health -related factors, the statement, I go to bed early and wake up early has got the highest mean (3.39).
- In school of nursingrelated factors, the statement, the school has all necessary facilities for learning has got highest mean (3.91).
- In hostel related factors, the statement, the hostel environment is not suitable has got the highest mean (3.53).
- In family related factors, the statement, both my parents are earning has got the highest mean (3.49).

Table1: Item wise frequency percentage distribution of factors affecting academic performance among Nursing Students.N =118

S.NO	FACTORS	MEAN SCORE	RANK	
1.	Student related factors:	22.01	1	
	a) I submit my assignment on time	3.78		
	b) I am always regular to the class.	3.22	1	
	c) I study the topic everyday	2.67	-	
	d) I study only before the exam.	4.17	-	
	e) I always feel homesickness	2.94	-	
	f) I am not able to understand topics clearly in the classroom	2.85		
	g) I spend more time in mobile phones and watching T. V	2.38		
2.	Teacher related factors:	19.84	2	
	a) Teachers are well prepared for the class.	3.44	-	
	b) Teachers finish class within the stipulated time.	3.04		
	c) Teachers takes extra efforts to help students in studies.	3.29	_	
	d) Teachers are effective in their communication	3.37	1	
	e) Teachers demonstrate good teaching skills.	3.35	4	
	f) Teachers use different A.V. aids related to the topics	3.35		
3.	Clinical related factors:	18.85	3	
	a) I prioritize and plan the care for the patient.	3.88		
	b) I use the clinical experience to gain more skill and practice.	3.60		
	c) I am confident to take care of patient.	3.72		
	d) I am able to co-relate the topics taken by teachers with patient condition.	3.80		
	e) I am confident to communicate	3.85		
4.	Health related factors:	15.87	4	
	a) I go to bed early and wake up early.	3.39		
	b) I have difficulty in studying during menstrual period.	2.00		
	c) I usually skip breakfast.	2.79	-	
	d) I feel sleepy throughout the day.	2.36		
	e) I have health issues.	2.33		
	f) I go to bed late and wake up late every day.	3.00	-	
5.	College infrastructure related factors:	14.74	5	
	a) There are adequate books in the library.	3.67		
	b) School provides various curricular and co-curricular Activities.	3.83	-	
	c) The school has all necessary facilities for learning.	3.91	-	
	d) The classroom is more comfortable for teaching learning	3.33	-	
	activities.	5.55	1	
6	Hostel - related factors:	14.41	6	
6.		2.56	0	
	a) My roommate is always supporting me.b) The hostel environment is not suitable.	3.53	-	
	b) The nostel environment is not suitable. c) Hostel food is not good.	3.09	1	
	d) There is no space in the room for studying.	2.64	-	
	e) There is no recreational room for the students.	2.59	1	
7.	Family related factor	10.34	7	
1.	a) My parents are well educated.	2.49	1	
			-	
	b) My family has financial problem.	1.83		
	b) My family has financial problem.c) Both my parents are earning.	1.83 3.49	-	

TABLE 2 shows item wise frequency and percentage distribution of academic performance of the nursing students.

- 40.67% students have neutral opinion regarding their high intelligence level.
- 47.45% students have disagreed that they got distinction in their exams.
- 38.13% students have disagreed that they score poor marks in subjects.
- 50% students have disagreed that they often fail in exams.
- 50% students have disagreed that they got awards for their academic achievements.
- 45.76% students have agreed that they achieve their target with goal.

Thus, we can say that there is a moderate positive correlational relationship between the factors affecting academic performance among nursing student.

TABLE2: ITEM WISE FREQUENCY PERCENTAGE DISTRIBUTION OF ACADEMIC PERFORMANCE N-118

	11-110										
S.NO	STATEMENT	FREQUENCY				PERCENTAGE					
1.	Academic Performance (A1):	S.A	A	Ν	D.A	S.D	S.A	A	N	D.A	S.D
a.	I have high intelligence level.	4	29	48	33	4	3.38	2.67	40.67	27.96	3.38
b.	I get distinction in my exams.	7	18	33	56	4	5.93	15.25	27.96	47.45	3.38
c.	I score poor marks in subjects.	2	30	30	45	10	1.69	25.42	25.42	38.13	8.47
d.	I often fail in exams.	0	19	26	59	14	0	16.10	22.03	50	11.86
e.	I have got awards for my academic achievements	3	20	29	59	7	2.54	16.94	24.57	50	5.93
f.	I achieve my target with goal.	11	54	36	12	5	9.32	45.76	30.50	10.16	4.23

*SA=Strongly agree; A=Agree; N=Neutral; D=Disagree; SD=Strongly disagree

TABLE 3 Shows mean, standard deviation and Karl Pearson's Coefficient of Skewness(r –value) of opinionnaire score of between the factors and affecting academic performance among nursing students.

	Factors affecting academic performance	Academic performance	r
MEAN	22.00	16.40	r=0.67
STANDARD DEVIATION	0.574	0.1158	

IV. Discussion

The student's performance is affected by various factors like social, psychological, economic, environmental and personal factors. These factors may vary from person to person and country to country.

It is important for the institution and faculty to eliminate the factors that commonly affects the academic performance among nursing students. The present study was aimed to assess the factors affecting the academic performance among nursing students. Finding revealed that all the factors have impact on academic performance whereas in this study two factors i.e. student related factors (22.01) and teacher related factors (19.84) have a very high impact as they both got the highest rank.

Findings of the study conducted by Faculty of Business and Finance Department Commerce and Accountancy in May 2013 was in agreement with this study which analyzed the factors affecting the academic performance of undergraduates in Kanpur .The study finding indicate that the teaching method has a positive relationship with academic performance .The role played by lecturer in the teaching process is essential ,it shows relation between two variables was significant. Time management was one of the keys indicate to determine student academic performance, where good planning and time management reduce academic stress.

Another study conducted by Kamel et al. (2010) who noticed that more than half of students (53%) sleep for 4-6 hours every day and 39.5% of them study only 4-6 hours. Furthermore, less than half (45.5%) of the students have average academic score. This is agreed with Arne et al. (2010) who stated that a small number of his population sleep sevenhours a night do better on memory tasks than those who do not. This was supported by research conducted by Ross, (2010) who found that nutrition plays an important role in the body's ability, the mind ability to growth and the performance of our potential education capacity.

On the same line, Elbsuony (2016) highlighted that the total number of study sample was 239 majority of nursing students (86.2%) were single. Also, Dills (2006) shows that academic performance is dependent on parents' social economic status. That is students from high social economic backgrounds will perform better than their counter parts from low social economic backgrounds as discussed. Moreover, Rostand (2002) who

found that family income has a profound influence on the educational opportunities available to adolescents and on their chances of educational success. low-income students usually attend schools with lower funding levels, have reduced achievement motivation and much higher risk of educational failure.

One more study revealed that the highest mean was 'feeling sleepy in class (3.125) with high impact. Meanwhile, the indicator with the lowest mean was 'difficulty in breathing (2.21) which was found to have the lowest influence on the academic performance of the student nurses. This also was asserted by (Wolfson and Carskadon, 1998) who stressed that sleep way in teenagers seriously affect their thinking, feelings and their behaviors during the day. Another study was conducted by Fredriksenet al. (2004) reported that the effects of adolescent sleep loss during middle school, also found relation between low grades, decrease self-esteem, high depressive symptom and participants who do not take enough sleep. These findings are in harmony with the present study's findings. In the same factor 'Feeling hungry in class' (3.215) came at the second item of having effect on student performance. Moreover, Al Ghamdi, (2013) who noticed that the association between insufficient sleep duration and lower university grades are understandable in the lifestyle view of sleep functions, as sleep deprivation may negatively affects the ability to complete cognitive tasks. Also, Sunshine et al. (2015) reported that feeling sleepy in class deemed to be the most impactful on academic performance among the personal condition's category.

According to the findings of the study habits section, all are found to be highly impactful with the indicator 'I study only when there is a quiz (3.30) having the highest mean. One indicator though was determined to belong to the lower range, the item I copy the assignments of friends (2.10). This agreement with Alami, (2016) who said that "There could be many reasons for students' boredom such as, untouchable topics to read or write and mismatch between students' current level of knowledge and the presented material in the classroom".. Moreover, Cerna and Pavliushchenko (2015) who stressed that high performing students' study in calm and lonely most of the time, they study at consistent intervals along the whole semester, write note in lecture and through the study ask questions in class and read the lecture before the class.

V. Conclusion

Therefore, it was concluded that several factors pose a high impact on the academic performance of student nurses, with Student -Related factors topping the list. Among the (7) domains, teacher-related factors and clinical related factor, health related factor and school related factor fall behind the Student -related factors. Nonetheless, these categories are still deemed to be highly impactful. Conversely, hostel related factor and family related factors pose little effect on student nurses on their academic performance. Thus, students should find solutions to improve their performance also, parents should help their children to improve academic performance by providing needed encouragement and guidance

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