



ASSOCIATION OF LEARNING STYLES WITH ACADEMIC PERFORMANCES OF NURSING STUDENTS

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ABSTRACT

This is the study to assess the association of learning styles adapted by Nursing students with their academic performance. The objectives was to assess the association of the learning style with the academic performance of the students. The research approach was quantitative and the research design was comparative research design. The population was the nursing students and by convenient sampling 80 student nurses were selected for the study. Structured questionnaire and VAK questionnaire was developed to collect the data. The data was analysed by u descriptive and inferential statistics in terms of frequencies/percentage and Chi-Square. Major finding of the study revealed that many of the 3rd year and internship students adapt combined learning style (Auditory and Visual). There was no significance association between learning style and their academic performance.

KEYWORDS:- Learning styles, Academic Performance, Nursing students.

indicators of how a learner perceives, interacts with and responds to the learning environment. Everyone has a amalgamation of various learning styles. Some people may find that they have a dominant style of learning, whereas others use different styles in different circumstances. A core concept is that individuals differ in the ways they learn. The term “learning styles” is being used in educational literature since 1970’s .The term “Learning Style“ describes an individual’s preference for understanding his/her experiences and transforming them into knowledge”. There are many learning style inventories like Kolb’s Learning Style Inventory, Honey and Mumford’s Learning Styles Questionnaire, Vermunt’s Inventory of Learning Styles, Felder and Soloman’s Index of Learning Styles and Flemming’s VARK questionnaire. According to VAK there are three types of learning styles. They are Visual, Auditory and Kinesthetic .Visual learners are those who associate ideas, concepts, data and other information with images and techniques. Auditory learning is a learning style in which a person learns through listening. Auditory learners need to hear in order to understand and may have difficulty with written instructions. Kinesthetic (also called tactile) learning takes place by the students carrying out a physical activity, rather than listening to a lecture or watching a demonstration.

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INTRODUCTION

Every individual has their own ordinary or customary form of obtaining and processing information in learning situations. The common ways or patterns by which people learn are known as their learning styles. Learning styles are set of cognitive, emotional and psychological factors that serve as relatively stable

NEED FOR THE STUDY

Each students has different understanding power, some students learn through hearing some student through seeing or some students learn through action easily, so recognise the most effective learning style for the students will helps to develop approaches for nursing students to benefit from learning situation .Bridget V (2017) conducted across sectional study to develop knowledge about the preferred learning style of Saudi nursing



students that can lead nursing students to comprehend course content and in turn, provide quality care in Saudi. 125 female nursing students who volunteered to participate in this study. The result shows that Saudi nursing students preferred kinaesthetic ($P < 0.0001$) from. The kinaesthetic learning style was the highest ranked preference for all groups of nursing students¹. Kumar, Latha Rajendra(2009) conducted a cross sectional study among 214 medical students of AIMST university. The aim of the study is to understand the characteristic of the learning audience and incorporating demonstrated principles of adult educational design. The main outcome measures were learning styles, auditory, read/write, kinesthetic. The study shows that preferences of different learning styles were visual 9%, auditory 28%, reading/writing 38% and kinesthetic 38%². The researchers decided to conduct the study to assess the learning style prevalent among the nursing students and the impact of that on their academic performance.

MATERIALS AND METHODS

The study is quantitative study. Comparative research design was used to assess the relationship of learning style and academic performance. The study was conducted in Apollo school of nursing with 80 nursing students of third year and internship selected using convenient sampling. The standardised VAK questionnaire designed by Swine brune University of technology is used to evaluate the different learning style adapted by nursing students. The tool consists of 3 sections; **Section A:** Demographic data including age, year, Qualification, schooling from. **Section B:** Academic performance in last DNC examination. **Section C:** VAK questionnaire to assess the learning styles used by student nurses. Content validity of data collection tool was determined by three experts, 2 from nursing education and 1 from nursing service.

RESULTS

The data was analysed by descriptive and inferential statistics. Table 1, shows the background distribution of the students participated in the study. Out of 80 students 62 [77.5%] students were between the age of 18 to 21, 72[90%] students were 12th pass. Out of 80 students 46 [57.5%] students were pursuing third year and 34[42.5%] were internship students. Out of the total samples 53 [66.25%] students were from private schools. Table 2 and fig: 1 shows academic performance of the

students in the last annual exam by the state nursing council. Out of 80 students 37[46.26%] students scored between 66 to 80%. Table 3 and fig:2 shows the learning style of the students. Out of 80 students 27[33.75%] adapt visual and auditory learning style. Table 4 and fig 3 shows the comparison of the learning style of third year and Internship student, out of 80 samples 16[35.5%] third year and 11inters [31.42%] follow visual and auditory learning style. Table 5 shows the association of learning style and academic performance. The calculated chi square value [2.92, 1.25, 3.13] is less than the table value of [12.592] reveals that there is no significant association between the learning style and academic performance.

DISCUSSION

The present study was aimed to assess the relationship between the learning style adapted by students and their academic performance. The research group found limited literature regarding such study among nursing students.

Findings revealed that majority of the students adapt combined learning style (auditory and visual). These findings were in agreement with Rathnakar P. Urval (2014) conducted a descriptive study to understand the preferred sensory modalities of students of learning. Consenting 415 students were administered a printed form of version 7.0 of the VARK questionnaire. The study shows that the majority of students in the study had multiple learning preferences (45.5%) and kinesthetic (33.1%). It was conducted in Kasturba Medical College in India.³

Findings revealed that there is no significant association between the learning style and academic performance.

These findings were in agreement with Muhammad Hamid Chaudhary(2015) conducted a ANOVA study on association of academic performance with learning style preference of medical students of Quaid-e-Azam, medical college Bahawalpur, Punjab, Pakistan. The aim of this study was to assess favourite learning styles and determine their association with the academic performance of undergraduate medical students. 597 students were selected for this study. The result shows that the 82.9% students completed the survey. ANOVA showed there was no significant difference of academic performance among the students having different learning styles.⁴

Table 1: Background characteristics

SAMPLE CHARACTERSTICS	FREQUENCY (F)	PERCENTAGE (%)
AGE (IN YEARS)		
18-21	62	77.5%
22-25	17	21.25%
>25	1	1.25%
EDUCATIONAL QUALIFICATION		



12 TH Pass	72	90%
Graduation	7	8.75%
Above graduation	1	1.25%
YEAR OF THE STUDY		
3 RD year	46	57.5%
Internship	34	42.5%
SCHOOLING		
Govt.	26	32.5%
Private	53	66.25%

Table 2: Academic Performance

ACADEMIC PERFORMANCE	FREQUENCY	PERCENTAGE
<50%	2	2.5%
51-65%	35	43.75%
66-80%	37	46.25%
>80%	6	7.5%

Table 3: Learning style of the students

LEARNING STYLE	FREQUENCY (F)	PERCENTAGE (%)
VISUAL	10	12.5%
AUDITORY	16	20%
KINESTHETIC	14	17.5%
VISUAL & AUDITORY	27	33.75%
AUDITORY & KINESTHETIC	7	8.75%
KINESTHETIC & VISUAL	6	7.5%

Table 4: Comparison of learning style of the students

LEARNING STYLE	3 RD YEAR		INTERNSHIP	
	FREQUENCY(F)	PERCENTAGE(%)	FREQUENCY(F)	PERCENTAGE(%)
VISUAL	6	13.33%	4	11.42%
AUDITORY	9	20%	7	20%
KINESTHETIC	9	20%	5	14.28%
VISUAL AUDITORY	16	35.5%	11	31.42%
AUDITORY KINESTHETIC	3	6.66%	4	11.42%
VISUAL KINESTHETIC	2	4.4%	4	11.42%

Table 5: Association of learning style and academic performance.

ACADEMIC PERFORMANCE	VISUAL LEARNING STYLE Median 10		Chi square value	df	Table value		
	Above median	Below median					
<50%	2	0	2.92	3	12.592		
51-65%	20	17					
66-80%	21	19					
>80%	0	1					
ACADEMIC PERFORMANCE	AUDITORY LEARNING STYLE Median 11		Chi square value			3	12.592
	Above median	Below median					
<50%	1	1	1.25			3	12.592
51-65%	21	16					
66-80%	26	14					
>80%	1	0					



ACADEMIC PERFORMANCE	KINESTHETIC LEARNING STYLE		Chi square value	df	Table value
	Above median	Below median			
<50%	0	2	3.13	3	12.592
51-65%	20	17			
66-80%	21	19			
>80%	1	0			

Fig 1:- Pyramid represents percentage distribution of nursing students in relation to their academic performance.

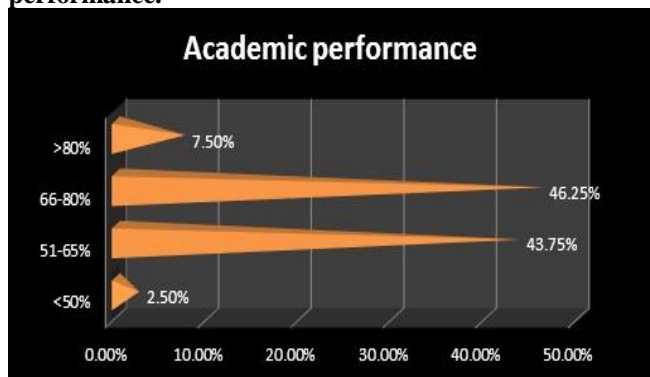
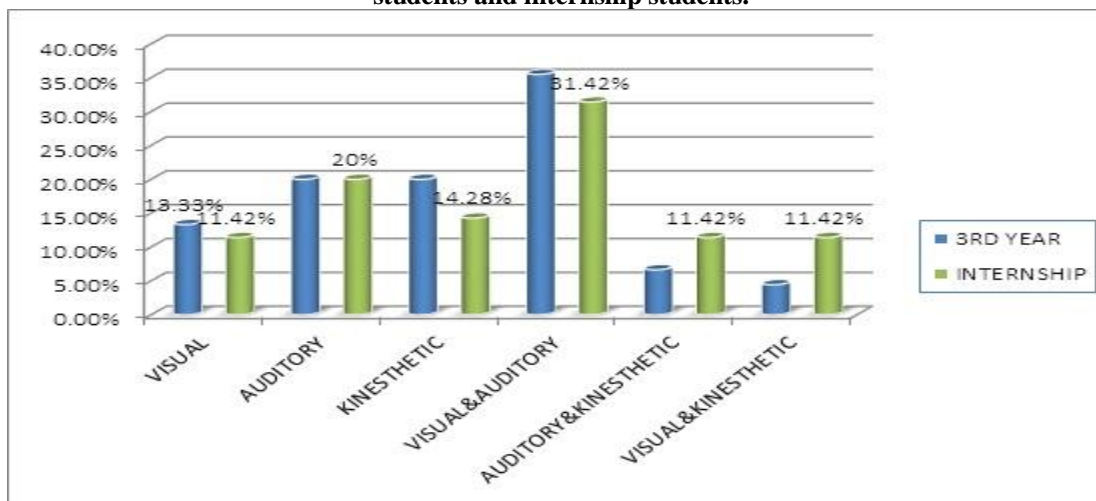


Fig 2: Bar graph represents learning styles of nursing students assessed by VAK questionnaire



Fig 3:- column graph represents learning styles of nursing students assessed by VAK questionnaire of 3rd year students and internship students.



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