



LEARNING PRIORITIZATION: A STUDY TO UNDERSTAND THE RELATIONSHIP BETWEEN LEARNING APPROACHES USING ASSIST, AMONG RAKMHSU STUDENTS

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ABSTRACT

The quantity and quality of knowledge gained by students depends on both approach to learning and existing skills. The future physicians must learn how, when, where the relevant knowledge applied in the treatment of patient. One of the main objective of study was to find the learning approaches of students in different courses. The study result showed many students used strategic approach followed by deep approach but gender wise males were having significant surface approach in their studies. The study provided an insight of learning preference and it was alarming with students having deep approach as second preference irrespective of year of study. The faculty must bring various interactive sessions which allows students to understand the concepts and apply during the patient care.

KEYWORDS :- Learning approach, Students, Physicians, Patient.

INTRODUCTION:

A student in any course is expected and must be a "lifelong learner" to enhance and improve their skills and knowledge. The knowledge content is changing, updating every day and this knowledge is must for every learner to succeed in their life. The learning environment and styles plays a pivotal role in quality of learning and academic success.

The learning approaches have been given importance in higher education, they have not received enough attention in medical programs (1). Medicine is one of the esteemed professions with highly competent people.

One of the challenge is imparting vast knowledge content within a limited time and ensuring that it is retained, remembered and effectively interpreted by a student. For student it is quite essential to be aware of recent findings and materials in medicine(2).

The practice of medicine is always associated with retaining the knowledge gained in their studies as well as personal experiences during practice. According to medical education research, students who enter medical school are highly motivated (3) as the admission criteria used in medical schools are generally based on their academic competency proven through strong secondary school performances, motivation to become lifelong learners, personality and communication skills⁽²⁻⁷⁾.

The students who have joined the institute will have different learning styles and its imperative that faculty must acknowledge their learning styles to cater the subject to every student. The success of student also lies with the teaching methods adopted by faculty with specific aim of making them life long and effective learners. According to researches, both approach to learning and study skills are important factors that affect the quality of student learning⁽⁸⁾.

According to Ramsden et al, based on students learning

approaches they are classified into three groups: deep approach, strategic approach and surface apathetic or superficial approach (9).

Approaches to learning may be defined as the behavioral and intellectual responses elicited by students in response to a learning environment. The terms "surface apathetic learners" (SAL) and "deep learners" (DL) were coined from the basic idea of observing students and qualitatively identifying two different ways of approaching a reading task: memorize only (SAL) or understanding the text (DL) (10).

Many models and measures of learning approaches (LA) and styles have been described in literature (11). The instruments to study these approaches included Approaches to Studying Inventory (ASI) and the relatively modern Approaches and Study Skills Inventory for Students (ASSIST), which has been used to measure learning styles in undergraduate students. It was proposed that the motives actually determined the learning process⁽¹¹⁻¹⁴⁾.

Based on these facts this study was conducted to know the learning approaches in the health sciences university students.

MATERIALS AND METHODS:

The study is a prospective cross sectional study conducted on the RAKMHSU students belonging to Medical, and Pharmacy colleges. The total sample size is 200 students in both the groups taking into consideration the confidence level of 95% and confidence interval of 5% and sample population 800 students.

The instrument used to assess the student approach to learning was ASSIST (Approaches and study skills Inventory for Students). The inventory contains 67 statements, and respondents indicate their agreement with each statement, using a five point Likert scale ASSIST consists of four sections. The first section is a six-item measurement of the student's own

conception of what the term "learning" means to them. The second section consists of 52 statements related to mainly three dimensions-- deep, strategic, and surface-apatetic. The ASSIST measures student's approaches to learning on mainly three dimensions referred to as main scales; deep, strategic, and surface-apatetic. ASSIST also contains sections related to student's definition of concept of learning and preferences for different types of courses and teaching.

A convenient random sampling was done in this study. All the students of constituent colleges were approached by the investigators, the questionnaire administered and the data collected on the same day. The students who do not wish to participate were excluded from the study. The study group divided into two groups- Medical and Pharmacy.

Data will be entered into SPSS 24 software and was analyzed by descriptive statistics (i.e., mean, SD, frequency). Chi square test was used for the comparison of questionnaire data.

The Pvalue less than 0.05 considered as statistically significant.

RESULTS:

The questionnaire return percentage was 75 for medical and 70 for pharmacy students. The study results showed that higher percentage of medical and pharmacy students preferred strategic approach (p<0.001) than deep and surface apathetic within in the group. In comparison with the groups a statically significant was found with regard to surface apathetic learners (p<0.001) as shown in the table 1.

Table 1: Showing the descriptive statistics data from medical and pharmacy students.

Learning approach	MBBS (75) Mean ± SD	Pharmacy (70) Mean ± SD	P value
Deep approach	45±7.75	45±7.97	NS
Strategic approach	50±10.65	55±10.9	NS
Surface apathetic approach	24±9.55	36±8.77	0.000

The study also compared the gender differences in learning approaches and found that both group were preferring strategic approach followed by deep and surface approach. On comparison we found that females preferred deep approach than males (p=0.08) and males were significantly preferring Surface apathetic approach (p=0.02) with no significant difference in strategic approach as shown in table 2.

Table 2: Showing the comparison of female and male mean scores for each approach.

Learning approach	Females Mean ± SD	Males Mean ± SD	P value
Deep approach	60±7.49	58.52±7.78	0.08
Strategic approach	75.4±10.93	72.85±9.7	0.26 (NS)
Surface apathetic approach	46±10.34	51.62±8.49	0.02

DISCUSSION:

The learning approach is very essential to understand the content and grasp the knowledge with respect to the learning situation and context.

According to Leite et al the deep approach emphasizes understanding concepts, relating and having an interest in ideas. Surface apathetic approach, on the other hand, is a syllabus bound superficial method of learning, where emphasis is on habitual memorization, with a lack of understanding and intention to only cope minimally with the course. With the strategic approach, students are motivated to achieve the highest scores possible. This involves good time management and study organization, however, this type of learning may result in fragmented understanding of contents, with poorer integration across topics as compared to the deep approach⁽⁴⁵⁾.

Several studies have been conducted on various populations of medical school students globally, examining students' approaches to learning (16-18). Compared to previous studies our study done in more heterogeneous group of population as in RAKMHSU the student come across from 35 different nationalities.

A study conducted in Singapore, showed that higher percentage of medical and pharmacy students preferred strategic approach than deep and surface apathetic within in the both groups (19). Which was in accordance partially with study which found that the majority of students used deep and strategic learning approaches, with the predominant approach to learning being the strategic approach.

It can also be correlated with study done in Aruba by Shankar et al (18) showing that the majority of medical students used deep and strategic approaches to learning.

The study according to our data clearly states that strategic approaches scores of medical and pharmacy students indicates that they are motivated for achievement, organizing their studies and managing their time. On contrary in Shah et al.'s (20) study of the learning approach among health sciences students, he found that majority of the medical students adopted the deep learning as their predominant learning approach.

The various previous studies did not find any statistically significant difference in gender wise learning approach (17,21,22). While our results showed both group were preferring strategic approach followed by deep and surface approach. On comparison we found that males were having significant surface approach in their studies, with no significant difference in strategic and deep approach.

This clearly shows apart from strategic approach females preferred understanding the concepts and males were merely memorizing the contents.

The results suggest despite of teacher's effort to promote active and self-learning majority of student's focus was on fragmented learning with focus on getting good grades.

Our study is a pilot study applied on one batch of students and serves to bring awareness among students and encourage them to adopt appropriate learning styles to maximize the knowledge.

LIMITATIONS:

1. Questionnaire was a self-reporting tool and bias by subjects cannot be ruled out.
2. Done in single university cannot be generalized to student population.
3. Need to study with further batches of students.
4. Year wise comparison not done.

CONCLUSION:

The learning approach in health care profession changes with

different demographic variables. It's essential that the faculty should intervene and create a favorable environment allowing each learning approaches to enhance the learning and preparing them for better future and patient care.

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