



# Learning approaches and academic performance of 4<sup>th</sup> year MBBS students in QAMC Bahawalpur

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## ABSTRACT

### INTRODUCTION:

Medical students enter the college after 12 years of different schooling system. During their course of study in the medical college they develop different learning approaches.

This research sheds light on the different learning approaches of MBBS students they achieve during their course of study, difference b/w the approaches of boys and girls and their academic performances.

### Objective:

To classify the 4<sup>th</sup> year MBBS students according to their different learning approaches and academic performances.

### Study design:

Cross-sectional descriptive study

### Settings:

The study was conducted in QAMC,BWP.

### Duration of study:

It was carried from March 2013 to May 2013.

### Subjects and methods:

A total of 100 questionnaire were filled.50 from the boy's side and 50 from girl's side in 4<sup>th</sup> year MBBS class of QAMC,BWP.

### Results:

Our research "Learning approaches and academic performance 4<sup>th</sup> year MBBS students in QAMC,BWP" was held during March 2013 to May 2013.30% of male students follow surface approach while 18% of female students follow the same.70% of males follow deep approach while the percentage among females was 82%.Deep learners show better academic performance ,as the female learners show a greater proportion of deep learners so their academic performance was better up to some extent as compared to male students. The difference was not much significant.

### Conclusion:

Female students have greater proportion of deep learners and show better academic performance as compared to male students up to some extent.

## Introduction

Approach towards learning may be defined as the behavioral and intellectual responses elicited by students as a result of exposure to a learning situation.

A simplified model of classification of students learning approaches recommends categorization of approaches as surface & deep approach.

**Surface approach:** It is motivated by a concern to pass the examination and predominant process in acquiring it seems to be rote learning.



**Deep approach:** It is characterized by a keen interest in subject material in attempt to understand the material.

Many models and measures of learning approaches & styles have been described in nature. The instruments too study these approaches included

Approaches to study inventory(ASI)

Approaches and study skills inventory for students(ASSIS)

Which have been used to measure learning approaches in undergraduate medical students. The three trends (surface, deep & strategic) reflect different levels of processing of learning.

**Emilia & Mulholland** and **Davis & Scales**, report that medical and Science students generally score higher on surface orientation as compare to the Arts students. So, these students apparently follow the surface approach o do well in exams. Whereas same student may follow deep approach under different circumstances.

**Coles,Newble & Clark** showed that traditional curricula support and encourage surface approach.

With the change in power distribution, awareness in subject of science and increasing trend among the females to obtain medical education. Gender has also become a factor in selection of teaching strategy in view of dominant motives and preferred approaches selected by males and females.

It is now known that undergraduate students have different learning approaches and it has also been examined that gender difference in learning approaches exist among the undergraduate medical students.

## Objectives

The objective of the study was to:

-to compare the learning approaches and academic performances of boys and girls of 4<sup>th</sup> year MBBS in QAMC.

## Methodology

### Setting:

The study was conducted in QAMC, BWP.

### Duration of study:

It was conducted from March 2013 to May 2013.

### Study population:

100 students from 4<sup>th</sup> year MBBS in QAMC, BWP.

### Study design:

Cross-sectional descriptive study.

### Sampling techniques:

Convenient sampling techniques.

### Inclusion criteria:

Willing students of 4<sup>th</sup> year MBBS in QAMC, BWP.

### Data collection:

A simple pretested questionnaire was distributed in the students. It can be easily filled by the respondents. The questionnaire contained two parts .Part A consisted of bio-data & part B consisted of questions related to subject. The aim of the study was to compare the learning approaches and academic performances of male and female students of 4<sup>th</sup> year MBBS in QAMC, BWP.



## **Data analysis:**

The data was analyzed manually and interpreted in form of tables. The questionnaire was designed to access the learning approaches and academic performances of the 4<sup>th</sup> year MBBS students. It contained 15 questions that were designed on the basis of different factors.

- 1) Achievement motivation efficient study habits driven by an extrinsic need to succeed
- (2) Reproducing Orientation - rote memory;
- (3) Meaning Orientation – a search for deep understanding of the subject plus a need to succeed;
- (4) Comprehension - a search for connections and relationships in the material;
- (5) Globetrotting - a fragmented approach to studying;
- (6) Logic - a stress on rationality rather than intuition to reach conclusions.
- (7) Improvidence -(lacking foresight for the future, heedless, incautious) undue caution in developing main ideas.

On the basis of these factors question no.1,2,3,4,7,8,13 & 14 were designed to access the surface approach and question no.5,6,9,10,11,12 & 15 were designed to access the deep approach.

## **Results**

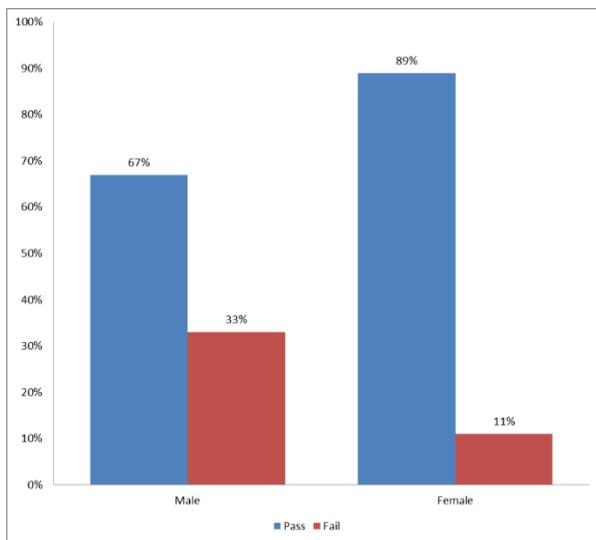
Our research on “Learning approaches and academic performances of 4<sup>th</sup> year MBBS students in QAMC,BWP” shows the following results 41% of male students prefer to memorize their lecture notes while in females the proportion is only 26% (figure no.1a, b).75% male students prefer to memorize the text books and 91% female students prefer the text book memorization 4% male students find better to study alone while in case of females this proportion is 61%..61% males take interest in

informative lecture notes while 73% females take interest in the lecture notes (figure no.4a, b).85% males prefer to study from text books to understand the basic concepts as compared to 67% females.48% male students consult several other books for detailed understanding while in case of female students the proportion is 35%, .77% male students try to integrate the concepts while in comparison 87% female students follow the same .73% male students want to correlate knowledge and concepts for better understanding on the other hand 87% female students do so (figure no.8a, b).87% male students try to sort out their misconceptions while 91% female students do so 80% male students attempt to clarify and strengthen their concepts while 89% females do so .

33% male students prefer to study before the class while in the females the proportion is just 6% .48% male students visualize textbooks just before exams as compared to 32% females .53% male students study just before exams only to just pass through the exams while in females the proportion is 38%.

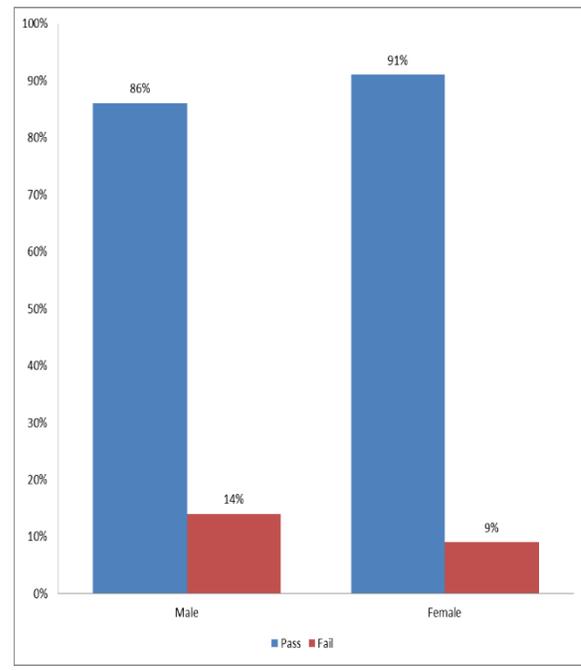
**Table no. 1**  
**Percentage of male and female students with different approaches**

Gender	Surface approach	Deep approach
1.Male	30%	70%
2.Female	18%	82%



**Figure no.1**

**Academic performance of students following surface approaches**



**Figure no.2**

**Academic performance of students following deep approaches**

## **DISCUSSION**

A research was conducted on the learning approaches and academic performances of 4<sup>th</sup> year MBBS students in QAMC,BWP.

Answers to the questionnaire in current study suggest the student's employment of deep approach towards learning. As analysis of responses to each item separately shows that students memorize facts as well as from concepts and can increasingly do so if required.

According to this study 41% male and 26% female students prefer to memorize their own lecture notes, while in study conducted at Aga Khan University Karachi 43.2% students preferred to memorize their own lecture notes.

In this study 75% male and 25% female students prefer to memorize textbooks while in the study conducted at Aga Khan University Karachi the proportion was 74%.

In current study 74% male and 61% female students feel it better to study alone while in study at Aga Khan Uni. 82.6% students did the same.

According to this study in QAMC 61% male and 73% female students take interest in informative lecture notes while in the study at Aga Khan Uni. Karachi the proportion was 75%.

64% male and 74% female students study lecture notes for course only in this current study while in study at Aga Khan Uni. Karachi the proportion was 79.2%.

In this study conducted at QAMC, 85% male and 67% female students prefer to study just from the textbooks while in study conducted at Aga Khan Uni. Karachi the proportion was 47% only.

In our study 48% male and 37% female students consult several other books while in the study conducted at Aga Khan Uni. Karachi the proportion was 77.8%.

In our study 77% male and 87% female students attempt to integrate the concepts while in study at Aga Khan Uni. Karachi 63.46% students did the same. According to this study on learning approaches 73% male and 87% female students try to co-relate their concepts while in previous study at Aga Khan Uni. Karachi 67.4% students tried the same.

In this current study 87% male and 91% female students try to understand their misconceptions while in previous study at Aga Khan Uni. Karachi 79.8% students tried to understand their misconceptions.

According to this study at QAMC, 80% male and 89% female attempt to clarify and strengthen their concepts while 80.76% students did the same in the study held at Aga Khan Uni. Karachi.

33% male students and 6% female students prefer to study the subject before class according to this study while according to study at Aga Khan Uni. Karachi 64.46% did the same. According to this study, 48% male and 32% female students visualize textbooks just before exams while at Aga Khan Uni. The proportion was 50.96%.

53% male students and 38% female students study just to pass through the exams according to this study while according to the study at Aga Khan Uni. Karachi the proportion was 50.96%. In this study responses of the students shows that most of them following the deep approach while the student's response was towards strategic approach according to the research by "Zoon Naqvi and Rashida Ahmad" and they found that results did not depict a demonstrable learning approaches during the academic year. According to the research of "Rehana Rehman, Rakshan Khan, Muhammad Atif Akahi" the strategic approach was found among most of students which is the combination of both surface and deep approaches. In subscale analysis females were better in seeking, meaning and relating ideas while males were found to prefer learning environment to support better understanding. In our research about learning approaches deep approaches was predominantly found among male and female students. Research by "Keithia L. Wilson, Rosly M. Smart, Robert J. Watson" indicated that no gender differences were found on equivalent deep and surface approaches and achieving scales. Whatever irregular pattern of learning behavior which emerges after factor analysis showed very little and non-significant relationship between learning approaches and academic performances

## CONCLUSION

From this study we conclude that female students have larger proportion of deep learners and they show better results as compared to male students who have lesser no. of deep learners but the difference is not much significant.

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