

# Study approaches adopted by physiotherapy students

\*Venkadesan R, \*Gunjan Vermani, \*Smati Sambyal, \*\*Sanjiv Duggal, \*\*\*Monica Gulati

\*Lecturer, \*\*Senior lecturer, \*\*\*Dean, School of Applied Medical Sciences

Lovely Professional University, Jalandhar-Ludhiana G.T Road, Phagwara-144402, Punjab

## Abstract

A Study approach adopted by students varies from one student to another. Meanwhile teaching methodology, lecturer's guidelines as well as criteria for obtaining high marks in examination control the students learning approach. This study used to find out the relationship between study hours, family income, part time job and academic results with study approach. Biggs' Study process questionnaire was used to analyse the study approach adapted by Physiotherapy students. Total of 100 BPT and 17 MPT students of Lovely Professional University were recruited for this study. The data were analysed in relation to student's academic scores, part time jobs, family income and study hours. Results of this study showed that 59% of Physiotherapy students adopted deep achieving, 20% Deep and 19% superficial study approach. From this study majority of physiotherapy students adopted a deep-achieving learning approach that means they are willing to obtain higher grades but their family income, part time job and study hours did not correlate with their study approach except academic scores.

**Key words:** Superficial approach, deep approach, deep achieving approach, Physiotherapy

## Introduction

The aim of education is that students learn. Tertiary education should no longer be a process involving only knowledge transfer, but more importantly an understanding of the manner in which the knowledge is acquired by the students should be developed through close monitoring and supervision by the lecturer<sup>1</sup>. Students seem not to adopt universally similar approaches to studying for their courses, and the learning which results seems to vary dependent upon those approaches<sup>2</sup>. Surface approach motive is extrinsic; it is to carry out the task because of either positively or negatively reinforcing

consequences. The student is willing to engage in learning tasks and pass minimally either because life will be even more unpleasant if he does not, or he/she wishes to gain a paper qualification with minimal trouble or effort. Surface motivated students focus on what appear to be the most important topics (as defined by examination) and aim to reproduce them. Because of this focus they do not see interconnections between elements, or the meanings and implications of what is learned. Deep approach motive is based on intrinsic motivation or curiosity; the strategy arising from curiosity is to seek meaning. When a deep approach is adopted, there is a personal commitment to learning, which means that the student relates subject material to personally meaningful contexts or to existing prior knowledge, theorizing about what is learned, and deriving extensions and exceptions. Whereas the deep achieving motive is similar to the surface

## Reprints Requests: Venkadesan R.

Department of Physiotherapy  
Lovely Professional University  
Jalandhar-Ludhiana G.T Road  
Phagwara-144402, Punjab

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approach in that it is focused on a product, in this case the ego trip that comes from obtaining high grades and winning prizes. The general strategy is thus to maximize the chances of obtaining high marks. While this may lead to optimal engagement in the task (as does deep strategy), such engagement is the means, not the end (unlike deep strategy); the nature of the engagement really depends on what earns the most marks<sup>3</sup>. Physiotherapy services occurs in a wide variety of settings that include health organisation, private practices, nursing homes, schools, community settings, sports clubs, and in work place<sup>4</sup>. Early access to Physiotherapy has been reported to have far-reaching benefits of reduced medical costs, improved patient satisfaction, enhanced recovery time, and reduced sick leave, prevention of chronic problems, and reduction of the total amount of physical therapy needed<sup>5</sup>. Physiotherapist's autonomous practice incurs broad responsibilities and raises concerns regarding the delivery of safe, competent, and appropriate patient care<sup>5</sup>. By the nature of their role, physiotherapists frequently develop a close physical relationship and an emotional attachment with their patients that is often unique within the healthcare sector<sup>6</sup>. Reinertsen proposed that there are three ways to lose our autonomy: (1) create a culture that tolerates mistakes and does not deal effectively with colleagues who fail to fulfil their professional obligations; (2) don't follow the evidence; and (3) permit unwarranted practice variation<sup>7</sup>.

Physiotherapy students were asked to complete the Biggs' Study Process Questionnaire (Biggs 1987) which identifies their study approach. Hypothesis states that if most of the students adopted either deep approach or deep achieving approach the learning environment is

more suitable whereas the majority of students who adopted superficial approach then the learning environment or teaching methodology need to be changed. Physiotherapist needs more knowledge about the patient conditions and evidence based physiotherapy treatment for autonomous practice. The present study which deals with approaches adopted by physiotherapy students so that they can have proper counselling and can become qualified Physiotherapist.

### Methodology

The students were asked to fill the informed consent and English version of the Study Process Questionnaire was given to the Physiotherapy students. The original instrument consists of 42 items. It is a 5-point response scale. These response scales were.

5 = always or almost always true (of me).

4 = frequently true of me.

3 = true (of me) about half the time.

2 = sometimes true (of me).

1 = never or only rarely true (of me).

The average marks of the student's current semester, study hours, total family income and involvement in part time employment were recorded. The predominant study profile was identified after processing the raw scores of the Study Process Questionnaire. Analyses were carried out by using SPASS software.

### Results

#### Demographic data

##### Table 1. Demographic data of gender

100 BPT & 17 MPT students were inducted into this study. BPT students were between 17 to 21 years of age and MPT students between 22 to 25 years.

## Table 2: Demographic data of Study approaches

Fifty-nine percent of the students adopted deep-achieving approach. Twenty percent of the students adopted deep approach. Whereas only 19% of the students adopted a surface predominant study approach. 60 percent of the students' total family monthly income (from parents) was more than 1.5 lakh (INR). None of our students have a part time job which requires devotion of at least 3 hours per week of their time.

### Study hours and Academic scores

The amount of time the student spent in studying, excluding sleep and college contact hours, ranged from as little as 2hrs to as much as 6hrs.

Graph one shows very weak positive relationship between study hours and percentage results. The value of  $r = 0.19196$ . Line of best fit is  $Y = 0.6989x + 64.17$  was shown in the graph. Standard error was 0.4240. Graph two shows very weak negative relationship between study hours and percentage results. The value of  $r = -0.1376$ . Line of best fit is  $Y = -0.5296x + 67.46$  was shown in the graph. Standard error was 0.898. Graph three shows weak positive relationship between study hours and percentage results. The value of  $r = 0.3817$ . Line of best fit is  $Y = 1.687x + 55.80$  was shown in the graph. Standard error was 0.8710.

### Study approach and academic scores

Analysis showed that there was a significant correlation ( $r = 0.7520$ ) between the academic scores and study approach.

### Conclusion

Findings of this study is similar to the one reported by Alice Yee-men Jones (1991)<sup>1</sup> except the relationship between academic score and

study approach. This may be due different target population which includes all year students of BPT and MPT instead of only the students of BPT 2<sup>nd</sup> year. Results of this study showed that 59% of Physiotherapy students adopted deep achieving and 20% of students adopted deep achieving approach that means they are willing to maximise understanding of the subject matter and the present environment is more suitable for learning. Although these students appear to be more organised in their studies their family income, part time job and study hours did not correlate with their study approach. Every universities should conduct induction programme for first year students regarding teaching methodologies, assignment preparation and evaluation procedures so that students critical analytical thinking will be encouraged. Josef et al 2005 proposed that therapist is having more responsibilities in case of autonomous practice and Reinertsen said that who fail to fulfil their professional obligation and evidence they will lose their autonomy. Apart from this, teacher has to evaluate academic score through continuous evaluation and has to give counselling individually to the students who adopted superficial approach so that professional obligation can be promoted.

## Appendices

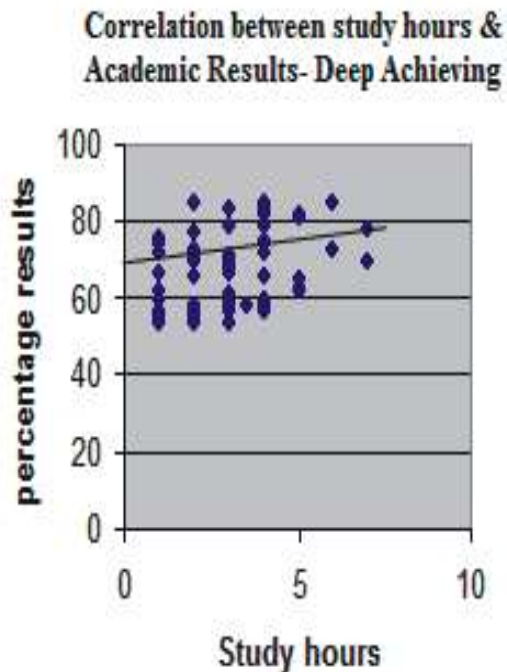
Table 1: Demographic data of Gender

Program	Male	Female	Total
BPT	14	66	100
MPT	4	13	17

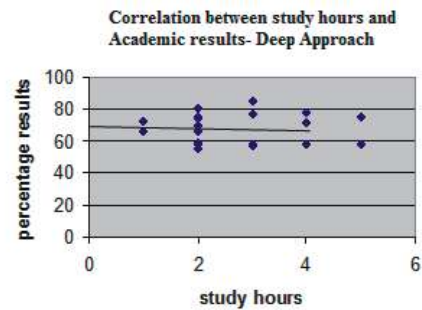
Program	SA	DA	DAA	Total
BPT 1 <sup>st</sup> Yr	2 (13%)	1 (6%)	12 (80%)	15
BPT 2 <sup>nd</sup> Yr	6 (24%)	3 (12%)	16 (64%)	25
BPT 3 <sup>rd</sup> Yr	6 (25%)	11 (46%)	7 (29%)	24
BPT 4 <sup>th</sup> Yr	8 (22%)	5 (14%)	22 (61%)	36
MPT 1 <sup>st</sup> Yr	1 (9%)	2 (18%)	8 (72%)	11
MPT 2 <sup>nd</sup> Yr	0 (0%)	2 (33%)	4 (67%)	6
Total %	23 (19%)	24 (20%)	69 (59%)	117

Table 2. Demographic data of Study approaches

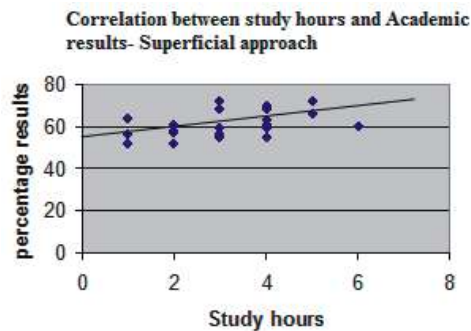
Note: SA- Superficial Approach, DA- Deep Approach, DAA- Deep Achieving Approach



Graph 1. Correlation between study hours and academic results- Deep Achieving



Graph 2. Correlation between study hours and academic results- Deep Approach



Graph 3. Correlation between study hours and academic results- Superficial Approach

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