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# PHYSICAL THERAPY STUDENT'S SATISFACTION DURING THEIR PRACTICAL AND CLINICAL TRAINING SESSIONS AT ABHA, SAUDI ARABIA. A CROSS-SECTIONAL STUDY.

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**Abstract:** Finding student's satisfaction is the current trend in the world universities. The majority of curricula are modified as per the student's satisfaction results. The major aim of this study was to determine the student's satisfaction of Physical Therapy during their practical sessions at the university and clinical sessions at hospitals.

Total 181 students (84 men and 97 women) in four levels of Physical Therapy participated in this study. The students were evaluated on the questionnaire for their satisfaction in physical therapy practical sessions at the university level and clinical training in hospitals.

The questionnaire data was analyzed employing descriptive statistics, student t - test and ANOVA. The mean total satisfaction for the whole questionnaire was  $3.26\pm0.79$  indicating a good satisfaction for students towards their practical and clinical sessions conducted at the university as well as in the hospital settings. Even individual practical and clinical sessions also showed good satisfaction levels with mean  $\pm$  SD of  $3.25\pm0.80$  and  $3.27\pm0.92$  respectively.

Our data strongly suggest that the students of Physical Therapy are satisfied with their practical and clinical sessions. There was no significant difference between male and female student's satisfaction levels but there was a significant difference between various levels of student's satisfaction.

Keywords: Clinical Training; Physical Therapy; Practical; Satisfaction; Student.

### Introduction

American Physical Therapist Association describe Physical therapists as health care professionals who maintain, restore, and improve movement, activity, and health enabling individuals of all ages to have optimal functioning and quality of life [1]. In the Kingdom of Saudi Arabia bachelor program of Physical Therapy was started 30 years before and currently there are more than 16 universities offering this course [2]. Physical Therapy is a unique profession which is an essential participant in health care delivery system [3]. Various universities offer Physical Therapy courses worldwide, with a continuum from a diploma to a doctoral level. In the Kingdom of Saudi Arabia the Bachelor of Physical Therapy is an optimal level of qualification with five to six years of course study, which involves four to five years of classroom teaching at the university and one year of internship at the hospital [4÷12].

As Physical Therapy involves evaluation and treatment of the patients, students should undergo practical sessions at the university and clinical trainings in various hospitals under the guidance and supervision of teaching faculty and specialists from their second year. Hands on experience is very important to sculpt students to treat patients in an effective and efficient way after completion of their course

The current educational system focuses on an important concept called student's satisfaction [13, 14, 15]. As an academician we can enhance students' understanding and learning by knowing satisfaction levels of the students towards their education and learning. Most of the renowned universities have a system of obtaining student's satisfaction surveys after the completion of the program. The majority of studies focused on finding students' experience in the whole program, but few studies are focused on identifying the issues in each level in various contexts like classroom teaching, practical sessions and clinical postings [16, 17]. In this particular study, we intended to obtain students' satisfaction in their practice session at the university and in the clinical training sessions at the hospitals.

# Methodology

Total 181 students (84 men and 97 women) in four levels of Physical Therapy had participated in this study. In this cross-sectional study a group of assistant professors

designed a questionnaire to evaluate student's satisfaction during practical and clinical sessions. The basis for this questionnaire was a published questionnaire on medical imaging students [17]. The questionnaire was divided into part A and B. Part A collected the demographic data and part B gathered information related to student's satisfaction. Part B was again divided into two sections, section one assessing the satisfaction of practical sessions at the university and section two assessing the satisfaction of clinical session at the hospital. Details of the questionnaire are provided in Appendix-1.

After that each level students were gathered after their class hours and the researcher provided them with the necessary information about the study in the classroom and distributed the questionnaires with a written consent form attached to them. Only the students who are willing to give a written consent were asked to participate in the study. Adequate time period was given and students were instructed to give their true opinion. To decrease the psychological pressure and fear the forms were given and taken by another faculty member not related to their specialty and they were instructed that no further investigation or discussion about their opinions will

follow. Collected forms were kept in an envelope and sealed to be given to the data analysis person.

SPSS version 16 was used for the data analysis. To check the Normality of data PP plot and QQ plot was used. Descriptive statistics were used to find mean, standard deviations of each question and for total scores. Cronbachs alpha was used for reliability testing. The mean scores of male and female students for total satisfaction were compared by independent t test. ANOVA was used to find out the satisfaction differences between all the levels of students. p value less than 0.05 was considered as a significant difference.

The aim of the study was to obtain students' satisfaction in their practice session at the university and in the clinical training sessions at the hospitals. In this cross-sectional study total 181 students from four (5, 6, 7 and 8) levels of a physical therapy program participated in the study. The PP and QQ plots were used for the normality checking of the data. All the data obtained in the study was under normal distribution. Descriptive statistics were used to find the mean and standard deviation of each question and total scores. The details of descriptive statistics are presented in Table 1.

Male (N=84)		Female (N-97)		Total (N-181)	
Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
3.21	1.05	3.04	1.21	3.12	1.14
3.50	1.05	3.16	1.23	3.32	1.16
3.51	1.05	3.26	1.19	3.38	1.13
3.46	1.08	3.31	1.38	3.38	1.24
3.40	1.06	2.96	1.34	3.17	1.24
3.02	1.06	2.71	1.04	2.85	1.06
3.58	1.12	3.72	1.31	3.65	1.22
3.14	0.94	3.20	1.10	3.17	1.03
3.36	1.07	3.34	1.21	3.35	1.14
3.48	0.99	3.00	1.19	3.22	1.13
3.41	0.86	3.15	0.95	3.27	0.92
3.32	0.79	3.19	0.82	3.25	0.80
	Mean  3.21  3.50  3.51  3.46  3.40  3.02  3.58  3.14  3.36  3.48  3.41	Mean         Standard Deviation           3.21         1.05           3.50         1.05           3.51         1.05           3.46         1.08           3.40         1.06           3.02         1.06           3.58         1.12           3.14         0.94           3.36         1.07           3.48         0.99           3.41         0.86	Mean         Standard Deviation         Mean           3.21         1.05         3.04           3.50         1.05         3.16           3.51         1.05         3.26           3.46         1.08         3.31           3.40         1.06         2.96           3.02         1.06         2.71           3.58         1.12         3.72           3.14         0.94         3.20           3.36         1.07         3.34           3.48         0.99         3.00           3.41         0.86         3.15	Mean         Standard Deviation         Mean Deviation         Standard Deviation           3.21         1.05         3.04         1.21           3.50         1.05         3.16         1.23           3.51         1.05         3.26         1.19           3.46         1.08         3.31         1.38           3.40         1.06         2.96         1.34           3.02         1.06         2.71         1.04           3.58         1.12         3.72         1.31           3.14         0.94         3.20         1.10           3.36         1.07         3.34         1.21           3.48         0.99         3.00         1.19           3.41         0.86         3.15         0.95	Mean         Standard Deviation         Mean         Standard Deviation         Mean           3.21         1.05         3.04         1.21         3.12           3.50         1.05         3.16         1.23         3.32           3.51         1.05         3.26         1.19         3.38           3.46         1.08         3.31         1.38         3.38           3.40         1.06         2.96         1.34         3.17           3.02         1.06         2.71         1.04         2.85           3.58         1.12         3.72         1.31         3.65           3.14         0.94         3.20         1.10         3.17           3.36         1.07         3.34         1.21         3.35           3.48         0.99         3.00         1.19         3.22           3.41         0.86         3.15         0.95         3.27

3.17

0.82

0.75

Table 1. Mean and standard deviation of each question and total scores.

Reliability of the questionnaire was calculated by using Cronbachs alpha. The value for reliability was 0.87, which is considered as excellent reliability for the questionnaire. Mean and standard deviations of practical, clinical and total questionnaire satisfaction for various levels were provided in Table 2.

3.36

Total Satisfaction

The mean satisfaction difference between male and female students for practical, clinical and total

questionnaire satisfaction was calculated by using independent t test, the values are provided in Table 3. The mean satisfaction difference between various level students for total questionnaire satisfaction was calculated by using ANOVA. One way ANOVA results show a p value less than 0.001 indicating significant difference between various levels satisfaction. The values are provided in Table 4.

3.26

0.79

Table 2. Mean and standard deviation of practical, clinical and total questionnaire satisfaction for various levels.

Level	Mean and Standard Deviation	Practical Satisfaction	Clinical Satisfaction	Total Satisfaction
5 (N-43)	Mean	3.18	3.23	3.21
	Standard Deviation	0.63	0.72	0.62
6 (N-70)	Mean	3.76	3.54	3.65
	Standard Deviation	0.91	0.84	0.83
7 (N-39)	Mean	2.95	2.93	2.94
	Standard Deviation	0.88	0.73	0.67
8 (N-29)	Mean	2.66	3.01	2.84
	Standard Deviation	0.78	0.72	0.68
Total (N-181)	Mean	3.27	3.25	3.26
	Standard Deviation	0.92	0.80	0.79

Table 3. Satisfaction differences between male and female students for practical, clinical and total questionnaire satisfaction.

Type of Satisfaction	Gender	N	Mean	Standard Deviation	p value	
Practical Satisfaction	Male	84	3.41	0.86	0.053	
	Female	97	3.15	0.95		
Clinical Satisfaction	Male	84	3.32	0.79	0.29	
	Female	97	3.19	0.82		
Total Satisfaction	Male	84	3.36	0.75	0.10	
	Female	97	3.17	0.82		

Table 4. Satisfaction differences between various level students for total questionnaire satisfaction.

(I) Level	Mean and SD of (I) Levels	(J) Level	Mean and SD of (J) Levels	p value
5	3.21±0.62	6	3.65±0.83	
		7	2.94±0.67	0.10
		8	2.84±0.68	0.03
6	3.65±0.83	5	3.21±0.62	0.00
		7	2.94±0.67	3.01
		8	2.84±0.68	1.37
7	2.94±0.67	5	3.21±0.62	0.10
		6	3.65±0.83	3.01
		8	2.84±0.68	0.56
8	2.84±0.68	5	3.21±0.62	0.03
		6	3.65±0.83	1.37
		7	2.94±0.67	0.56

### **Discussion**

The aim of the study was to obtain students' satisfaction in their practice session at the university and in the clinical training sessions at the hospitals.

The mean total satisfaction for the whole questionnaire was 3.26±0.79 indicating a good satisfaction for students towards their practical and clinical sessions conducted at the university as well as in the hospital settings. Even

individual practical and clinical sessions also showed a good satisfaction levels with mean  $\pm$  SD of 3.25 $\pm$ 0.80 and 3.27 $\pm$ 0.92 respectively.

We have taken level 5 onwards because only from this level onwards the students have clinical postings at hospitals. There was no significant difference between satisfaction levels of male and female students indicated with p value 0.10. There was a significant difference

between satisfaction of various levels of students indicated with p value less than 0.001.

There are many studies done about finding out students' satisfaction in general about the university education [18, 19]. But there are few studies which concentrated on practical and clinical sessions. Dunn et al conducted a study to find undergraduate nursing students' perceptions of their clinical learning environment in Australia and made students' satisfaction as one of the major component in their clinical learning environment scale [20]. In our study we have also emphasized this aspect and found students have good satisfaction towards their practical sessions at the university and clinical sessions at the hospitals.

The individual level wise comparison of satisfaction was declining in nature. From level five to level six the satisfaction levels increase but after that till level eight it showed a decline. This may be due to increasing complexity in the clinical learning.

We suggest further improvement in the students' satisfaction by improving students' and staffs' interaction, improving quality of teaching in clinical environments by experienced faculty members,

increasing variety of patients and clinical settings exposure for the students.

In our study we had less number of students in the final level and we were restricted to a single program of one college. Similar studies can be done in the future including all the programs of Physical Therapy in various colleges of the Kingdom to find overall satisfaction of the students in the country.

#### Conclusion

The mean total satisfaction for the whole questionnaire was  $3.26\pm0.79$  indicating a good satisfaction for students towards their practical and clinical sessions conducted at the university as well as in the hospital settings. Even individual practical and clinical sessions also showed good satisfaction levels with mean  $\pm$  SD of  $3.25\pm0.80$  and  $3.27\pm0.92$  respectively. There was no significant differences between male and female students' satisfaction levels but there was a significant difference between various levels of students' satisfaction.

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## Appendix-1

Questionnaire to evaluate Physical Therapy student's satisfaction on practical sessions in the College of Applied Medical Sciences and clinical postings in the hospital:

A. Participant's information

1. I ditioipant 5 mion	nation	
Name:	Age:	Gender:
Level:	Mobile Number:	
Email:		

B. Questions about practical sessions and clinical postings at the hospital

`	stions about practical sessions at the university	F				
	Statement	Not at all	To a small extent	To some extent	To a large extent	To a very large extent
1	The practical sessions at the university provided me with a lot of new skills and knowledge that will assist me during my future clinical practice					
2	The laboratory sessions taught me a lot of new skills and knowledge that will help me with the practical examination					
3	I am able to understand the practical sessions very well and it is helpful to me to apply this knowledge to my future patient care.					
4	Self-assessment is an important aspect of my practical laboratory sessions					
5	I am satisfied with the practical physical therapy sessions at the university					
Que	stions about clinical postings at the hospital					
	Statement	Not at all	To a small extent	To some extent	To a large extent	To a very large extent
6	I am able to see variety of cases and procedures at the hospitals					-
7	It is important to go to different hospital postings to learn the variety of work. And I am posted in various hospitals.					
8	I will be able to plan, implement and evaluate care of the patient after my postings at the hospital					
9	Self-assessment is an important aspect in my clinical postings at the hospital					
10	I am satisfied with the clinical postings at the hospital					

(Please tick the appropriate response in the box provided for each question)