

# Satisfaction Level of Physiotherapy Students in North India

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## Abstract

**Background:** Physiotherapy or physical therapy is one of the allied health services that is used to improve patient's quality of life without use of drugs. This service helps in restoration and improvement of function by applying manual therapy, physical modalities, therapeutic exercises and hydrotherapy etc.

**Study Design:** A Randomized Survey Design.

**Objectives:** To find out satisfaction level among physiotherapy students of North India.

**Method:** Total 161 students from Physiotherapy colleges of North India, voluntary participated in the study among which 55 were male and 106 were female. Inclusion criteria were students of third-year and fourth-year of Bachelor of Physiotherapy degree; both male and female with age limit 19-24 years. First-year and second-year students, Postgraduate students, interns and professionals were excluded from the study.

**Results:** Average score of DREEM Questionnaire was 127. In the questionnaire, there were five questions (i.e. 1, 2, 10, 18 & 19) that scored highest value and showed high satisfaction rate. Total 142 students (88.19%) were happy to choose this particular field while 19 students (11.18%) were unhappy.

**Conclusion:** Out of 161 students, 142 students (88.19%) were happy to choose Physiotherapy field. Physiotherapy students of North India have high satisfaction level towards Physiotherapy course.

**Keywords:** Physiotherapy, Satisfaction level, DREEM inventory questionnaire.

## Introduction

Physical therapy is defined as “the restoration or treatment of physical deformities, contractures or pain by applying various exercises, electrotherapeutic modalities, mobilizations, manipulations and hydrotherapy etc. without use of any medications operative procedure”<sup>[1]</sup>. The APTA (American physical therapy association) defines Physical therapy

in which physical therapists examines the patients completely and after that makes an effective treatment plan which primarily focuses on relief of pain, increase range of motion, improvement infuctions and prevention of deformities because of any pathology associated with musculoskeletal, neurology, pediatric, sports, obstetrics and gynecological conditions<sup>[1]</sup>.

**Evolution:** Electrotherapy (such as water therapy, hot, cold and electric current) mainly used by physiotherapists were developed in Greece by Hippocrates, who is considered as Father of Western Medicine. Various exercises were used in the era of 1500s, 1600s, and 1700s in Europe for the treatment of myopathies, degenerative disorders, bony dysfunctions and many more. At the time of 1800s, sensory or muscle re-education were used to treat various neurological or orthopedic disorders and injuries. Physiotherapy mainly originated during the World War I which required the

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treatment of army soldiers mainly injured in war. The outburst of poliomyelitis in the United States during 1920 to 1930 resulted in urgent need of physical therapy. Many individuals in the United States required short term and long term Rehabilitation after the 2nd World War. This raised the physical therapy standard [2].

**Physical Therapy Course Work:** To raise the profession, university decided to start the basic level course for physical therapy to train the nurses and individuals. To initiate this, University of Southern California in 1992 and Creighton University of Nebraska in 1993, start DPT. This was 2 years diploma in physical therapy. Then bachelor's degree was initiated. Presently, it is of 4 and 1/2 year degree. Then, Initiation of master's degree programs started in physical therapy. It was 2 year specialization degree (American Physical Therapy Association, 2003). At present, a number of universities are offering PhD program in Physiotherapy.

**Career in physiotherapy:** Physiotherapists are offered clinical jobs in government as well as private hospitals and academic jobs in institutes, colleges and universities. Physiotherapy services are also required in geriatric and pediatric rehabilitation centers as well as with sports team and individual sports persons. It is also required in corporate sector for prevention and management of work related injuries.

**Current issues in physiotherapy:** The current issues in Physiotherapy in India are students' perceptions about their profession, career opportunities, level of remuneration, job satisfaction, job retention, patient referrals and public awareness about physiotherapy etc [3]. Student's perception, learning behavior & education is the most important basis for any professional growth and educational satisfaction among students. Thus, World Federation for Medical Education focused on evaluating learning behavior and educational environment [4].

The rationale for DREEM inventory questionnaire was to investigate the role of academic environment in student's learning, perceiving and any effect on their growth, profession, progress, behaviour and social well-being [5].

## Methodology

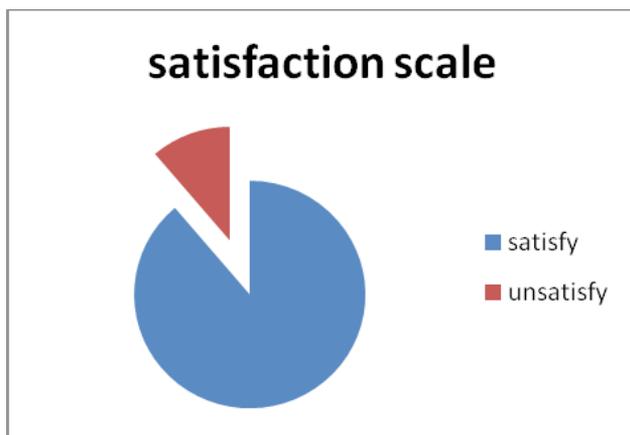
**Eligibility criteria:** The present study was randomized survey design. Inclusion criteria were 3<sup>rd</sup> & 4<sup>th</sup> year undergraduate students, both males & females with age from 19 to 24 years pursuing Bachelor's of Physiotherapy degree. An exclusion criterion was first-year and second-year students, Postgraduate students, interns and Physiotherapy professionals.

**Tools and Instrumentation:** Student's satisfaction level was evaluated by using "DREEM (Dundee Ready Educational Environment) inventory questionnaire" and the data collected was kept confidential. DREEM inventory constitutes 50 questions, that are simple, self-allocated and closed-ended questions related to academic environment, teaching and learning [6]. Each question consists of 4 to 0 score on a "5-point Likert response" as follows: [4 = strongly agree; 3 = agree; 2 = unsure; 1 = disagree and 0 = strongly disagree]. Average scores between 3 and 4 mainly indicate their satisfaction, questions with an average score of 2 represents dilemma and scores of 0 and 1 indicate dissatisfaction. There were some negative questions that are question number 4, 8, 9, 17, 25, 35, 39, 48, and 50. Their scoring was reversed.

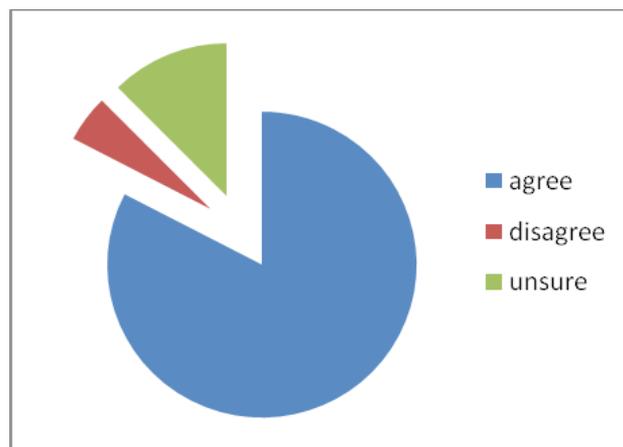
**Procedure:** The survey was conducted at different institutes of north India including Haryana, Chandigarh, Punjab, Delhi and Uttar Pradesh. The participation was voluntary. A stratified random probability sampling was used for data collection. The questionnaire was given to undergraduate physiotherapy students. Voluntarily participation was there, and the questionnaires were kept confidential. Total 161 Physiotherapy students participated in the study voluntarily, among them 55 were males and 106 were females.

## Results

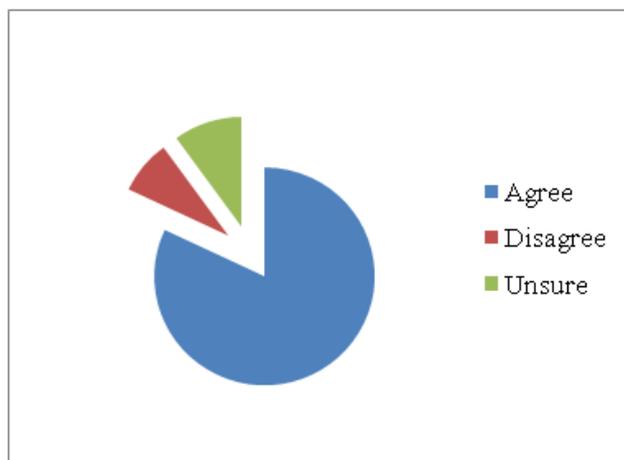
142 students (88.19%) were happy to choose Physiotherapy field while 19 students (11.18%) were unhappy. Average value of DREEM Questionnaire was 127. In this questionnaire, five questions (i.e. 1, 2, 10, 18 & 19) that scored highest value and showed high satisfaction rate. Figure-1 demonstrates satisfaction scale. Figure 2 to 6 demonstrates question's with highest Physiotherapy response value.



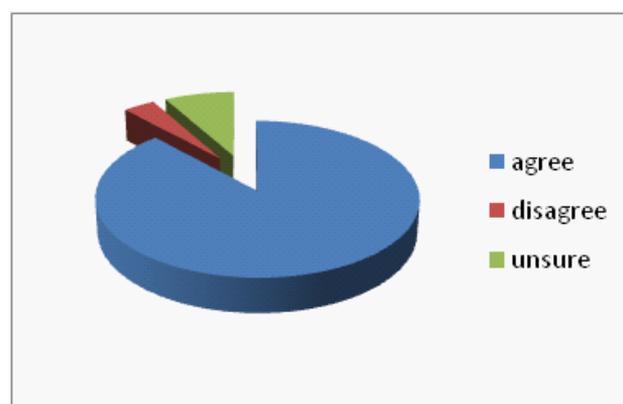
**Fig. 1: Satisfaction level perceived by Students**



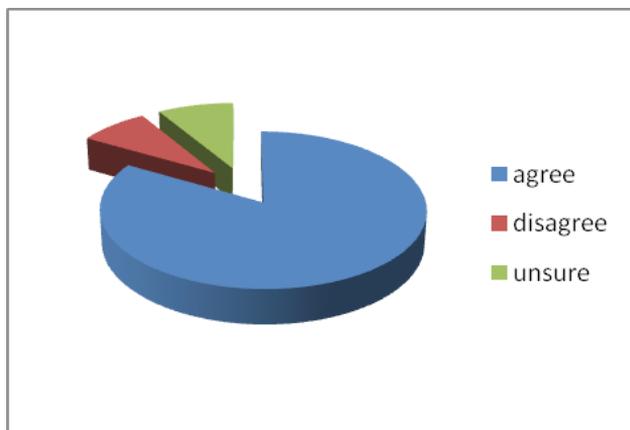
**Fig. 4: (Q 10). "I am confident about passing this year". (Score-133)**



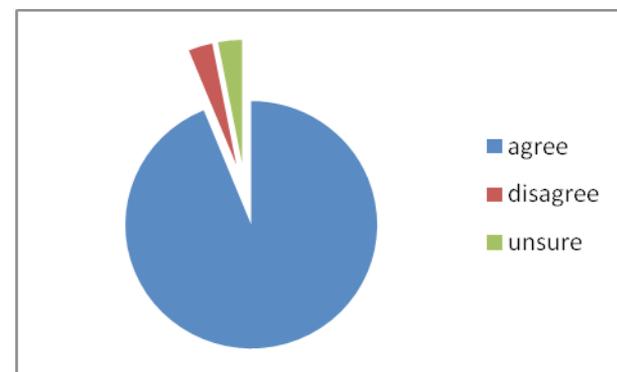
**Fig. 2: (Q 1). "I am encouraged to participate in class". (Score -132)**



**Fig. 5: (Q 18). "The teachers have good communication skills with patients". (Score-142)**



**Fig. 3: (Q 2). "The teachers are knowledgeable". (Score-134)**



**Fig. 6: (Q19). "My social life is good". (Score-151)**

### Discussion

The primary objective of this survey was to assess the student's perception regarding academic environment of undergraduate physiotherapy students. Academic environment is the most important factor in student's behaviour, learning, understanding profession and growth<sup>[7]</sup>. We used DREEM inventory questionnaire

for this purpose. DREEM inventory is a reliable and effective instrument in interpreting the academic environment of various programmes<sup>[8]</sup>. Present survey was performed in Physiotherapy colleges of North India. In this study, maximum numbers of students perceived the educational environment as positive.

82% students responded that they were actively participating in the class that indicates student's positive perception towards teaching environment. Furthermore, new strategies should be incorporated to enhance the more interest like practical sessions, presentations and live examples. 48% students expressed that the teachers provide good support system for the students under stress while others disagreed with this point. Techniques like Jacobson Relaxation exercises, breathing exercises & regular counseling may be incorporated for effective management of stress. 35% students stated that they are tired to enjoy this course. Therefore, few extra-curricular activities such as sports, annual functions, youth festivals etc should be incorporated for more emphasis. 46% students agreed that the "learning techniques which work for me before continue to work for me now", but 17% students disagreed. Learning strategies should be modified depending upon student's capabilities. Teaching should be simple, understandable and clear. Novel learning strategies should be incorporated such as practical training, case studies, audiovisual aids etc. 12% students expressed that the teaching is not stimulating. Therefore, stimulus should be provided such as open discussion, visual presentations to make teaching more effective. The role of teachers should not be concentrated only on information provider but also a skill facilitator. They should develop attitudes and skills required for professional growth. 22% students believed that the school or institute is not time tabled. A pre-planned timetable and scheduled plan should be established in all departments for better learning. 22.36% students expressed that the teaching is not student-centered while. A revised curriculum should be established for the long term learning of the students and enhance their knowledge and confidence. 44% of participant expressed that the cheating is a main issue in this institute which indicates a serious concern. Therefore, strict rules should be included in the school to avoid cheating such as punishments (physical or mental), fine and suspension etc.

Some students (52%) stated that "there is too much factual learning to memorize" and have reported similar concern. Therefore, teaching should emphasize

on long term learning as well as enhancing student's practical knowledge. There should be some holistic knowledge based on values and beliefs. The problem of "teacher-centered teaching and factual learning" can be resolved by implementing "Problem Based Learning (PBL) sessions" and "Short-term Student Research Project" which makes students independent. "Personal and Professional Development (PPD) sessions" can also be implemented to reduce tension and stress<sup>[9]</sup>. The students should be encouraged more towards self-directed learning to raise the confidence of working independently as well as to enhance the student's knowledge, understanding and learning<sup>[10]</sup>. 70% of students expressed that "the teaching time is put to good use". This is a good sign that the time is utilized optimally by maximum students. Students should be advised to utilize their time in library, reading room, OPD, and practical room's etc. 18% students stated that the teachers not give clear examples. Therefore, simple examples should be given to clear the concept and overcome the doubts. 8% students expressed that "they are not clear about the learning objectives of the physiotherapy course". Coordinator should advise to provide clear aims and objectives of the profession i.e. health promotion, health education and improve the quality of life. Almost 60% students agreed that the enjoyment overweighs the stress of study. Excessive stress of the study disturbs their personal life. Therefore, some extracurricular activities and functions should be organized to increase their interest in the profession. 88.19% students were satisfied from their education and environment. They perceived their education more positive. Results suggest that educational performance, career and profession can be enhanced by developing or planning effective and efficient strategic techniques and various plans for better understanding, learning and knowledge<sup>[11, 12]</sup>. Although educational environment needs careful ongoing evaluation on regular basis (such as teaching, learning, curriculum etc.) and requires necessary actions and cooperation from both sides (teacher and student). The overall average DREEM score for Indian medical school, Karnataka, was found to be 117/200 (n = 226), indicating that, students' perceptions towards their teaching were more positive<sup>[13]</sup>. The global DREEM scores in other medical institutes such as in Sri Lanka, Nigeria and UK were found to be 108/200<sup>[14]</sup>, 118/200<sup>[15]</sup>, and 139/200<sup>[16]</sup> respectively. The mean DREEM score for a medical school in India was reported as 107.44/200<sup>[17]</sup>. This survey provides insights to the concerns and standards of Physiotherapy education in

North India. It can be generalized and necessary changes may be incorporated in curriculum as well as teaching and evaluation process to improve the satisfaction levels among the student pursuing Physiotherapy course.

### Conclusion

Out of 161 students; 142 students (88.19%) were happy to choose physiotherapy field and 19 students (11.18%) were unhappy. Average score of students was 127. Students pursuing Physiotherapy course in North India are satisfied with the course. However, survey findings can be incorporated by the administration of colleges to further improve the level of satisfaction.

**Ethical Approval:** Participants were assured about the confidentiality of the study.

**Conflict of Interest:** The authors report no conflict of interest.

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