

ATTITUDE TOWARDS COMMUNICATION SKILLS LEARNING AMONG
UNDERGRADUATE PHYSICAL THERAPY STUDENTS: A CROSS-SECTIONAL
STUDY

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Abstract

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Background: The development of communication skills is one of the essential professional skills in the physical therapy field, which directly affects patient safety, satisfaction, decision-making and compliance with the rehabilitation program. Irrespective of their significance, student attitudes toward learning communication skills may influence engagement and acquisition of skills. **Objective:**

To establish the perception of the undergraduate physical therapy students on the communication skills learning. **Methods:** The study was a descriptive cross-sectional study which was carried out on undergraduate Doctor of Physical Therapy (DPT)

students attending selected rehabilitation institutes located in Karachi, Pakistan. The non-probability convenience sampling was used to recruit 140 students between third and fifth year in academics. Communication skills attitude scale (CSAS) (Positive Attitude Scale, PAS, and Negative Attitude Scale, NAS) was used to measure attitudes towards communication skills learning. The SPSS version 21.0 was used to analyze the data. The descriptive statistics was presented in frequencies and percentages. **Results:** 87.9 percent of the total participants (140) were female. The general data on the attitudes towards learning communication skills showed that 73.6% of students were positively oriented towards communication skills, 24.3% were negatively oriented, and 2.1% demonstrated the neutrality in their attitude. The higher PAS scores than the NAS scores reflected a good level of recognizing the significance of communication skills in clinical practice and low level of resistance to learning communication skills, respectively. **Conclusion:** The physical therapy undergraduates were found to have mostly positive attitudes regarding the acquisition of communication skills. These results justify the systematic and longitudinal incorporation of communication skills education and measurement into the undergraduate physical therapy courses in order to improve the professional competence, as well as patient-centered rehabilitation outcomes.

Keywords: Attitude; communication skills; learning; physical therapy students; CSAS

Introduction

One of the fundamental clinical competencies is communication which forms the basis of patient safety, satisfaction, shared decision-making, and long-term care adherence, especially in the rehabilitation framework where repetition, goal negotiation, behavior change coaching, and long-term therapeutic engagement are essential elements of care. Effective communication in the physiotherapy practice allows proper history taking, clarification of diagnosis and prognosis, formation of a therapeutic alliance, management of expectations and enhancement of patient self-management behavior. New evidence in the field of rehabilitation and healthcare remains consistent: bad communication has been linked to decreased rates of compliance to prescribed exercise programs, decreased patient satisfaction, and less optimal functional outcomes, particularly when it comes to long-term musculoskeletal and neurological rehabilitation (O’Keeffe et al., 2020; Hall et al., 2021).

Communication has been a professional competency that is now being highlighted more as a professional competency in health professions education research than it is

an optional or soft skill. The modern education systems define communication as a measurable, observable, teachable, and competency that ought to be approached in a systematic manner and integrated into the undergraduate education system. The contemporary models of instruction contribute to the longitudinal development in communication skills based on simulation based learning, mentoring based feedback, reflective practice and planned clinical exposure. Most recent systematic reviews and empirical studies have found the training of structured communication skills to improve empathy, professional confidence, patient-centered care indicators, and patient satisfaction in healthcare disciplines (Mohamed et al., 2024; Fernandez-Alcantara et al., 2025; Peimani et al., 2025). Moreover, virtual patients and blended learning techniques are digital and simulation-based educational strategies that are becoming increasingly acknowledged as effective in building communication competence with the involvement of feedback and formal assessment (Ono et al., 2024; Keifenheim et al., 2023).

The attitude of learners towards communication skills training and their readiness to have training on the same is determining whether learners will engage, work hard and practice interpersonal behaviors. Positive attitudes have been linked with high levels of learning, increased openness to feedback and development of skills in the long term, and negative attitudes can lead to resistance to training, surface participation, or fleeting assessment. One of the most proved tools that measure both positive and negative orientations to learning communication skills as it is offered by health professions education is the Communication Skills Attitude Scale (CSAS) (Rees et al., 2002). Recent multi-country studies that utilized the CSAS have generally found positive attitudes of undergraduate cohorts, but have observed a downward trend in the positive attitudes, and an upward trend in negative attitudes have been noted as senior academic years. Increasing clinical work, examination pressure, time limits, and the view that communication skills are not adequately prioritized in summative assessment systems, have been identified as the causes of this trend (Nourein et al., 2021; Pradhan et al., 2024; Pochrzęst-Motyczyńska et al., 2025).

In the context of physiotherapy education in particular, the current scholarship emphasizes the need to establish discipline-specific communication competencies instead of using general medical communication models only. The surveys by experts have found out significant communication skills that are vital in ensuring effective practice of physiotherapy practice, which include active listening, empathy, shared decision making, clear explanation of the therapeutic rationale and responsiveness to the emotional expression of the patients. Although they are acknowledged as important, they are frequently uncharted or clearly covered in the undergraduate physiotherapy

course (Santos et al., 2022). Moreover, some educational interventions, including communication-oriented OSCE stations, reflective practice, peer feedback, and blended e-learning modules, have shown the positive outcomes on the empathy, confidence, and willingness to cope with difficult interactions with patients in physiotherapy students (Soundy et al., 2021; Bearman et al., 2020; Bokken et al., 2021).

Although more and more attention is paid to it internationally, there is a significant gap of evidence. Attitudes to communication skills learning have been studied in most studies in the field in medical and dental students with relatively little research conducted in undergraduate physiotherapy education, especially in low- and middle-income nations (Pradhan et al., 2024; Santos et al., 2022). Furthermore, a significant part of the existing evidence is based in high-income environments and might not be easily generalized to those environments in which the curricular organization, assessment, faculty education, and sociocultural norms of communication vary significantly (Nourein et al., 2021; Peimani et al., 2025). It has also been observed in previous studies that local curricular priorities and assessment strategies have a very strong impact on the attitudes of students towards learning communication skills, which restricts the applicability of such results in learning contexts (Pochrzewska et al., 2025).

The local evidence on the attitude of physical therapy students towards learning communication skills is limited in Pakistan. Such absence of context-specific information can impede the process of curriculum development, policymaking in education, and the accomplishment of the task of integrating the communication competencies into undergraduate training. This is because knowledge of the attitude of students is important in formulating contextually dependant educational interventions such as early exposure to curricula, long-term reinforcement, inclusion of communication skills in OSCEs and clinical assessments, and systematic feedback system. This gap may be addressed to improve patient-centered practice of rehabilitation, improve clinical outcomes, and assist in developing professionals of physical therapists of the future. Based on this, this research was designed to find out the attitude of undergraduate physical therapy students in Karachi, Pakistan, on learning communication skills by administering a validated measure.

Methodology

Study Design

The study design used was a descriptive cross-sectional study which aimed at determining the attitudes of students of the fourth year undergraduate physical therapy program towards learning communication skills.

Study Setting

The research was carried out in the sampled rehabilitation and physical therapy institutes within Karachi, Pakistan, and they are:

- Isra institute of rehabilitation sciences.
- Ziauddin University College of Rehabilitation Sciences.
- Dow University of Health Sciences.
- Baqai Medical University

Study Duration

The data were obtained in 6 months after the consent of the Institutional Ethical Review Committee.

Study Population

Undergraduate students who were pursuing the Doctor of Physical Therapy (DPT) program at the selected institutions made up the study population.

Sample Size

The calculation of the sample size was done with the Raosoft online sample size calculator by assuming a confidence level of 95, a margin of error of 5 and the expected distribution of the responses of 50. On the basis of the estimated accessible population of about 220 undergraduate DPT students in the selected institutes, the sample size was determined to be 140 as the minimum required sample.

Sampling Technique

The method of non-probability convenience sampling was chosen because of the possibilities of access and institutional authorization.

Eligibility Criteria**Inclusion Criteria:**

- Undergraduate DPT male and female students.
- Students who are in the third, fourth, or fifth academic year.
- Those students who have had at least one month of clinical exposure.
- Readiness to make written informed consent.

Exclusion Criteria:

- Students not present during the period of data collection.
- Those students who did not agree to take part in the study.

Data Collection Instrument

The Communication Skills Attitude Scale (CSAS), a self-administered questionnaire that is a validated measure was used to measure attitudes toward communication skills learning. The CSAS is made of 26 items that are equally subdivided into two subscales: Positive Attitude Scale (PAS) contains 13 items.

Negative Attitude Scale (PAS) contains 13 items.

All items will be rated out of five points Likert scale of strongly disagree (1) to strongly agree (5). Greater PAS scores show the presence of more positive attitudes towards communication skills learning and greater NAS scores show the presence of more negative attitudes.

Attitude Categories

Positive attitude: PAS score 43 or higher NAS score 43 or lower.

Negative attitude: NAS score 22 -43 and PAS score 14-21.

No attitude: PAS and NAS scores of 29-42.

Data Collection Procedure

After receiving institutional permission, the potential participants were contacted at their usual academic time. The objective of the research was described and informed consent form was signed before the data was collected. The design of the questionnaires was to administer and collect them on the same day to reduce bias on responses. The confidentiality and anonymity of the participants were highly adhered to and no actual data were documented.

Data Analysis

The Statistical Package of Social Sciences (SPSS) version 21.0 was used in entering and analysing data. The demographic variables and CSAS scores were calculated as descriptive statistics and displayed in frequencies and percentages.

Ethical Considerations

Data collection was done after receiving ethical approval by the Institutional Ethical Review Committee. The involvement was made strictly voluntary and the participants were made aware of their right to leave the study at any point without being penalized. The anonymity and data confidentiality were observed during the research process.

Results

There were 140 undergraduate physical therapy participants in the study. Table 1 and Figure 2 shows the demographic attributes of the involved participants. Most of the respondents were women (87.9), with male students making 12.1 percent of the total. In regards to the academic year, the majority (42.9) of the participants were in the fifth academic year, then the fourth year (40.0) and the third year (17.1).

The attitude to the learning of communication skills revealed in Table 2 and is represented in Figure 1. The results showed that 73.6 percent students expressed a positive attitude towards learning communication skills compared to 24.3 percent and 2.1 percent having negative attitude and neutral attitude respectively.

Table 3 and Table 4 display the distribution of the scores on the Communication Skills Attitude Scale. There was an increased score in Positive Attitude Scale (PAS), which showed a high level of awareness of the significance of communication skills in clinical practice. Conversely, Negative Attitudes Scale (NAS) scores were relatively lower implying that there was a relative lack of opposition against acquiring communication skills on the part of the research participants.

Table 1: *Demographic Details*

Variable	Category	n	Percent (%)
Age (years)	21	18	12.9
	22	33	23.6
	23	61	43.6
	24	22	15.7
	25	6	4.3
Gender	Female	123	87.9
	Male	17	12.1
Academic Year	3rd	24	17.1
	4th	56	40.0
	5th	60	42.9

Table 2. *Overall attitude toward communication skills learning (n=140)*

Attitude	n	Percent
Positive	103	73.6
Negative	34	24.3
Neutral	3	2.1

Table 3. *Positive Attitude Scale (PAS) category distribution (n=140)*

PAS category	n	Percent
14–28	12	8.6
29–42	15	10.7
43–56	80	57.1
≥57	33	23.6

Table 4. *Negative Attitude Scale (NAS) category distribution (n=139; 1 missing)*

NAS category	n	Percent
14–28	7	5.0
29–42	78	55.7
43–56	52	37.1
≥57	2	1.4

Figure 1. Overall attitude toward communication skills learning (n=140)

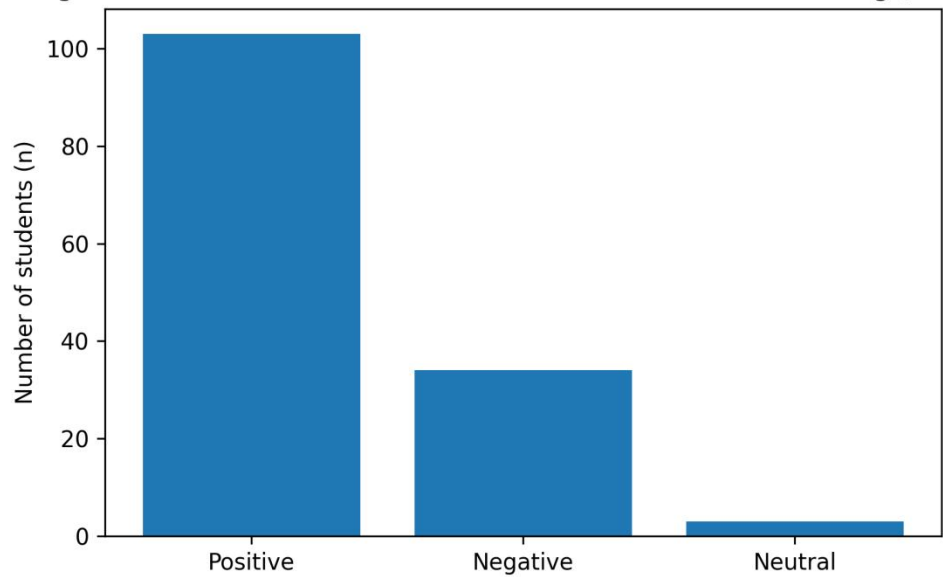


Figure 2. Gender distribution of participants (n=140)

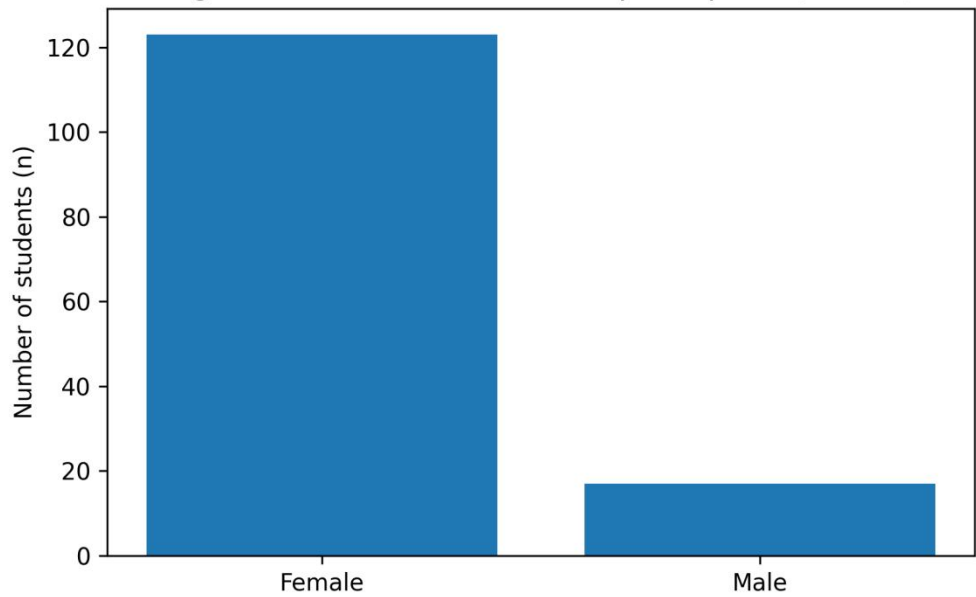
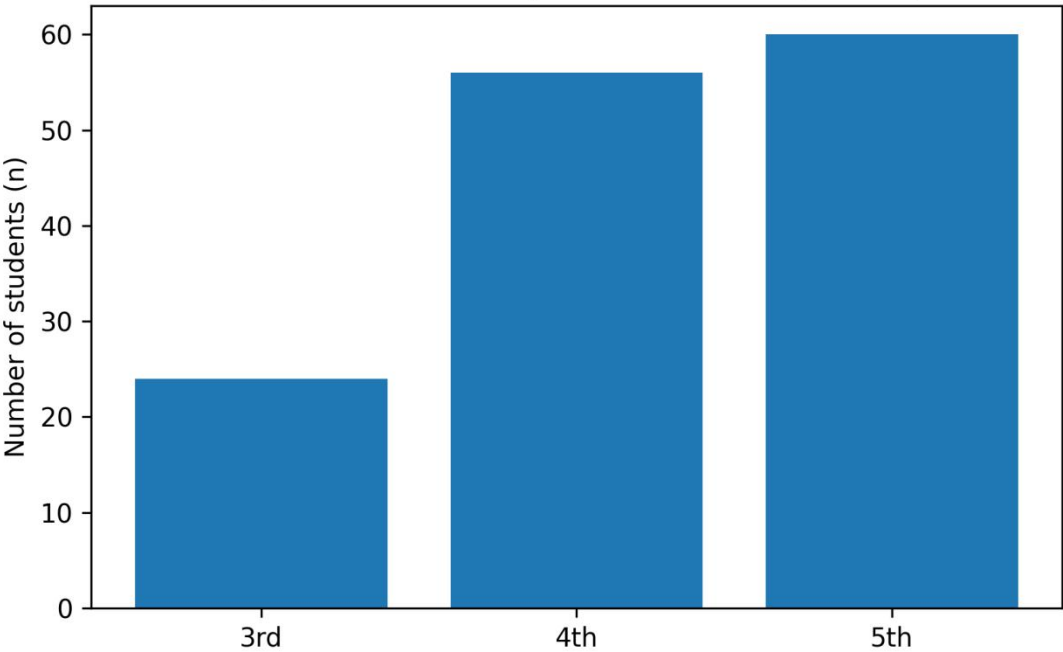


Figure 3. Academic year distribution (n=140)



Discussion

The study was a cross-sectional study to determine the attitude of undergraduate physical therapy students in Karachi, Pakistan to learning communication skills through the Communication Skills Attitude Scale (CSAS), which is a validated scale. The results show that most of the respondents were significantly positive about the use of communication skills learning, which is indicative of the acknowledgment of communication as a core competency in rehabilitation practice (Rees, Sheard, and Davies, 2002; Nilsen et al., 2007). The scores of positive attitudes (PAS) in this cohort are consistent with the international evidence on positive attitudes towards the communication skills of health professional students (Alotaibi et al., 2016).

The high levels of PAS are often seen as a cognitive and affective understanding of the importance of communication as a key component of clinical competence, which is required to create therapeutic alliances, enhance patient education, and increase adherence to rehabilitation interventions (Usman & Siddiqui, 2022). The relevance of positive attitude and intentions among students has been highlighted in international studies, which explains why communication training should be incorporated in the health professional curriculum on an early and longitudinal basis (Latha, Farhana, Sonia, and Riyaz, 2024).

Although the overall trend was positive, close to a quarter of the respondents had negative attitudes, which is a significant learning issue. According to the previous studies, a variety of factors (such as perceptions of curricular overload, a lack of focus on communication training in comparison to technical instruction, the absence of a structured assessment, and a lack of perceived applicability to immediate clinical activities) could be the drivers of negative attitudes towards communication training (Rees et al., 2002; Usman and Siddiqui, 2022).

Educationally, the remarkable co-occurrence of the negative attitudes, even though the general positive orientation, implies that the provision of the communication modules is not enough, and students should perceive the communication competencies as professionally valuable and objectively measurable. The competency-based education models focus on observable behaviors and incorporate them into the formalized assessment methods. The integration of communication skills in performance evaluations, like Objective Structured Clinical Examinations (OSCEs), workplace-based assessment, and clinical progress instruments, helps in strengthening the importance of communication skills as they connect the learning outcomes with a quantifiable performance outcome (Ali, Naz, Rasheed, and Jasmin, 2024).

In addition, low attitudes could be coupled with poor opportunities to practice and feedback which studies reveal play a significant role in the internalization of communication behavior. Researchs that adopt the formats of experience, including simulated patient experiences, small group discussions, and feedback circles, demonstrate both better attitude scores and apparent performance improvements after the intervention (Latha et al., 2024).

Strengths and Limitations

One of the advantages of this research is the application of the well-known and psychometrically justified CSAS measure, that is, the most common tool to measure the attitude towards the learning of communication skills (Rees et al., 2002). This allows comparisons across studies and places results into a wider context of international studies (Nilsen et al., 2007). Moreover, the fact that the students of several academic years were included contributes to the increased contextual relevance and preliminary interpretation of the impacts of the educational stage on the attitudes (Usman and Siddiqui, 2022).

Nonetheless, this research paper is limited. Being a cross-sectional design, it does not allow making any causal conclusions about determinants of attitudes and their changes over time. The convenience sampling can be associated with the selection bias and limit external validity. Lastly, self-reported attitudes pose an informative yet not

necessarily an accurate indicator of actual communicative performance, which highlights why additional observational and performance-based measures should be used to assess the same in future studies (Ali et al., 2024).

Conclusion

The most common positive attitudinal trend was observed among undergraduate physical therapy students in Karachi who showed recognition of learning communication skills demonstrating the wide awareness of communication as a core competency in the profession. However, the occurrence of unfavorable attitudes in a non-negligible sample of students points to the weaknesses in the focus of the curriculum and assessment procedures (Rees et al., 2002; Usman and Siddiqui, 2022). The results justify a continuous curricular change in order to introduce systematic introduction of communication skills during training and invigilate formal assessment models to emphasize the significance of communication in clinical practice.

Recommendation

Communication skills need to be taught during the entire undergraduate program, assessed formally using OSCEs and clinical assessments, faculty should be developed in the practice and longitudinal studies should be used to measure the changes in attitudes of students and how it influences clinical practice.

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