

# The Application of Students' Standardized Patients on the Teaching of Traditional Chinese Orthopedics and Its Effect of Increasing Learning Interest

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**Abstract:** Objective: To analyze the application of students' standardized patients in the teaching of traditional Chinese medicine orthopedics and its effect on increasing interest in learning. Method: Select 80 students of 2019 Chinese medicine major in our college as the research object, and use random list method to divide all students into a control group and an observation group, each group of 40 students, the control group students receive traditional teaching, observation group Students accept the standardized patient teaching model. Results: The recognition rate of students in the observation group for students to standardize patient teaching models, to consolidate theoretical knowledge, to improve clinical thinking skills, to cultivate hands-on skills, to improve communication skills, and to increase income from work-study programs was higher than that of the control group.  $<0.05$ ); The observation score of the observation group students is  $(81.62 \pm 8.05)$ , the clinical skill assessment score is  $(85.84 \pm 8.37)$ , and the total score is  $(83.62 \pm 8.15)$ , which is compared with the assessment score of the control group. Statistically significant ( $P < 0.05$ ); the proportion of students in the observation group interested in learning was 100.00%, higher than the proportion of students in the control group interested in learning (82.50%), and the difference in data between the groups was significant ( $P < 0.05$ ). Conclusion: By implementing the standardized patient teaching model for students, it can improve the teaching quality of TCM orthopaedics, significantly improve the students' interest in learning and academic performance, and have high application value.

## 1. Introduction

Traditional Chinese medicine orthopedics is a very important part of traditional Chinese medicine and is a clinical science of traditional Chinese medicine with strong practice [1-2]. When students study orthopedics in TCM, students are required to be proficient in theoretical knowledge and clinical skills, especially clinical skills are the teaching difficulties in TCM orthopaedics, students often cannot accurately grasp various operating methods and their future employment Has a serious impact [3]. In order to improve the learning effect of TCM orthopaedics students, it is necessary to implement reasonable teaching to students to promote students to master various theoretical knowledge and operational skills of TCM orthopaedics [4]. This article mainly studies the application of students' standardized patients in the teaching of traditional Chinese medicine orthopedics and its effect on increasing interest in learning, as follows:

## 2. Materials and Methods

### 2.1 Information

A total of 80 students of Chinese medicine majors in our college of 2019 were selected as the object of this study, and all students were divided into a control group and an observation group with a random list method, with 40 students in each group.

In the control group, they were 18-19 years old, with an average of  $(18.53 \pm 1.69)$  years old; 25

male students and 15 female students.

In the observation group, they were 18-20 years old, with an average of  $(19.01 \pm 1.72)$  years old; 26 male students and 14 female students.

Comparing general data between groups,  $P > 0.05$ , there is comparability.

## **2.2 Method**

The students in the control group accept traditional teaching by teaching teachers the theoretical knowledge and clinical skills in accordance with the syllabus. During the teaching process, they explain the key points of each knowledge to the students comprehensively and carefully, so that students can become proficient Master various theoretical knowledge and clinical skills.

Observation group students accept the standardized patient teaching mode of students, according to the standards and requirements of the simulated doctor exam on standard simulated patients, and develop the standardized patient teaching mode for students; The training program of Chinese medicine professionals in colleges and universities, and according to the syllabus and plan, eight typical and common bone injuries are selected as the standardized patient teaching model training items, which are: distal radius fracture, middle and lower tibia fracture; shoulder dislocation, hip Joint dislocation; frozen shoulder, lumbar disc herniation; knee arthritis, osteomyelitis, etc.; select excellent students based on the principles of student voluntariness, health, dedication, and upper grades in the final exams of freshmen Students act as simulated patients for one of the diseases, and senior orthopedic doctors and teachers train the students so that students can simulate typical patients and become standardized simulated patients for teaching.

The development of the standardized patient teaching model for students: the trained students were used as simulated patients of eight typical diseases of orthopedics, including fractures of the distal radius and fractures of the middle and lower tibia; dislocation of the shoulder joint, dislocation of the hip joint; peri arthritis of the shoulder, Lumbar disc herniation; knee arthritis, osteomyelitis, equipped with corresponding props in the teaching, so that students can realistically perform the painful expressions and clinical symptoms of related diseases for students to conduct clinical operation training during training Hope, smell, ask, cut, move, measure, physical examination, doctor-patient dialogue, information exchange, etc., so that students can have a comprehensive and clear understanding of related diseases, and compare the etiology mechanism and diagnosis points in the textbook Dialectical treatment of diseases, accurate diagnosis and reasonable treatment.

## **2.3 Observation Indicators and Evaluation Standards**

Observe the comparison of the two groups of students' evaluation of the teaching model, students' assessment results and students' interest in learning.

## **2.4 Data Processing**

Use spss22.0 software to statistically process the data in the article. The measurement data is expressed by t test, mean $\pm$ standard deviation, and the count data is expressed by x<sup>2</sup> test and percentage (%).  $P < 0.05$  indicates that the data difference between the groups is statistically significant.

## **3. Results**

### **3.1 Comparison of the Evaluation of the Teaching Model by the Two Groups of Students**

The recognition rate of students in the observation group to the students' standardized patient teaching model is conducive to consolidating theoretical knowledge, improving clinical thinking ability, cultivating practical skills, improving communication skills, and increasing income from work-study programs, which is higher than that of the control group.). As shown in Table 1:

Table 1 Comparison of Two Groups of Students' Evaluation of Teaching Mode [n (%)]

project	Case(n)	Recognized(%)		Partially recognized(%)		do not approve(%)	
		Ob Gr.	Ob Gr.	Con Gr	Ob Gr.	Con Gr.	Ob Gr.
Student standardized patient teaching model	40	30(75.00)	39(97.50)	5(12.50)	1(2.50)	5(12.50)	0(0.00)
Helps to consolidate theoretical knowledge	40	30(75.00)	40(100.00)	6(15.00)	0(0.00)	4(10.00)	0(0.00)
Helps improve clinical thinking ability	40	31(77.50)	40(100.00)	5(12.50)	0(0.00)	4(10.00)	0(0.00)
Develop practical skills	40	31(77.50)	39(97.50)	5(12.50)	1(2.50)	4(10.00)	0(0.00)
Improve communication skills	40	32(80.00)	40(100.00)	5(12.50)	0(0.00)	3(7.50)	0(0.00)
Work-study programs increase income	40	31(77.50)	40(100.00)	6(15.00)	0(0.00)	3(7.50)	0(0.00)

### 3.2 Comparison of Assessment Results of the Two Groups of Students

The students in the observation group had a score of (81.62±8.05), a score of (85.84±8.37) in clinical skills, and a total score of (83.62±8.15). Compared with the scores of the students in the control group, the statistics were statistically significant ( $P<0.05$ ). As shown in Table 2:

Table 2 Comparison of The Assessment Results of the Two Groups of Students ( $\bar{x} \pm s$ )

Gr	Case	Score(Point)	Score(Point)	TTL(Sc)
Ob Gr.	40	81.62±8.05	85.84±8.37	83.62±8.15
Con Gr.	40	75.68±7.39	72.92±7.14	74.08±7.26
T	--	3.4379	7.4274	5.5280
P	--	0.0009	0.0001	0.0001

### 3.3 Comparison of Learning Interests of Two Groups of Students

The proportion of students in the observation group interested in learning was 100.00%, which was higher than the proportion of students in the control group interested in learning (82.50%). The data difference between the groups was significant ( $P<0.05$ ). As shown in Table 3:

Table 3 Comparison of Learning Interests of Two Groups of Students [n(%)]

Gr.	Case	Strong interest	General interest	Not interested	Interested(%)
Ob Gr.	40	28	12	0	40(100.00)
Con Gr.	40	22	11	7	33(82.50)
X <sup>2</sup>	--	--	--	--	7.6712
P	--	--	--	--	0.006

## 4. Discussion

“Standardized patient” refers to a person who can be trained to accurately express actual problems in a replicated manner [5-6]. Student standardized patient simulation teaching method refers to a method for students to play a specific patient role in a hypothetical situation after specific training for practical teaching [7]. Standardized simulated patients can create real injury and illness scenarios, and then it is convenient for students to see, ask, measure, move, and palpate. This method can connect theoretical knowledge with actual patients, and has a positive effect on students' mastering skills and consolidating knowledge [8-9].

By training standardized students to simulate patients, and used in orthopedics practice teaching, the patient's situation is simulated on-site, and the students are standardized to simulate patients. The theory and practice are combined, and the traditional teaching method is changed to student learning as the center and Student development-centered and student-learning-centered teaching mode, and then form a new teaching method guided by teachers, students as the main body, theory

and practice [10-12].

The study found that the recognition rate of students in the observation group for students to standardize patient teaching models, to consolidate theoretical knowledge, to improve clinical thinking skills, to cultivate practical skills, to improve communication skills, and to increase income from work-study programs is higher than that of the control group. ( $P<0.05$ ); students in the observation group had a theoretical evaluation score of  $(81.62\pm 8.05)$ , a clinical skill evaluation score of  $(85.84\pm 8.37)$ , and a total score of  $(83.62\pm 8.15)$  points. In contrast, statistics are significant ( $P<0.05$ ); the proportion of students in the observation group interested in learning is 100.00%, which is higher than the proportion of students in the control group interested in learning (82.50%), and the data difference between the groups is significant ( $P<0.05$ ).

In summary, the implementation of the standardized patient teaching model in the teaching of orthopedics in traditional Chinese medicine can stimulate students' interest in learning, improve students' academic performance, and enable students to have a higher evaluation of teaching, and have higher clinical application value.

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