

Research on Influence of Small Group Teaching Mode in Stimulation of Learning Motivation of Medical Students

Jia Zhou

School of Humanities and Social Sciences, Luzhou Medical College, Luzhou, 646000, China

Keywords: Small group teaching. Medical students. Learning motivation. Teaching mode

Abstract. Objective: to study the influence of small group teaching mode on the stimulation of learning motivation of medical students. Method: questionnaire survey and analysis are conducted on medical students in a university and their learning motivation and main factors influencing learning motivation are observed, thus effectively improving the learning quality of students. Result: according to the investigation, learning motivation of medical students is closely related to pursuit of material, thirst for knowledge, reputation of small group, social orientation and personal achievements. Small group teaching can effectively improve the learning quality of medical students, enhance the gumption of medical students and improve the level of learning motivation. Conclusion: learning motivation is a dynamic factor closely related to students' learning. The intensity of motivation often influences the learning quality of students. Therefore, to improve learning quality, it is required to stimulate the medical motivation of students.

Introduction

In the scope of psychology, motivation is defined as internal motivation making an individual activity march towards the target activity in a direction. In allusion to the concept of motivation, psychologists mainly analyze the relationship between motivation and behaviors and summarize the following characteristics, mainly including directivity, dynamic property, concealed property and complexity. Directivity mainly means that the thought and action of the subject march towards certain objective and direction; dynamic property refers to the intensity of maintaining or adjusting individual behaviors; complexity mainly refers to the complexity of behaviors in the action process due to the influence of various external factors. Concealed property means that motivation can only infer the reason of behaviors through actual situation and individual performance.

Motivation is mainly divided into two categories: first, physiological motivation which is based on basic demands of individuals in daily life, such as hunger, thirst and sleep. These motivations are based on existence needs and belong to the most original motivation in life and instinct. Therefore, they are not closely related to education. Another motivation is social motivation related to education, mainly referring to motivations based on the learning of cultural knowledge in the living process of human beings. For example, human beings constantly perceive in the process of working or learning, generate keen interests and hobbies and constantly conduct in-depth discussion and research. In other words, social motivation is obtained through constant learning. The most important one is learning motivation.

As a part of social motivation, learning motivation is the manifestation of specific need of learning. Factors influencing students' learning motivation mainly include students' interest in learning, hobbies and personal habits, objectives, faith and interest. All this is closely related to learning motivation. In the teaching process of medical science, medical teachers should ensure the learning quality of medical students, speculate the learning motivation of medical students with medical students as subject and obtain the intensity and durability of motivation of medical students by speculating their learning motivation, including interests and hobbies and learning direction. With good learning motivation and durability, medical students will show keen interest in learning, concentrate in class, show keen interest in experimental lesson and strengthen the ability of independent study. This research mainly conducts questionnaire survey on college students'

motivation, divides students into control group and observation group for analysis and understands the status of learning motivation of medical students and the influence of learning motivation.

Data and methods

General data

This research mainly conducts investigation and analysis on students in a medical university and all medical students. It conducts questionnaire survey on medical students in this semester. Investigation contents include students' gender, age, teaching mode, medical specialty and aspects of learning motivation. This research divides all students into group I and group II by investigating and understanding the teaching status.

Methods

Different teaching methods are used for two groups of medical students. Group I uses small group teaching method and group II uses traditional teaching method. Daily classroom teaching, experimental teaching and final exam etc. are mainly included. Students' learning situation is observed in the exam.

Preparation of questionnaire survey

The college conducts investigation and analysis on learning motivation of medical students through independent research questionnaire. After the investigation, the investigator analyzes each level of internal and external learning motivations of medical students.

Analysis on external learning motivation

External learning motivation mainly includes evaluation by others, social orientation, social pressure and objective pursuit etc.

First, evaluation by others. It mainly refers to evaluation of students' behaviors by family members or friends and teachers, including students' value and opinions etc.

Second, social orientation. It mainly refers to main director or view of value in the society. It has certain influence on the learning behavior of medical students. Due to social phenomena and old concepts, students fail to discover the significance of learning, which greatly hinders their self-identification and struggle.

Third, social pressure. Social pressure means that behaviors and concepts of other students influence students in the learning process.

Forth, objective pursuit of students. Some students mainly regard future remuneration and interests as learning objectives and constantly look forward to the future in the learning process.

Evaluation standard

Evaluation standard is set up mainly according to the grade of questionnaire. Grades of questionnaire mainly include "with" "uncertain" and "without". "With" represents 3 points, "uncertain" represents 2 points and "without" represents 1 point. Higher score shows higher motivation intensity.

Observation indicators

Main indicators in this observation include the following:

First, overall level of learning motivation of students.

Second, differences of learning motivation of group I and group II after the implementation of small group teaching and traditional teaching.

Statistical analysis

This statistics mainly uses SPSS17.0 statistical software for analysis. Enumeration data are subject to X² test and measurement data are subject to T test. Differences with $P < 0.05$ have statistical significance.

Result

150 questionnaires are issued and 150 questionnaires are recovered. The effective rate is 100%.

Level of learning motivation of medical students

According to the investigation, the analysis on learning motivation of medical students is mainly shown in table 1:

Table 1. Analysis on level of learning motivation of students

Motivation status	Score	Overall level (score divided by number of items)
Evaluation by others	7.73 ± 1.65	1.23 ± 0.33
Social orientation	9.87 ± 2.49	1.78 ± 0.28
Social pressure	6.23 ± 1.68	1.08 ± 0.24
Objective pursuit	7.86 ± 3.14	1.67 ± 0.16
Curiosity and gumption	6.87 ± 1.25	1.11 ± 0.24

According to the table above, the order of overall level of intensity of 5 motivations of medical students is successively social orientation, objective pursuit, evaluation by others, curiosity and gumption and social pressure. According to the result, social orientation and objective pursuit are main factors of maintenance of students' learning motivation.

Comparison of motivation after teaching of students in group I and group II

This research divides all students into group I and group II. Group I uses small group teaching method and group II uses traditional teaching method. Learning motivations of students in both groups are compared. Table 2 shows details:

Table 2. Comparative analysis on motivation of students in group I and group II after teaching

Motivation status	Group I	Group II
Evaluation by others	4.18 ± 1.28	4.56 ± 1.17
Social orientation	8.87 ± 1.46	9.8 ± 3.13
Social pressure	4.3 ± 2.96	9.78 ± 2.56
Objective pursuit	7.36 ± 2.78	3.08 ± 0.46
Curiosity and gumption	8.26 ± 1.13	3.24 ± 2.76

According to the table above, differences of group I and group II in evaluation by others and social orientation do not have statistical significance ($P > 0.05$). However, differences of group I and group II in social pressure, objective pursuit and curiosity and gumption have statistical significance ($P < 0.05$). After the implementation of small group teaching for students in group I, their motivations of objective pursuit and curiosity and gumption are greatly improved. This shows that students' learning concept and thinking change. Students in group II pay more attention to social pressure and social orientation and their scores in objective pursuit and curiosity and gumption are lower.

Discussion

Analysis on level of learning motivation of medical students

According to this research, the order of overall level of learning motivation of medical students is successively social orientation, objective pursuit, evaluation by others, curiosity and gumption and social pressure. This research shows that contemporary college students are inevitably influenced by commodity economy in the learning process. Therefore, they mostly put the pursuit of personal interests and social orientation in the first place. Development into useful talents is the main factor maintaining the learning motivation of students and continuously promotes learning.

Influence of small group teaching on learning motivation of medical students

This research mainly conducts comparative analysis on group I and group II and makes comparison after the implementation of small group teaching and traditional teaching. The result shows that the learning motivation of students in group I changes from social orientation and objective pursuit to objective pursuit and curiosity and gumption after small group teaching. This shows that learning concept and thinking of students in group I change after small group teaching. This paper analyzes the reason, i.e. small group teaching mode changes traditional teaching model

and can create a good learning atmosphere for students. Under such a learning atmosphere, students have stronger desire for knowledge and pay more attention to the knowledge learnt rather than the direction of the society and future employment. Their learning gets rid of utilitarian. Students pay more attention to enrich their knowledge and improve their skills. Students in group II pay more attention to social orientation and social pressure. This shows that exam-oriented education has great influence on students in group II and easily causes students to learn for exam and work and influences learning quality.

The research above shows that the implementation of small group teaching can effectively improve students' learning initiative. In the process of implementing small group teaching, attention should be paid to the following:

First, adhere to cooperative principle. It is important to adhere to cooperative principle in small group teaching, which can effectively improve students' learning initiative, improve their cooperative consciousness and help them give full play to superiority.

Second, teachers should pay attention to enlighten students. In the process of group cooperation, teachers should pay attention to enlighten students so as to improve the quality of discussion. How to make students conduct discussions smoothly is a problem to be studied by each teacher. Before small group classroom teaching, teachers should explain relevant contents to students in advance, e.g. what should be noticed during the discussion and what the key direction in this research is, and make students know the direction and content of discussion and improve their initiative through appropriate inspiration.

Third, implement supervision and administration work well. In the process of implementing small group teaching activities, teachers must make students understand their own learning ability and contents clearly and constantly adjust learning strategies. If finding that some students' learning motivation intensity weakens in the learning process, teachers should analyze the reason, communicate with students pertinently, satisfy their psychological requirements, improve their self-confidence in learning and learning motivation intensity and constantly encourage students to learn positively, choose appropriate methods and overcome difficulties.

This research shows that small group teaching can help students conduct independent learning and discussion, motivate their learning initiative, constantly strengthen their learning motivation and improve learning efficiency.

Acknowledgments

This paper is a scientific research subject of Luzhou Medical College: Investigation on Learning Motivation, Psychological Safety and Job Expectancy of Free Medical Students – Achievements of Comparison with Non-free Medical Students (No.: 2011-59)

References

- [1] Yang Lingxiao: Brief Discussion on How to Conduct Small Group Teaching, Hua Zhang. .2010.06(34): 12-13.
- [2] Liu Yuexiong, Fang Ping: Preparation of Questionnaire on Learning Motivation of Middle School Students, Journal of Capital Normal University (Social Sciences Edition). 2006.06(03): 116-120.
- [3] Xiao Hai, Yang Yanjie, Qiao Zhengxue, Qiu Xiaohui, Wu Yuhua, Zhao Guang: Research on Influence of Small Group Teaching on Learning Motivation of Medical Students, China Higher Medical Education. 2011.03(01): 103-104.
- [4] Wang Yunhai, Wu Dandan, Li Feng: Research on Factors Influencing Learning Initiative of College Students and Countermeasure Analysis, Journal of Henan University (Social Sciences). 2006.46(05): 163-168.

- [5] Sheng Yaohuan, Zeng Xiangfu, Li Qihua: Investigation and Analysis on Learning Motivation of College Students and Its Training, *Education and Occupation*. 2006.7(20):101-103.
- [6] Wang Liqiong, Shi Xiaobo, Ding Yiling: Application of PBL+LBL Double-track Teaching Mode in Teaching of Gynaecology and Obstetrics, *Exploration of medical Education*. 2006.5(10): 940-941.
- [7] Yuan Baibing, Yang Boning, Yu Hongrong: Inspirations of PBL Teaching Reform of Medical College, *Hong Kong University on Us, Higher Education Forum*. 2006.4(02): 51-52.
- [8] Liu Chunsong, Zhang Yimin, Zhang Hong: Differences of Gender, Grade and Subject of Learning Motivation of College Students, *China Clinic Recovery*. 2005.9(20): 96-98.