

Medical Students' Attitudes Towards Behavioral Sciences

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Abstract

Objective : This study aimed to find the medical students' attitude to Behavioral Science after completing the course.

Method : Second and third year Chiang Mai medical students were asked to complete a 25-item questionnaire regarding their attitude to Behavioral Science at the end of their final examination.

Results : Both mean scores of attitude were quite high. There was no difference in mean scores for both years, but some items were answered differently.

Conclusion : Even though Behavioral Science was regarded as a crucial matter for medical application and the results were satisfactory, many factors involving this subject, such as the teaching system could be changed. The author suggested a possible way to make Behavioral Science more acceptable and understandable.

Key word : Behavioral Science, Attitude, Medical Students

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Behavioral Science (BS) courses for pre-clinical students have been instituted in most medical schools⁽¹⁾. The main objectives in teaching this subject are a) a humanizing function, to calculate a humanitarian approach in the student, and to help the student to develop emotional and social matu-

rity, and facilitate his work in "whole person" medicine b) to study the science of behavior, train students to think scientifically about human activities, and rely on empiricism rather than merely on common sense, c) the preparation for clinical psychiatry, and d) the understanding of human behavior⁽²⁾.

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At Chiang Mai Medical School, a BS course is given to medical students in their preclinical year. It is lecture-based, lasts 101 hours and an assessment is performed once in the final examination.

This study aimed at testing the students attitude towards BS to see how they felt and thought about it before they studied psychiatry in the clinical year. In addition, their free opinions could be beneficial for the staff and teachers themselves to improve the contents of the subject.

METHOD

Two hundred and seventy-six out of three hundred and sixty medical students were asked to complete a questionnaire after their final examination. Before answering the questionnaire, the students were informed that any responses from them would not affect their marks. The questionnaire comprised 25 items, a 5- rating scale; ranging from "extremely(5)" to "not at all(1)". At the bottom of the questionnaire there was an open question for free opinion. Information was analyzed by descriptive demographic data. The overall scores of both classes were compared by the *t*-test. Factor analysis was performed to classify the group of all items. SPSS for windows was the computer program used in this study.

RESULTS

The response rate was 86 per cent for second year students and 81 per cent for those in the third year. Reliability of items was 0.95, indicating the appropriateness of its use. Overall mean scores of entire attitudes were 3.59, S.D. = 0.82 for both second and third year students. The number demonstrated quite a high level of attitude towards BS. The mean scores of overall items for third year students became lower than that of the second year, but there was no statistical significance.

In the demographic data, the mean age of the respondents was 18.85 (S.D. = 0.88) and 20.24 (S.D. = 1.32) years for second and third year students, respectively. The male : female ratio was 41: 59 for the second year and 54: 46 for the third year.

The items that gained greater scores (3.38-4.16) in both years were; "I am interested in attending the lecture." "I think that BS is related to other subjects in medicine." "I believe that this subject can be applied to daily life", "I believe that

this subject helps learners to obtain a broader view of the world, "I believe that BS is a fundamental course for studying psychiatry in a higher year" (Table 1).

Table 1. The top rank of both year 2 and 3.

Items	Mean. S.D.
I believe that behavioral science is a fundamental course for studying psychiatry in a higher year.	4.16, 0.70
I believe that this subject helps learners to obtain a broader view of the World.	4.11, 0.82
I believe that this subject can be applied in daily life.	4.02, 0.83
I think that BS is related to other subjects in medicine.	3.64, 0.75
I am interested in attending the lecture.	3.38, 0.84

The items that gained the least scores (1.64-1.97); were all negative ones, i.e. "I think BS might be out of date", "I do not trust this subject". "I cannot determine how this subject could be useful to medicine", "I do not like the lecturer more than the subject and the method of teaching", "If BS were an elective subject, it would not be my choice", "This subject is not attractive to me".

When such items were reversed they gained the mean scores of about 3.98- 4.36 (Table 2). Comparing these items between second and third year students, only 6 were different (Table 3).

The factor analytic study yielded 5 factors, which counted for 60.5 per cent of all variables as follows:

Factor 1 consisted of 13 items from 25 items and included the students' interest, and feelings towards BS and its usefulness.

Factor 2 gathered 4 items, which indicated influence of the teaching styles and the character of the teachers.

Factor 3 was concerned with its association and promotion to other fields, and its base for psychiatry.

Factor 4 indicated the importance of spending time for study and examination.

Factor 5 was concerned with the lecture and lecture notes on BS, i.e. "I am interested in attending the lecture", "I borrowed and copied the

Table 2. The Mean, S.D. of the negative items and the reversed mean scores of them.

Items	Mean, S.D	Reversed Mean, S.D.
I do not trust BS .	1.64, 0.78	4.36, 0.78
I think BS is out of date.	1.66, 0.83	4.34, 0.83
I cannot see how BS is useful to medicine.	1.68, 0.89	4.32, 0.89
If BS were an elective subject , it would not be my choice.	1.91, 1.07	4.16, 0.70
I do not like the lecturer more than the subject and the method of teaching.	1.97, 0.91	4.11, 0.82

Table 3. The comparison between second and third year students in all items in which only 6 were different.

Items	t-value	p-value
I think the content of BS is redundant .	3.19	0.002
I cannot determine how BS can benefit medicine.	2.25	0.027
I do not trust BS.	2.63	0.010
BS is not attractive to me .	3.04	0.003
I spent as much time for BS as for other subjects in medicine .	-2.56	0.012

lecture notes from my friend who attended the class in preparation for the examination.”

DISCUSSION

The whole picture of attitudes from both classes was quite good. There were some items that differed between the second and third year as shown in Table 3. It indicated that the third year students had a more positive attitude than those in the second year. This could be caused by many reasons. Firstly, in the second year the students began to learn in a number of basic science subjects such as anatomy, physiology and biochemistry, which were familiar subjects studied in the previous year. These subjects were concrete, easy to understand and more scientific; thus, the students preferred them to BS which was abstract with a psychosocial approach (medical students favored

science – based subjects that they were good at). They are usually weak in social science.

The second reason raised from the learning system was that BS hours were disturbed by the examinations of other subjects. Nevertheless, in the third year, the students could see the importance of BS. They were taught directly or they could see its usefulness by the content, which comprised of mostly diseases or disorders. These reasons could make the students more optimistic towards BS.

Although the mean scores were satisfactory, often only half of the class attended the lecture. This happened because of forthcoming examinations in other subjects. Some students who did not attend had no explanation for their absence.

One reason was the examination with only multiple choice questions, which were not changed for years by some lecturers. Some students did not attend class and only read the old examination papers which were handed down from senior students. Those students were able to cheat in the examination and they were, therefore, not asked about their attitude towards this subject (even though they achieved a good score). An interesting comment (not shown here) was that the method of teaching should be stimulating because the contents were rather boring. A more suitable time for teaching could be provided or a change in the old teaching system, into a complete block lecture system that could improve the situation in the case of interference from other subjects, especially during examination periods.

To achieve a more positive attitude towards BS, many factors were involved such as the students interest in psychosocial matters, the influence of the teachers' style and character, the method of teaching (including media) and evalua-

tion, and sufficient time for study, as evidenced by the factor analytic study.

In addition, the teaching method could also be changed. Reading, panel discussions, films and small group teaching of interview skills were suggested for integration into traditional lectures. The students participation in the course such as the evaluation of the program, could stimulate their motivation and enthusiasm^(4,5).

Limitations of this study are: there was no comparative study, i.e. before an examination. A study conducted at the end of an examination could have been biased because some students did not pay much attention, as they were worried about the next examination. In addition, evaluation should be formative, which could give a more precise attitude than that collected at only one time and in response to the questionnaire paper.

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เจตคติของนักศึกษาแพทย์ต่อวิชาพฤติกรรมศาสตร์

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วัตถุประสงค์ : เพื่อสำรวจเจตคติของนักศึกษาแพทย์ชั้นปีที่สอง และสามต่อวิชาพฤติกรรมศาสตร์

วิธีการศึกษา : ใช้แบบสอบถามเจตคติต่อวิชาพฤติกรรมศาสตร์ จำนวน 25 ข้อที่ทดสอบความเชื่อมั่นแล้วทำการทดสอบในช่วงสอบไล่วิชาพฤติกรรมศาสตร์เสร็จ

ผลการศึกษา : พบว่าค่าเฉลี่ยของคะแนนเจตคติอยู่ในเกณฑ์ค่อนข้างสูงของทั้งสองชั้นปี ค่าเฉลี่ยรวมทั้งสองชั้นปีไม่มีความแตกต่างกัน มีเพียงบางข้อเท่านั้นที่ค่าเฉลี่ยมีความแตกต่างอย่างชัดเจน

สรุปผล : ถึงแม้ว่าวิชาพฤติกรรมศาสตร์จะมีความสำคัญในการนำไปประยุกต์ใช้และผลค่าคะแนนเฉลี่ยเจตคติออกมาพอใจ แต่ยังมีปัจจัยหลายอย่างที่เกี่ยข้อง เช่น ระบบการสอนที่ควรจะได้มีการเปลี่ยนแปลง ปรับปรุง ผู้นิพนธ์ได้เสนอวิธีทางที่เป็นไปได้ในการทำให้อาจารย์ได้รับการยอมรับและเข้าใจมากขึ้น

คำสำคัญ : พฤติกรรมศาสตร์, เจตคติ, นักศึกษาแพทย์

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