RESEARCH REPORT

The satisfaction level of the 'Human Relationship' course under the charge of a nursing teacher: considerations of the factors which affect the satisfaction level of students

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Abstract A nursing teacher has taken charge of the 'Human Relationship' course open to those university students who are aiming for becoming a registered nurse, or a clinical radiological technologist, or a clinical laboratory technologist. The course is conducted, employing several means such as the role-playing method to obtain a feeling of real clinical situations. After the course evaluation was conducted, and the factor analysis on the result of the evaluation was performed, four factors were extracted. Those factors were interpreted as the followings: the first factor as "the factor in the contents of the course"; the second factor as "the factor in the method used in the course"; the third factor as "the factor related to the attitude of and the way of communication of the teacher"; the forth factor as "the factor related to role-playing". In comparison of the averages of the first and third factor scores according to the individual satisfaction levels of the course, there were recognized significant differences among three groups (the group of satisfaction, the group of the middle and the group of dissatisfaction). It has been found that "the contents of the course" and "the attitude of and the way of communication of the teacher" affect the satisfaction level of the students. Some improvements to be done are clarified, such as change in the contents of the course to make students aware of the necessity of the course knowledge in clinical practice, and a way of speech which is to enable students listen easily.

Key words: satisfaction level, human relationship, nursing teacher

Introduction

The concept of human relationship is an important and fundamental element in providing good quality of health care. Thus, we have been searching for educational methods to incorporate the concept in the course by employing some ideas, for instance, arranging a nursing teacher in the charge of the 'Human Relationship' course open to university students who are study-

ing to become a registered nurse or a clinical radiological technologist, or a clinical laboratory technologist, and adopting the role-playing method imagining clinical situations. In order for future improvement of the course course evaluation was conducted.

There are only few researches about course evaluation on courses related to human relationship conducted in healthcare universities. Many researches ¹⁻² are appeared to be on communicational education for students who aim for one of the similar occupations as the ones mentioned in this research, or on the course evaluation of communication counseling course for nursing students. Such researches did manage to pick up some issues in the courses from the outcomes of the

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course evaluations, but there has been no comparison in the satisfactory level of students, or consideration on influencing factors to the satisfaction level. Therefore, this research considers factors affecting the satisfaction level of students from the outcome of a course evaluation, in order to achieve a course by which students can obtain a higher level of satisfaction.

Purpose

The purpose of this research is to analyze the outcome of the course evaluation on the 'Human Relationship' course in relation to the individual satisfaction levels of the students, to consider their factors that affect the satisfaction levels in order to improve the course's quality.

Methods

On the last day of the 'Human Relationship' course in 2003 and 2004, a course evaluation form was distributed to the students. The followings were explained orally: the purpose of this research; participation is voluntary and would not affect their overall results in the course; the form would be taken anonymously and processed statistically; and the outcomes might be presented at academic conferences or on journals. Then, the students who had agreed to participate were asked to submit the completed form into a box. To protect the privacy of the students, there were no sections to write a participator's name, age, sex, the academic year and the department s/he belonged to.

In setting up questions for the course evaluation, the questions were created originally for this research, taking the distinctive characteristics of the course into consideration and with reference to Makino's course evaluation table³⁾. Eighteen questions were set, and each of them asked the students to answer by choosing one of 5 answer responses, ranging from "I think so" to "I don't think so". For statistical processing, 1 to 5 points were allocated to each of the responses, starting from the response "I think so" with the highest point of 5, and the other responses with less points respectively

in order. For statistics, the factor analysis method (principal factor analysis, varimax rotation) and the analysis of variance method were employed.

The teaching method in the 'Human Relationship' course

The 'Human Relationship' course is conducted as a common fundamental course for some curriculum programs, and a unit of this course consists of 15 hours of study (8 of a 90-minute lecture). It is a compulsory course for students in registered nursing program in their first year, and an option for those students in the clinical radiological technology program in the first year and for the students in the clinical laboratory technology program in their second year.

The course flows: the first 60 minutes is held for lecture, then the students perform role-playing on a theme related to the lecture for about 20 minutes, and the last 10 minutes are to complete a coursework sheet and submit it. On every lecture day, the students are to perform role-playing all together and to write what they learn from the role-playing on the coursework sheet and submit it.

The setting of role-playing starts from a close relationship between familiar people, and then gradually moves onto a relationship in a clinical environment: starting from "the relationship between parent and child" to "the relationship between colleagues", "the relationships among patient, patient's family and medical staff in a clinical situation", and to "the relationships between members within a medical team". The course is assessed by attendance, coursework, and written examination.

Results

In 2003, the course evaluation forms were returned by 99 students (the return rate of 91.7%) from the total of the 108 students who had undertaken the course (69 of them were in the registered nursing program, 38 of them were in the clinical radiological technology program, and 1 of them was in the clinical laboratory technology program). In 2004, the forms were returned by

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110 students (the return rate of 91.7%) of the total of the 120 students who had undertaken the course (80 of them were in the registered nursing program, 37 of them were in the clinical radiological technology program, and 3 of them were in the clinical laboratory technology program). Overall, the forms were submitted by 209 students (the return rate of 91.7%) of the total number of the 228 students who had undertaken the course in the two years. In both of the years, the valid response rate was 100%.

In the responses, 165 of the students (78.9%) answered that the 'Human Relationship' course was either "satisfactory" or "satisfactory to some extent". Also, the responses from 30 of the students (14.4%) were "not satisfactory or dissatisfactory", and 14 of the students (6.7%) responded as either "dissatisfactory" or "dissatisfactory to some extent". In this research, those groups were classified as "the group of satisfaction", "the group of the middle", and "the group of dissatisfaction".

Factor analysis was conducted, using the students' responses to the 18 question items in the course evaluation form. The factor number after principal factor

analysis and varimax rotation was set as the eigenvalue of 1.00 or more. The 3 question items ("the assessment should only be made on the basis of the examination", "the assessment should only be made on the basis of coursework", and "the current method of assessment is satisfactory") which had had a low factor loading and had showed similar levels of that loading in several factors were excluded.

As a result, four factors are rotated by varimax rotation and each factor is interpreted from loading value of its component data. The loading value after varimax rotation is shown in table 1. Those factors are interpreted as the followings: the first factor as "the factor in the contents of the course"; the second factor as "the factor in the method used in the course"; the third factor as "the factor related to the attitude of and the way of communication of the teacher"; the forth factor as "the factor related to role-playing". The Cronbach's coefficient of reliability was 0.85 in the whole.

The averages of the factor scores according to the individual satisfaction levels (by group) are shown in figure 1. In the first factor and the third factor, as the

 $Table \ 1 \qquad The \ outcome \ of \ the \ factor \ analysis \ on \ the \ course \ evaluation \ of \ the \ 'Human Relationship' \ course$

$\begin{tabular}{ l l l l l l l l l l l l l l l l l l l$	Factor 1	Factor 2	Factor 3	Factor 4	
The contents were useful	0.839	0.062	0.106	0.121	The first factor: the factor in
The contents were interesting	0.810	-0.015	0.087	0.166	the contents of the course
The contents were easy to understand	0.724	0.086	0.223	0.148	
The textbooks were appropriate	0.660	-0.002	0.213	0.160	
The contents to study were clear	0.627	0.002	0.218	0.170	
The handouts were appropriate	0.481	0.101	0.209	0.128	
The progress of the course was adequate	0.416	0.006	0.301	0.138	
I wanted my opinions to be heard more in the lecture *	0.031	0.801	0.009	-0.056	The second factor: the fac-
A more participatory style of lecture would have been better *	0.043	0.777	0.024	-0.000	tor in the method used in the
I wanted more use of slideshow and video *	-0.037	0.471	0.132	-0.042	course
The teacher talked too fast *	0.106	0.059	0.582	0.057	The third factor: the factor
The attitude of the teacher was unpleasant *	0.424	0.021	0.562	0.119	related to the attitude of and
There was a difficulty in listening to the lecture *	0.258	0.133	0.545	0.147	the way of communication of
					the teacher
The coursework sheet in every lecture was unnecessary *	0.158	-0.004	0.148	0.700	The forth factor: the factor
Role-playing was not necessary *	0.280	-0.111	0.060	0.696	related to role-playing
The contribution rate of the factor (%)	19.60	8.48	7.45	6.60	
Cumulative contribution rate (%)	19.60	28.08	35.53	42.13	

Note: A factor with a factor loading higher than 0.4 is framed with double-line.

Negatively worded items * were reverse scored, and thus these items were rescored.

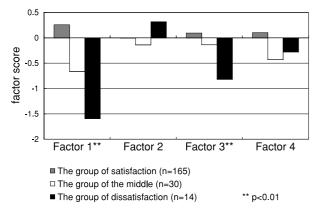


Figure 1 . The averages of the factor scores according to the individual satisfaction levels $\begin{tabular}{ll} \hline \end{tabular}$

dissatisfaction level increased, the course was negatively perceived, and thus significant differences (p < 0.01) were recognized among the three groups. In the second factor and the fourth factor, there was no significant difference generated by the satisfaction levels in the way the course was perceived. However, in the fourth factor, there were indications that the course was perceived negatively by the groups except "the group of satisfaction".

Discussion

The most influential factor in the course satisfaction level of the students was "the contents of the course" and "the attitude of and the way of communication of the teacher". The questions which had a large factor loading in the first factor "the factor in the contents of the course" were the followings: "the contents were useful"; "the contents were interesting"; and "the contents were easy to understand". Therefore, the satisfaction level of the students was declined when the students were not sure what the course contents were useful for, when the contents were not interesting, and when they found difficulty in understanding the contents.

In addition, the questions which had a large factor loading in the third factor "the factor related to the attitude of and the way of communication of the teacher" were the followings: "the teacher talked too fast"; "the attitude of the teacher was unpleasant"; and "there was a difficulty in listening to the lecture". This

fact was considered to have accelerated the disinterest of the students in the lecture and the difficulty in understanding the contents of the course.

It has been clarified that there are points of improvement such as to make the course contents clear in the aspect of its necessity in clinical situation, and to contrive a way of communication to make the contents easier to be understood. On the other hand, there is a report that those students who are not active toward learning are likely to evaluate the course contents and the attitude of the teacher at low level⁴). It is suggested that there is necessity to strengthen the motive for learning at the beginning of course, in order to enable students to involve in studying actively.

Furthermore, in the fourth factor "the factor related to role-playing" which was the main characteristic of the course, although there was no significant difference between the groups, there was an indication of a negative perception of the course in "the group of the middle" and "the group of dissatisfaction". While there is an understanding that a participatory type of learning is a desirable method to students⁵⁾, there are also those students who find difficulty in participating actively in role-playing, or who feel uneasy to be open with other students as the course is jointly conducted for the three different programs. It is necessary to consider a type of lecture by which students can feel easy to involve in. There was an indication that the students thought that the coursework sheet was unnecessary. It has been reported that such a coursework should be there not only for submission but also to extend its effectiveness to develop the lecture as a material⁶. Thus, it is also necessary to come up with a way to make a use of the coursework sheet effectively in the lecture.

Conclusion

As a result of the factor analysis on the outcome of the course evaluation, four factors were extracted and they were interpreted as the followings: the first factor as "the factor in the contents of the course"; the second factor as "the factor in the method used in the course"; the third factor as "the factor related to the attitude of 22 Keiko Sekido

and the way of communication of the teacher"; the forth factor as "the factor related to role-playing". In the comparison of the averages of the factor scores according to the individual course satisfaction levels of the students, it was indicated in the first factor and the third factor that as the dissatisfaction level increased, the students felt more negative about the course, and significant differences among the three groups were recognized. From this fact, it has been clarified that the features which influence the satisfaction level of the students are "the contents of the course" and "the attitude and the way of communication of the teacher".

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