

Factors Affecting Nursing Staff's Willingness to Supervise Nursing Students

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Abstract

Though nursing education and training have been widely studied, how to encourage nursing staff to supervise nursing students receives relatively less attention. We aim to partially fill this gap by investigating factors affecting nursing staff's willingness to supervise nursing students. Eleven factors on general qualification merits and seven factors on teaching merits and preferences are considered, for which survey data are collected from a large hospital in China. We find in many cases nursing staffs with factor levels generally regarded as merits are more willing to supervise. However, certain factors with merits are not significantly relevant to nursing staff's willingness to supervise. Our findings can help hospital administrators on how to encourage nursing staffs to participate in nurse training.

Keywords: hospital administration; nurse training; clinical supervision.

1. Introduction

In most countries, nurse education consists of both theoretical and practical trainings, where the prior one is mostly conducted in classrooms, while the latter one is often achieved in hospitals, under clinical supervision by nursing staffs. With no doubt nurse, trainings are important to educate and prepare nursing students for their nursing care professionals, and thus have garnered extensive studies in literature. Bentley (1996) reviews the change of nurse training from an apprenticeship system of preparation to an education system where trainees have student status in past decades.

Cohn et al. (1990) study the effectiveness of a training program for nurse aides. Smith (1991) discusses the importance of raising emotional care in nurse training. Andersson (1993) studies how students' perceptions of professionals nursing change during their entire nurse training program. The author shows that student nurses perceive nursing in a traditional way stably during the training period. Kuen (1997) examines perceptions of effective clinical teaching behaviors of nurse educators by both nursing students and nurse educators. Faye et al. (1999) survey nursing student satisfaction over a nurse training program. Mackintosh (2006) explores the impact of socialization process on pre-registration nursing student's views about care and personal ability to deal with becoming a nurse.

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Training and support for newly graduated nursing students also receive research attention. For example, Oermann and Moffitt-Wolf (1997) describe stresses experienced by new nurse graduates in clinical practice during initial orientation period and investigates social support to these stresses. In addition, Price (2009) studies career choice and early professional socialization of nursing students, and recommends recruitment and retention strategies to address nursing shortage.

In many countries, for examples the United States and China, clinical supervision is required on pre-registration nurse training. Nurse supervisor plays a key role for the career success of nursing students. Carver et al. (2007) investigate impacts of clinical supervision on pre-registration nurse training from the perspective of nursing students. Those authors find that supervision is attractive to students, but there are significant student anxieties about both general and group supervision. Hall (2007) examines the relationship between perceived supervisor support and measured nurse occupation-related outcomes.

However, there is lack of research on encouraging and motivating nursing staffs to supervise nursing students. The problem is important especially in Chinese hospitals because that supervising students is often not a required or anticipated duty by nursing staffs. The following works are helpful for readers to understand nurse training in China. Chan and Wong (1999) review the development of nursing education system in China and Hong Kong. Xu et al. (2000) review the nursing education system in China from historical, economic, and sociopolitical contexts, and compare the system with that in the United States. In addition, Yun et al. (2010) describe the nursing shortage in China and explain the causes of the shortage.

In this work, we investigate factors affecting nursing staff's willingness to supervise nursing students. Eleven factors on general qualification merits and seven factors on teaching merits and preferences are considered, for which survey data are collected from a large hospital in China, in a sample size of 382. We find in many cases nursing staffs with factor levels generally regarded as merits are more willing to supervise. However, certain factors with merits are not significantly relevant to nursing staff's willingness to supervise. Our findings can help hospital administrators on how to encourage nursing staffs to participate in nurse training.

The remainder of the paper is organized as follows. Section 2 describes the survey used in the study. Section 3 analyzes survey data and discusses factors affecting nursing staff's willingness to supervise nursing students. Finally, we conclude the work and provide future research direction in Section 4.

2. Survey

The survey is developed by an expert panel of nursing staffs in a large hospital in China as an attempt to promote nursing supervision in hospitals. Although the questions are based much on the current practice of nurse training in Chinese hospitals, they are deemed to be general and relevant to nursing education and training in other countries. The survey contains 19 questions. Q1 asks whether the respondent is willing to supervise nursing students, and the answer is the variable of interest. Q2-Q12 is about general qualification merits, and Q13-Q19 is for teaching merits and preferences. The survey was answered in 2014 by nursing staffs in a large public hospital in China, with 382 respondents,. The original questions are in Chinese, and below we list the translated questions.

Variable of interest:

1. Willingness to supervise nursing students (1=Yes, 0=No)
General qualification merits:
2. Education (1=Postgraduate, 2=Regular undergraduate, 3=Self-taught undergraduate, 4=Associate degree)
3. Position (1=Associate director, 2=Senior nurse in charge, 3=Senior nurse, 4=Nurse)
4. With good attitude and passion to supervise (1=Yes, 0=No)
5. Strict and careful with work (1=Yes, 0=No)
6. With rich professional knowledge (1=Yes, 0=No)
7. With skill of formal demonstration (1=Yes, 0=No)
8. Able to answer questions correctly and thoroughly (1=Yes, 0=No)

9. Caring students for their study and life (1=Yes, 0=No)
10. Able to lead ward-round (1=Yes, 0=No)
11. Able to communicate with nursing students efficiently (1=Yes, 0=No)
12. Able to correct students for their errors (1=Yes, 2=No)

Teaching merits and preferences:

13. Having a teaching plan (1=Yes, 0=No)
14. In favor of two-way selection between nurse supervisors and nursing students (1=Yes, 2=Not care, 3=No)
15. Believing that strict requirement has positive effect on nurse training (1=Yes, 0=No)
16. Believing that teaching enthusiasm is affected by student initiative (1=Yes, 0=No)
17. Favorite teaching method (1=Lecture without PowerPoint, 2=Lecture with PowerPoint, 3=Case study)
18. In favor of student evaluation by nursing department (1=Yes, 2=Not care, 3=No)
19. In favor of teaching evaluation by nursing students (1=Yes, 2=Not care, 3=No)

We note that for certain questions, such as Q4-Q9, Q11, and Q12, the answers are subjective. That is, the answer may not really measure the respondent's general qualification. For example, a respondent answering Yes for Q5 may not necessarily be stricter and more careful with work than a respondent who answers No for the same question. We regard this as limitation of our study. However, for those questions, the answers may reveal the level of self-confidence of the respondents, which can be relevant to the respondents' willingness to supervise nursing students.

3. Data Analysis

We use Chi-square tests to investigate whether the proportion of nursing staff who are willing to supervise nursing students is affected by the answer to each of Q2-Q19. In Table 1, for each test, we report the test statistic, degrees of freedom, and the *p*-value.

Question	Pearson Chi-Square	Degree of Freedom	<i>p</i> -Value
Q2	1.866	3	0.601
Q3	19.052	3	0.000
Q4	25.251	1	0.000
Q5	1.114	1	0.291
Q6	9.973	1	0.002
Q7	13.171	1	0.000
Q8	16.954	1	0.000
Q9	7.030	1	0.008
Q10	6.296	1	0.012
Q11	7.349	1	0.007
Q12	16.825	1	0.000
Q13	24.466	1	0.000
Q14	11.944	2	0.003
Q15	5.802	1	0.016
Q16	2.476	1	0.116
Q17	4.556	2	0.102
Q18	12.447	2	0.002
Q19	3.451	2	0.178

Table 1: Chi-square Tests Results for Nursing Staff's Willingness to Supervise Nursing Students

We assume a significance level of 0.05 for all the tests. For questions with answers Yes and No and a p -value less than 0.05 (Q4, Q6- Q13, and Q15), Chi-square tests with results summarized in Table 1 indicate with which answer the corresponding nursing staffs are more willing to supervise nursing students. However, for questions with answers in more than two levels and p -value less than 0.05 (Q3, Q14, and Q18), we need to further compare nursing staffs with different answers. Here we use a Marascuilo procedure, which enables us to make comparisons between all pairs of nursing staff groups who answer differently for each question in Q3, Q14, and Q18. For preciseness, we omit the details of the Marascuilo procedure. At a significance level of 0.05, the findings of the Chi-square tests with Marascuilo procedure can be summarized as follows:

1. Nursing staffs are more willing to supervise nursing students when they consider themselves possessing the following general qualification merits:
 - a. with good attitude and passion to supervise (Q4);
 - b. with rich professional knowledge (Q6);
 - c. with skill of formal demonstration (Q7);
 - d. able to answer questions correctly and thoroughly (Q8);
 - e. caring students for their study and life (Q9);
 - f. able to lead ward-round (Q10);
 - g. able to communicate with nursing students efficiently (Q11);
 - h. Able to correct students for their errors (Q12).
2. Nursing staffs with different positions are significantly different in their willingness to supervise nursing students (Q3):
 - a. associate directors are more willing to supervise nursing students than other nursing staffs;
 - b. senior nurses in charge and senior nurses are more willing to supervise nursing students than regular nurses;
 - c. There is no evidence that senior nurses in charge and senior nurses are significantly different in their willingness to supervise nursing students.
3. For teaching merits and preferences, nursing staffs are more willing to supervise nursing students when they are:
 - a. having a teaching plan (Q13);
 - b. Believing that strict requirement has positive effect on nurse training (Q15).
4. For general qualification merits, there is no evidence that nursing staffs are significantly different in their willingness to supervise nursing students:
 - a. no matter which of the four education levels (postgraduate, regular undergraduate, self-taught undergraduate, associate degree) they are with (Q2);
 - b. Whether or not they consider themselves strict and careful with work (Q5).
5. For teaching merits and preferences, there is no evidence that nursing staffs are significantly different in their willingness to supervise nursing students
 - a. whether or not they believe that teaching enthusiasm is affected by student initiative (Q16);
 - b. no matter which of the three teaching methods (lecture without Power Point, lecture with PowerPoint, and case study) they are in favorite of (Q17);
 - c. No matter they like, do not care, or do not like being evaluated for their teaching by nursing students (Q19).

6. Nursing staffs with different preferences over two-way selection between nurse supervisors and nursing students are significantly different in their willingness to supervise nursing students (Q14):
 - a. nursing staffs in favor and not in favor of two-way selection are more willing to supervise nursing students than those who do not care about two-way selection;
 - b. There is no evidence that nursing staffs in favor and not in favor of two-way selection are significantly different in their willingness to supervise nursing students.

7. Nursing staffs with different preferences over student evaluation by nursing department are significantly different in their willingness to supervise nursing students (Q18):
 - a. nursing staffs in favor and not in favor of student evaluation by nursing department are more willing to supervise nursing students than those who do not care about student evaluation;
 - b. There is no evidence that nursing staffs in favor and not in favor of student evaluation by nursing department are significantly different in their willingness to supervise nursing students.

Among the above findings, 1a-1h, 2a-2c, and 3a-3b are intuitive. That is, nursing staffs with factor levels generally regarded as merits are more willing to supervise. Finding 4a can be explained by the fact that to become a nurse, higher education level is required in recent years. Consequently, nursing staffs with lower education levels are often with more working years and thus more experienced. Therefore, the willingness to supervise is not significantly affected by education level. For finding 4b, note that in general, strictness and carefulness are little relevant to teaching and supervising. Finding 5a-5c show that the relationship between teaching enthusiasm and student initiative preferred teaching method, or preference over teaching evaluation does not significantly affect supervision willingness. Findings 6a-6b and 7a-7b show that those nursing staffs that do not care how nurse supervisors and nursing students select each other or whether nursing students are evaluated by nursing department are less willing to supervise. This can be explained by the intuition that those who do not want to supervise may more likely to not care.

Our above findings are helpful to hospital administrators on how to encourage nursing staffs to supervise nursing students. First, specific training, seminar, and workshop can be used to enhance nursing staff's qualification merits as revealed by findings 1a-1h and 3a-3b, or at least nursing staff's self-confidence over certain qualification merits, to encourage them to be more willing to supervise. Second, hospital administrators should be flexible about teaching method and student evaluation used by nurse supervisor, since no evidence shows that with specific preference on these two factors, nursing staffs are more willing to supervise.

4. Conclusions

This work investigates factors affecting nursing staff's willingness to supervise nursing students. Eleven factors on general qualification merits and seven factors on teaching merits and preferences are considered, for which survey data are collected from a large hospital in China. We find in many cases nursing staffs with factor levels generally regarded as merits are more willing to supervise. However, certain factors with merits are not significantly relevant to nursing staff's willingness to supervise. Our findings can help hospital administrators on how to encourage nursing staffs to participate in nurse training.

An interesting future research topic is how to incentivize those who are less willingly to supervise nursing students to be more willingly to supervise. Possible incentives include extra pay, bonus, merit points for promotion, teaching award or other specific recognition, etc. It is worthwhile to investigate which kind of incentives works the best under certain circumstances.

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