



The Relationship between Learning Motivation and Self Efficacy among Nursing Students

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Abstract

Introduction: Self-efficacy and learning motivation are two important variables for professional learning, leading to academic success. Nursing students' learning motivation and self-efficacy have been considered in different studies separately, therefore this study aimed to investigate the relationship between self-efficacy and learning motivation among nursing students.

Methods: This is a descriptive-correlational study, carried out at Tabriz University of Medical Sciences in 2013-14. Data was gathered with questionnaires about science motivation and self-efficacy for professional nursing competence and analyzed by descriptive and inferential statistics through SPSS software (version 13).

Results: The learning motivation and self-efficacy of the nursing students was 67.89 ± 14.12 and 68.10 ± 14.50 , respectively. There was a significant correlation between learning motivation and self-efficacy ($P < 0.001$).

Conclusion: Due to the significant relationship between learning motivation and self-efficacy in professional nursing competency, it is suggested that an increase in learning motivation could be associated with the promotion of self-efficacy in professional nursing competency in nursing students.

Introduction

Acquisition of clinical competency begins when first entering the field of nursing and continues until the end of an individual's period of working.¹ Thus, one of the aims of nursing education is training competent nurses in order to protect the health of members of society.² Nursing students rely on theoretical guidelines and clinical experiences to gain nursing knowledge and a sense of self-efficacy, for which definition, analysis, and research can provide invaluable knowledge for the nursing profession and evidence-based practice.³ In other words, nursing education is an integrated combination of practical and theoretical learning experiences offering knowledge, skills and attitudes to students for professional nursing practice.⁴ The complex mix of knowledge, psychomotor skills, problem-solving skills and a sense of competence is essential for clinical practice. Nursing graduates are expected to act independently and competently a short time after their graduation and should be prepared to manage their various professional challenges efficiently.^{5,6} Paying attention to the student's self-efficacy, which can be a predictive factor of clinical skills, should be considered in clinical evaluation.⁷ The results of the study conducted

by Yoo et al. showed that there is a positive significant relationship between self-efficacy and clinical competency, and it is important to create nursing education programs that promote self-efficacy and thus advance clinical competency.⁸ Self-efficacy and motivation are two important variables for professional learning, leading to academic success.³ Self-efficacy is related to one's perception or judging of her/his ability to attain a specific objective, and affects thoughts, feelings, creativeness, motivation and performance.³ An individual's self-efficacy determines their motivation, which is then reflected in their effort and persistence in facing barriers.⁹ Self-efficacy affects many important aspects of motivation, like activity choice, level of effort, persistence and emotional reaction.¹⁰ Bandura suggests that students with high self-efficacy are more willing to attend academic activities, resulting in more effort, more persistence and less negative emotional reactions when facing hard situations.¹¹ Parsa-Yekta et al. declared that items such as experiences, opportunities, environment, personal characteristics, motivation and theoretical knowledge are effective factors in the acquisition of clinical competency in a nurse's point of view.¹² Lee-

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Hsieh et al. described motivation as an important factor in effective nursing performance, too.¹³ Hanifi et al. declared that nurses' clinical competency is effective in motivating nursing students.¹⁴ Motivation plays an important role in explaining of behaviors, predicting effects of actions and guiding behavior to achieve objectives.¹⁵ Motivation not only promotes learning, but also is an intermediate to learning; while students have motivation during the learning process, everything will be paved well, relationships will run smoothly, stress will decrease and creativity and learning will be more open.¹⁶

Students' academic performance is affected by different factors, including motivation, which may be easily ignored. It is necessary, however, for faculty members, managers and consultants to investigate motivation in their students.¹⁷ There is a positive significant relationship between academic motivation and academic achievement.¹⁸ It is essential for nursing instructors to identify motivating factors for students to complete nursing education programs and get positive results.¹⁹

The curriculum at nursing education institutions is challenging in order to motivate nursing students to acquire skills that will allow them to offer high quality health care to clients.²⁰ A lack of motivation among nurses will not only burn them out, but may also have destructive effects on the health of society and result in a waste of time and money.²¹

The results of a qualitative study by Salehian and Armat found lack of hope and motivation among nursing students²² and stress, lack of motivation and gap between theory and practice were themes of the students' clinical experiences.²² The lack of nurses' skill may be because of lack of facilities, sources, equipment, inadequate and inappropriate education, gap between theory and practice, lack of enabling instructors and lack of motivation.²³

We could not find a study that simultaneously investigates the relationship between learning motivation and self-efficacy among Iranian nursing students. Although some studies are carried out about motivation and clinical competence, their relationship was not clear. Therefore, the present study was carried out with the aim of investigating the relationship between learning motivation and self-efficacy among the nursing students.

Materials and Methods

This research is a descriptive-correlational study which all of the senior nursing students of Tabriz University of Medical Sciences in 2013-14 participated. In total, 145 questionnaires (90%) were delivered to the students by the researcher, filled out and given back after 24 hours. With the exclusion of those with no past formal clinical experience, 125 nursing students entered in the study. In order to collect data, researchers used Self-Efficacy for Professional Nursing Competency Questionnaire (SEPNCQ) and Science Motivation Questionnaire (SMQ).^{24,25} SEPNCQ measured students' degree of confidence in estimating professional nursing competencies on a rating scale from 0 (not confident) to

100 (so confident). This questionnaire consisted of 181 items that were divided into 6 subscales: the relationship between nurse-patient, health promotion, preventing from disease/damage, supportive care, rehabilitation care and professional performance. It should be mentioned that the professional performance subscale of the questionnaire, which was originally based on the rules of North Carolina of Canada, was adjusted to Iran's nursing ethics, and the score of each subscale of SEPNCQ is 0-100. SMQ, which is based on Bandura's social-cognitive theory, measures students' motivation in learning in university training (25). SMQ consists of 25 questions which investigate learning motivation in 5 subscales: internal motivation (5 items), professional motivation (5 items), self-determining (5 items), self-efficacy (5 items), and score motivation (5 items). Students answer each item on a rating scale as: never (0), seldom (1), sometimes (2), often (3) and always (4). The score of each subscale of SMQ is 0-20.

The questionnaires were translated and their face and content validity were assessed by considering the comments of ten nursing experts. After carrying out the corrections suggested by the experts, the translated questionnaires and the original English version were given to two nursing professors for final confirmation. Cronbach's alpha coefficient was used to measure internal consistency and for reliability, which was estimated 0.99 for SEPNCQ and 0.92 for SMQ. This research was approved by the ethics committee of Tabriz University of Medical Sciences and a consent form was taken from each of the participants after presenting necessary information about research aims and ethical issues (anonymity and voluntary participation and withdrawal).

The data was analyzed through descriptive and inferential statistics (Pearson correlation) using SPSS for Windows (Version 13, SPSS Inc, Chicago, IL). P values <0.05 were deemed significant.

Ethical considerations

The study was conducted after approval was obtained from the Tabriz University Vice-Chancellor for Research, and permission to conduct the study was also obtained from the Dean of the Faculty of Nursing and Midwifery. All participants were informed of the objective and design of the study, written consent was received from the participants for interviews and they were free to leave the focus group if they wished.

Results

Data analysis showed that the students' age was 22.30 ± 2.14 , 81.6% were single and 73.6 were female. The mean of their total average score in the last semesters was 16.63 ± 1.09 . Self-efficacy and learning motivation of the students was 67.57 ± 16.20 and 67.89 ± 14.21 , respectively (Table 1, 2). According to the results of Pearson's correlation coefficient, the relationship between learning motivation and self-efficacy was significant (0.48, >0.001).

The relationship between all the learning motivation and self-efficacy subscales was significant, too (Table 3).

Table1. Learning motivation competency and its various fields

	Mean	Standard deviation
Internal motivation	14.26	3.50
Professional motivation	14.32	3.31
Self-determination	12.21	3.49
Self-efficacy	13.61	3.16
Motivation score	13.48	3.88
Total	67.89	14.21

Table 2. Self-efficacy in professional nursing and its various fields

	Mean	Standard deviation
Relationship between nurse-patient	66.67	16.96
Health promotion	64.78	16.66
Preventing from disease /damage	65.99	16.03
Supportive care	68.18	15.38
Rehabilitation care	66.23	17.43
Professional performance	73.02	16.42
Self-efficacy in total professional nursing competence	68.10	14.50

Table 3. The relationship between learning motivation fields and self-efficacy fields in professional competence

learning motivation	internal motivation	Occupational motivation	Self determination	Self efficacy	Grade motivation
Self-efficacy	(r , p value)				
the relationship between nurse-patient	0.38, < 0.001	0.39, <0.001	0.33, < 0.001	0.47, < 0.001	0.31, <0.001
health promotion	0.37, < 0.001	0.42, < 0.001	0.28, 0.001	0.40, < 0.001	0.37, <0.001
preventing from disease/damage	0.36, < 0.001	0.43, <0.001	0.22,0.013	0.31, < 0.001	0.33, < 0.001
supportive care	0.40, < 0.001	0.37, < 0.001	0.28, 0.001	0.30, <0.001	0.29, 0.001
rehabilitation care	0.36, < 0.001	0.34, < 0.001	0.22,0.011	0.24,0.005	0.24,0.005
professional performance	0.48, < 0.001	0.48, < 0.001	0.28, 0.001	0.38, < 0.001	0.40, < 0.001
the relationship between learning motivation and self-efficacy	0.48, < 0.001				

Discussion

The results showed that students' self-efficacy for professional nursing competency is almost average. This shows that they are nearly confident about the nursing profession. A study declared that teachers' efficacy, weakness of evaluation and professional skills has made the students not to have appropriate capability and competency feeling in caring of the patients. Also, another one of the nursing students' problems is gap of the theoretical lessons and clinical training. Hence, promoting teachers' professional skills can increase students' capability and competency in an effective educational system.²⁶ The results of this research are in concordance with the study by Mohammadi *et al*. The results also came to the conclusion that students of rehabilitation have evaluated their self-efficacy in clinical competencies in an average range.²⁷

However, newly graduated nurses in North Carolina have evaluated their self-efficacy for professional nursing competency at an above average level, which indicates that they are highly confident about their capability regarding the nursing profession, or, in other words, the preparedness of their theoretical knowledge and clinical skills.²⁴

Also, the results showed that students' learning motivation is in a range of average to high, which is in concordance with studies by Shakibaie *et al.*, Nilsson *et al.* and Asadzadeh *et al.*^{28,29,30} Among related subscales, professional motivation, which is a part of external motivation in this questionnaire, is in the highest level. In their research about learning motivation of midwifery and nursing students in Turkey, Kosgeroglu *et al.*, found that the total mean of external motivation is more than internal motivation.³¹ Also, Nilsson *et al.* carried out research in order to investigate nursing students' motivation in Sweden and came to a similar conclusion.²⁹ However, we found no study determining the relationship between learning motivation and self-efficacy in professional nursing competency, in Iranian context. However, in two different studies, Bandura and Zimmerman each explained the effect of self-efficacy on motivation and concluded that students' motivation in self-efficacy or their beliefs about their abilities has an effect on meeting professional needs.^{32,10} In some qualitative studies, it is declared that nursing students' clinical competency is effective in motivating them, and motivation is one of the effective factors in acquiring clinical competency.^{12,14}

Conclusion

The correlation between self-efficacy and learning motivation was positive and significant, and it is suggested that an increase in learning motivation could be associated with the promotion of self-efficacy in nursing students. The relationship between the learning motivation and self-efficacy subscales was significant, too. It should be mentioned that, according to the results of the study, nursing plans should be modified in order to increase self-efficacy and learning motivation of nursing students.

Limitations

Considering that this study data is based on self-reported

questionnaires, the use of more objective tools for better measurement of the variables could be useful. In addition, a study design with a greater sample size could facilitate the generalization of the results.

Conflict of interest

The authors declare no financial or personal conflict of interests.

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