The effects of reflection thinking on professional attitude, confidence and achievement of the Fundamental of Nursing Practicum students

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Abstract

This quasi-experimental, one-group, pretest-posttest research aimed of study to utilize reflection on professional attitude, confident, and the achievement of Fundamental of Nursing practicum among nursing students. The target group of this study (N=83) were second year nursing students of Faculty of Nursing, Suan Dusit University who were practiced in the Fundamental Nursing Practicum subject during the second semester, academic year 2017. The research measurements were: 1) Nursing students’ reflection thinking on fundamental of nursing practicum 2) Nursing students’ Confident assessment form of Fundamental of Nursing Practicum 3) a nursing students’ professional attitude assessment form. Quantitative data was analyzed by using the descriptive statistic and Paired-test, while the content analysis explored the qualitative data.

The findings revealed that the level of nursing students’ professional attitude on Fundamental of Nursing practicum before and after were good. (mean= 4.13, S.D=0.851, mean= 4.19, S.D=0.683)  The comparison before and after score of professional attitude on Fundamental of Nursing practicum were not significantly. After practicing Fundamental of Nursing Practicum, nursing students’ confident were moderated. (mean= 3.49)  and were significantly at level .05 (p<.05). After reflection technique on achievement of nursing students in Fundamental of Nursing Practicum were high level (Grade B+) at 50.60 %.

Introduction

Nursing practicum is crucial to nursing teaching since it aims to develop operational and nursing skills, critical thinking and problem-solving abilities of students. Reflective thinking is a self-reassessment process that contributes to new knowledge. It is one of the competencies that are long important to the education field (Kincheloe, Mclaren, Steinberg, 2011). Wisanskoowong, Fahy and Hastie (2011) argue that reflective thinking is a thinking process to learn from operational problems. It then helps to develop, improve and change the operations for better performance. Chong (cited in Kaewprom, 2013) also proposes that reflective thinking contributes to individual learnings in terms of personal experience revision, personal feeling assessment, case impact evaluation, further knowledge acquisition and
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future operational plans. Additionally, Ketkornkaew (2009) explains that using a reflection technique in teaching can support analytical thinking skill development of learners who may apply theoretical knowledge to practical operations.

A Fundamental of Nursing Practicum is the first course of the Bachelor of Nursing Science program, Faculty of Nursing, Suan Dusit University. The subject has been taught to second-year nursing students who should be able to apply theoretical knowledge derived from the first year. A teaching of Fundamental of Nursing Practicum is not lecture-based while students may encounter real situations, patients or changing clinical problems. In addition, students’ different personal backgrounds could reveal different frustrations, problems, capabilities and assistance of the individuals. For example, a reflection technique with 92 second-year students at the end of nursing practicum of 2015 academic year revealed that students were fearful, worried and unconfident when they treated patients. They explained that, for instance, “[I] never faced the situation like this before.” “Treating real people was different from a laboratory practice.” “[I] shook and shivered when treating patients.” “[I] spent long time to think before giving patient treatments. I felt unconfident in nursing operation in which I was too worried and unable to treat patients effectively.” Students who felt the previous examples may lack enthusiasm and have negative attitudes toward the nursing practicum and profession. Moreover, reflective thinking may reveal student needs such as “[I] needed advice from a supervisor regarding an analysis of incorrect practice. Such advice may help me to think systematically more than this time”.

Results derived from a reflection technique presenting in previous paragraphs are consistent with Pheeranand Wisansakunwong and Sumitta Sawangtuk’s study of learning from students’ reflection on nursing practicum in a labor room: A qualitative research (2015). They found that a reflection technique of nursing practicum helped students to be aware of knowledge development, whole and continuous learning, and alteration of nursing practicum attitudes or becoming a meticulous leader. Additionally, students were trained to think critically, understand themselves and others that could help develop personal operation skills. Reflective thinking of nursing practicum would exchange experience to knowledge. Repetition of reflective thinking would contribute to consciousness in nursing treatment in which students could reduce incorrect treatments or inappropriate actions while being encouraged with bravery and personal responsibility. Students also acknowledged the essential of further learning in order to understand, improve, develop personal nursing performance and have positive attitude towards the profession. When students had positive attitudes, they could appropriately apply knowledge and skills trained in a classroom to real operations, including efficient treatments of patients, families and society. Furthermore, Pattayanant (2008) argued that reflective thinking could lead to students’ educational satisfaction, happiness and self-confidence.

The Faculty of Nursing, Suan Dusit University commits to a particular university policy of quality development and student standards in specific fields. The faculty aims to produce nursing graduates who will fill up the domestic labor market with support and promote learning that leads to systematic thinking and creativity, development of student abilities through a work-based learning process. With this regard, the nursing faculty will produce skilled graduates or expert nurses who are ready to work in the labor market (Suan Dusit University Strategic Plan, 2013). A practicum teaching, a reflection technique in nursing studies and nursing operations are important to challenge students with learning and thinking ‘like a nurse’ while also contributing to meaningful learning operations. When students understand the meanings of their actions, they may retain in the profession. With this regard, reflective thinking becomes an important factor that connects theories with meaningful practices, facilitate a revision of experiential knowledge and increase tacit knowledge. Since reflective thinking has been studied widely, it has been accepted as a method to make sense of the experience, encourage participation, develop good nurses, reduce resignation from the nursing profession and give heartfelt treatment. A goal of reflection thinking is transformative education (Phrapokklao Nursing College, Chantaburi, 2009).

In this respect, researchers apply a reflection technique to the Fundamental of Nursing Practicum with an aim to study its effects towards professional attitude, confidence and learning achievement. Findings can contribute to a production of skilled nursing graduates who are able to work while building up confidence of future practicum courses. Then, students would become a professional nurse in the future.

Research objectives

1. To study the reflective thinking effects on
professional attitude of students, who registered in the Fundamental of Nursing Practicum, Faculty of Nursing, Suan Dusit University.

2. To study the reflective thinking effects on confidence of students, who registered in the Fundamental of Nursing Practicum, Faculty of Nursing, Suan Dusit University.

3. To study the reflective thinking effects on learning achievement of students, who registered in the Fundamental of Nursing Practicum, Faculty of Nursing, Suan Dusit University.

4. To contribute this the reflective thinking effects on confidence of students study for other instructors teaching practicum courses.

Research framework

Gibb’s reflective cycle (Gibbs cited in Academic Services and Retention Team, 2016) was used to design a research framework with regard to a reflective writing technique that might affect students’ professional attitude, confidence and achievement of the Fundamental of Nursing Practicum (see Figure 1).

Researchers improved questionnaire and tried it out with 30 students, who were not included in the sample. The Cronbach’s alpha coefficient was used to test for reliability which scored 0.81.

A form to assess confidence of the Fundamental of Nursing Practicum was developed from Apisara Changpanitch and Orachorn Sisailuan’s confidence assessment form of nursing practicum at a patient ward of second-year nursing students, which was designed from Bandura’s (1997) and Bloom’s (1964) theories. Changpanitch and Sisailuan’s confidence assessment form consisted of 30 questions with five rating scales.

A form to assess professional attitude was developed from Bloom’s theory (1964) with 25 questions. The form was analyzed by three experts, who are lecturers of fundamental nursing practicum, children and adolescents nursing practicum, adults and seniors nursing practicum. It was tested for content validity which scored 0.805. Researchers improved questionnaire and tried out with 30 students who were not included in the sample. The Cronbach’s alpha coefficient was used to test for reliability which scored 0.801.

A learning achievement assessment of nursing practicum of The Faculty of Nursing, Suan Dusit University was similar to the university’s grading criteria evaluation. Learning achievement was evaluated with five rating scales (20 questions and 100 scores).

3. Data collection

The process of data collection was as follows.

3.1 Researchers held the first meeting with a team of 10 supervisors of the fundamental of nursing practicum. The meeting was aimed to inform the team with clear research methods, objectives, advantages of writing reflection, assessment of professional attitude, confidence in nursing practicum and learning achievement.

3.2 Researchers explained to 83 second-year students of the fundamental of nursing practicum course about the research, objectives, advantages, forms, reflection thinking writing and assessments of professional attitude and confidence of nursing practicum. This step made sure that students understood the project clearly while researchers also asked for their cooperation in the

Figure 1: Research framework

Research methodology

This research was a quasi-experimental research with one group of pre-test and post-test design. Details were as follows.

1. Population and sample

A target group came from the whole population which was 83 second-year nursing students of the Bachelor of Nursing Science program, Faculty of Nursing, Suan Dusit University, who registered in the Fundamental of Nursing Practicum course of 2017 academic year.

2. Research tool design and quality development

Researchers designed the following tools.

2.1 A form to record reflective thinking of the Fundamental of Nursing Practicum was developed from Gibbs’ reflective cycle. It consisted of six steps of reflective thinking (Gibbs, 1988). The form was analyzed by three experts, who are lecturers of fundamental nursing practicum, children and adolescents nursing practicum, adults and seniors nursing practicum. Later, it was tested for content validity that scored 0.85. Researchers improved questionnaire and tried it out with 30 students, who were not included in the sample. The Cronbach’s alpha coefficient was used to test reliability which scored 0.81.

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A learning achievement assessment of nursing practicum of The Faculty of Nursing, Suan Dusit University was similar to the university’s grading criteria evaluation. Learning achievement was evaluated with five rating scales (20 questions and 100 scores).
research. Details were as follows.

1) Students must fill two forms of professional attitude assessment and confidence of nursing practicum assessment prior to a nursing practicum.

2) Students must record reflection thinking, fill two forms of professional attitude assessment and confidence of nursing practicum assessment at the beginning of a nursing practicum.

3) Students record reflection thinking at the end of a nursing practicum of the first ward (week 5) which was an in-between assessment of the practicum. Students must submit their records to a supervisor of the ward, who would be informed with student feelings or problems from a nursing practicum and would be able to give further advices for the next ward practicum.

4) Students must record reflection thinking at the end of week 5 of the second ward. Students must submit their records to a supervisor of the ward, who would be informed with student feelings or problems from the nursing practicum and would be able to give further advices.

5) Students must fill two forms of professional attitude assessment and confidence of nursing practicum assessment at the end of a nursing practicum.

6) Supervisors assessed students’ progression from reflection thinking and learning achievement of nursing practicum.

3.3 Researchers held the second meeting with a team of 10 supervisors of the fundamental of nursing practicum at the end of week 5 to follow-up progression or inquire about problems or obstacles of the research.

3.4 Researchers held the third meeting with a team of 10 supervisors of the fundamental of nursing practicum at the end of week 10 to summarize research results.

3.5 At the end of a nursing practicum, researchers collected data from reflection thinking records, professional attitude assessment, confidence of nursing practicum assessment and learning achievement for analysis.

4. Protection of participant rights

The target group were informed with clear research objectives. They had choices to accept or reject participation in the research project. Their decisions had no effects on learning achievements. Data would be kept confidential and results would be presented as the overall findings.

5. Data analysis

5.1 Data was analyzed using a computerized program. Results are shown.

1) Professional attitude and confidence of nursing practicum scores during the pre- and post-reflection thinking were analyzed and compared by t-test dependent samples.

2) Learning achievement of a nursing practicum was assessed by Suan Dusit University grading criteria evaluation.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
<th>Score range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>90-100</td>
</tr>
<tr>
<td>B+</td>
<td>Very good</td>
<td>85-89</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>75-84</td>
</tr>
<tr>
<td>C+</td>
<td>Fairly good</td>
<td>70-74</td>
</tr>
<tr>
<td>C</td>
<td>Fair</td>
<td>60-69</td>
</tr>
<tr>
<td>D+</td>
<td>Poor</td>
<td>55-59</td>
</tr>
<tr>
<td>D</td>
<td>Very poor</td>
<td>50-54</td>
</tr>
<tr>
<td>F</td>
<td>Fail</td>
<td>Lower than 50</td>
</tr>
</tbody>
</table>

5.2 Qualitative data from students’ reflective writings was analyzed with content analysis.

Research findings

Research findings are presented in two sections.

Section 1 General information. Research samples include 83 second-year nursing students, who register in the fundamental of nursing practicum course 2017 academic year. They are nine males (10.84%) and 74 female students (89.16%). They were 41 students who aged 20 years (49.4%), 38 people who aged 19 years (45.8%) and four students who aged more than 21 years (4.8%), respectively. Students’ grade point average (GPA) at the end of the first year (prior to the nursing practicum) is categorized into three groups: ‘good’ GPA (3.01-3.50) is earned by 55 students (66.27%), ‘average’ GPA (2.51-3.00) is earned by 23 people (27.71%) and ‘very good’ GPA (3.51-4.00) is earned by five students (6.02%), respectively.

Section 2 Research findings. Results are presented in two sections as follows.

Section 1 Reflective thinking effects on attitude, confidence and achievement of students of the Fundamental of Nursing Practicum, Faculty of Nursing, Suan Dusit University.
1.1 Reflective thinking effects on student professional attitudes of the fundamental of nursing practicum.

<table>
<thead>
<tr>
<th>Professional attitude</th>
<th>Pre-nursing practicum</th>
<th>Post-nursing practicum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Meaning</td>
</tr>
<tr>
<td>1. Social values</td>
<td>4.61</td>
<td>Highest</td>
</tr>
<tr>
<td>2. Professional characteristics</td>
<td>4.37</td>
<td>High</td>
</tr>
<tr>
<td>3. Operation</td>
<td>4.01</td>
<td>High</td>
</tr>
<tr>
<td>4. Interpersonal relations</td>
<td>3.54</td>
<td>High</td>
</tr>
<tr>
<td>Overall</td>
<td>4.13</td>
<td>High</td>
</tr>
</tbody>
</table>

Table 2 Results of professional attitude assessment of 83 second-year students during the pre- and post-fundamental of nursing practicum.

Table 3 reveals that professional attitude scores during the pre- and post-reflective thinking using t-test dependent samples remained the same.

1.2 Reflective thinking effects on student confidence of the Fundamental of Nursing Practicum.

<table>
<thead>
<tr>
<th>Assessment topic</th>
<th>Pre-reflective thinking</th>
<th>Post-reflective thinking</th>
<th>SD</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional attitude</td>
<td>N 4.1996</td>
<td>N 4.2368</td>
<td>.05114</td>
<td>-.727</td>
<td>.474</td>
</tr>
</tbody>
</table>

Table 3 Comparisons of professional attitude scores during the pre- and post-reflective thinking using t-test dependent samples.

1.3 Reflective thinking effects on student learning achievement of the Fundamental of Nursing Practicum.

<table>
<thead>
<tr>
<th>Score ranges of fundamental of nursing practicum</th>
<th>Grade</th>
<th>No. of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A</td>
<td>10</td>
</tr>
<tr>
<td>85-89</td>
<td>B+</td>
<td>42</td>
</tr>
<tr>
<td>75-84</td>
<td>B</td>
<td>30</td>
</tr>
<tr>
<td>70-74</td>
<td>C+</td>
<td>1</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td>83</td>
</tr>
</tbody>
</table>

Table 6 Student learning achievement after reflective thinking of fundamental of nursing practicum.

Table 5 reveals that student confidence of the fundamental of nursing practicum during the pre- and post-reflective thinking is statistically different with significance level of 0.05.

1.3 Reflective thinking effects on student learning achievement of the Fundamental of Nursing Practicum.

Table 6 displays that a majority of students achieved a ‘very good’ grade with B+ (42 people, 50.60%). Thirty people earned ‘good’ achievement with grade B (36.14%) while 10 students had ‘excellent’ result with grade A (12.50%). Only one student got ‘fairly good’ achievement (1.20%).

Section 2 An analysis of students’ reflective thinking towards nursing practicum.

1. Emotions, attitudes, readiness and expectations of Fundamental of Nursing Practicum.

Students reveal various emotions like excitement, expectations of knowledge acquisition and operational experience regarding being able to assess patients and cover nursing activities, having good attitude of nursing practicum for patients’ benefits, preparing for learning and being able to practice nursing. For example, students explained that “I felt excited, hadn’t got used to with early wakeup, nervous and afraid of incorrect operation. After self-adaptation, I was less excited.” (Student 5) “I expected to receive knowledge and experience from nursing practicum and be able to assess the patients with a health plan.” (Student 9) “I expected to do correct nursing activities for patients’ benefits.” (Student 11) “I
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patients and difficult to talk with patients due to physical obstacles.” (Student 41)

The Fundamental of Nursing Practicum is the first nursing practicum of nursing student which will connect knowledge from theories to practice with real patients. The students had to find patients whom had difference health problems assemble limited knowledge and experiences therefore they weren’t ready, afraid of mistakes and diffidence to nursing practice. These things might be students disheartened, boring, lack of enthusiasm and negative attitude to profession. From literature review about the reflective thinking found that the teaching by the reflective thinking can complete assessment knowledge, attitude and skills of nursing student’s nursing practicum by periodically reflective and this method can assessment learning problem of students towards to solving problems during practicum on time.

4. Guidelines of the Fundamental of Nursing Practicum preparation

Guidelines of the fundamental of nursing practicum preparation should include knowledge review of fundamentals of nursing and practicum. Students use various methods for self-preparation, for instance, reading textbooks, watching nursing procedure videos, enquiring knowledge from older-year nursing students and supervisors, learning how to communicate with patients, strengthening physical and mental health through meditation and good sleep. Students wrote that, for example, “I read textbooks to review nursing operations, procedures and Gordon’s functional health pattern assessment." (Student 8) “I watched nursing laboratory videos made by the Faculty of Nursing [Suan Dusit University] and other institutions.” (Student 12) “I enquired knowledge from older-year nursing students and supervisors.” (Student 31) “I prepared words for communication with patients.” (Student 45) “I prepared myself with both mental and physical strengths and was fit to take care of patients.” (Student 59)

The reflective thinking would be nursing students analyzed and evaluated the past situation or experience then developed themselves by carefully personal action plans to prepare for good nursing practicum.

Discussions

Research findings are discussed in regards to research hypotheses.

Hypothesis 1: A reflection technique effects to professional attitude of the Fundamental of Nursing Practicum. Findings reveal that professional attitude of students during the pre- and post-practicums were the same. Students have the highest level of professional attitude towards nursing profession pride which is consistent with their reflection of the nursing practicum. For example, they said that “I did ‘bed bath’ and feed the patients. They thanked me with smile. I was proud and tireless to do such activities. When I said goodbye to a grandmother who was admitted to a female ward, she praised and thanked for my operations. This made me more proud of myself and had better attitude towards nursing profession than the past.” (Student 1) “I was proud of taking care patients with successful treatment and made them recovery well.” (Student 17) “I was proud of treating patients until they got better. This made me feeling good to practice at a ward although I was very exhausted. I was happy if my tiredness had been exchanged with smiles from patients.” (Student 43) These examples depict how students are proud of themselves and have positive attitudes towards the nursing profession.

On the other hand, students reveal that a low level of professional attitude during the pre- and post-nursing practicum owes to frustration of interpersonal relations. For instance, student explained that “professional nurses hadn’t had good interaction with students so that I was afraid of approaching them when I was in need of advices or problem resolutions.” (Student 61) Work overload of professional nurses or critical circumstances of patients may be a cause of unimpressive interpersonal relations. However, students argue that bad interpersonal communication is a problem and obstacle of learning from the Fundamental of Nursing Practicum.

Hypothesis 2: A reflection technique effects to students’ confidence of the fundamental of nursing practicum, Faculty of Nursing, Suan Dusit University. Findings reveal that students’ confidence during the pre- and post-nursing practicum is statistically different with a significance level of 0.05. Regarding operational skills, students have a moderate level of confidence during the pre-practicum, but they are more confident during the post-practicum period. For example, students explained that “I wasn’t ready in both knowledge and skills of practicum with real humans.” (Student 69) “I was afraid of mistakes that might be risky to the patients and afraid of treatment rejection during a critical stage as I was only a nursing student.” (Student 72) These examples illustrate how personal fears could affect self-confidence. However, students depict that they are more confident
after finishing a nursing practicum. For instance, “I was more confident in nursing practice that being operated with real humans.” (Student 81)

Additionally, students’ confidence in knowledge during the pre- and post-nursing practicum is moderate. A moderate level of confidence in knowledge becomes an obstacle to learning during the nursing practicum since students have inadequate knowledge in the fundamentals of nursing. For example, they reflected that “fundamental knowledge is an important factor. I should well prepare myself and need to review lessons more than this time.” (Student 29) “I need to review my knowledge more than this time.” (Student 67) However, students are confident in taking the pulse and cleaning sexual organs at the highest level in both pre- and post-nursing practicum. For example, they explained that “I was proud of taking the pulse.” “I was happy to ‘bed bath’ patients. When they said thank you to me, I was proud and confident of nursing practicum.” (Student 83)

Hypothesis 3: A reflection technique effects to students’ learning achievement of the Fundamental of Nursing Practicum, Faculty of Nursing, Suan Dusit University. Students achieve a ‘very good’ grade (B+) from the Fundamental of Nursing Practicum (accounted for 50.66%). Good learning achievement is also reflected from good professional attitude and confidence in nursing operations.

**Recommendations of research usage**

1. Research findings can be used as guidelines of reflection thinking of the Fundamental of Nursing Practicum and other courses.
2. Applying reflection thinking to teaching should be cautiously observed with teaching using assessment methods. Practicum learning achievement evaluation should also be assessed with other methods in order to increase validity and extensiveness.
3. Findings reveal that reflective thinking is a crucial and useful technique that lecturers can acknowledge attitudes, emotions, problems, obstacles, helps in need and systematic thinking of students. In this respect, lecturers should pay attention to a reflection technique while offering helps or following-up students’ progression during pre-, post-, in-between and end of practicum in order to provide immediate assistance for students’ ultimate interests.

**Future research recommendations**

A future research should study reflective thinking effects on other practicum courses. Results could be different since students have more experience.

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