

**Clinical Reflection Skills as Basis for a Question Bank for General Education
Courses of Nursing Students**

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Abstract

A professional nurse is required to possess numerous skills aside from clinical ones and reflecting is one of the skills that have gained recognition due to its importance in nursing practice to the point that psychometric test has been constructed to appraise it (Bijani, et al., 2021). Developing the skill to reflect is critical during the tertiary level of education for nursing students. Karimi, et al. (2017) claims that reflection is especially relevant to professional development of nursing students. Reflection is positively associated with job readiness and resiliency among others (Bouchard, et al., 2024; Mwalabu, et al., 2024). Building on the previous works that support the value of reflecting skills for the nursing profession, the purpose of this study is to determine the reflecting skills of nursing students to acquire a basis for a question bank for reflections specifically designed for nursing students in their General Education Courses (GECs). One hundred nineteen second year nursing students participated in this study. An online survey was conducted using the Reflection on Clinical Practice Questionnaire for Nursing Students (RCPQNS) through Microsoft Forms. Results of frequency count and percentage calculation show that nursing students are always reflecting on scenarios indicated in the RCPQNS which includes professional competence, challenging clinical situations, and internal sources of motivation among others. Areas were identified that may require improvement for some students such as when dealing with fear of difficult clinical scenarios, being independent and accountable, interest in the nursing profession, and viewing things from multiple perspectives.

Clinical Reflection Skills as Basis for a Question Bank for General Education Courses of Nursing Students

The nursing profession is one of the most challenging disciplines in the allied health sciences. (reasons: stress, fatigue, etc.). These challenges have been discovered in various contexts of nursing practice such as hospital-based settings, mental health facilities (Lin, et al., 2022), home-visit (Nobuko & Satomi, 2024). Usually, these challenges are linked to the diverse roles in the nursing profession which resulted in diversified struggles depending on the responsibilities that are demanded from their job position (Adatara, et al., 2018). Thus, a professional nurse is required to possess numerous skills aside from clinical ones and reflecting is one of the skills that have gained recognition due to its importance in nursing practice to the point that psychometric test has been constructed to appraise it (Bijani, et al., 2021).

Developing the skill to reflect is critical during the tertiary level of education for nursing students. Karimi, et al. (2017) claims that reflection is especially relevant to professional development of nursing students. Reflection plays an important role in developing their job readiness and resiliency among others (Bouchard, et al., 2024; Mwalabu, et al., 2024).

Building on the previous works that support the value of reflecting skills for the nursing profession, the purpose of this study is to determine the reflecting skills of nursing students to acquire a basis for a Question Bank for Reflections specifically designed for nursing students in their General Education Courses (GEC). This instructional material will be disseminated to each GEC faculty to assist their students in reflective activities during their classes.

Objectives

To develop a basis for a question bank for reflections in GECs of nursing students, the study will answer the following questions:

1. What is the level of reflecting skills of nursing students when it comes to:
 - a. professional competence;
 - b. internal sources of motivation;
 - c. challenging situational clinical setting;
 - d. dynamic organizational atmosphere
 - e. reflection-based self-management
 - f. dynamic professional growth
2. What are the implications of the findings?
3. Based on the findings, what question bank for reflections can be developed for the General Education Courses of nursing students in St. Jude College of Dasmarinas, Cavite?

Methodology

This study uses a descriptive quantitative approach. (expound). A survey method will be employed to collect responses using the Reflection Skill Scale for Nursing Student of Bijani, et al. (2021). The participants will come from levels one and two nursing students at St. Jude College of Dasmarinas, Cavite (SJCDC). Slovin's formula will be used to determine the number of participants and upon ascertaining the total number of participants (N), the target distribution ratio per year level will be 1:1, that is, each year

level shall have the same number of participants who when added altogether will equal N.

The survey shall be administered online through Microsoft Forms, Google Forms, or face-to-face through printed questionnaires, depending on the availability of participants. Collected responses will be tabulated or transferred to Microsoft Excel spreadsheet for data analysis through the built-in statistical tool package and commands in the same application.

Results

This section presents the results of frequency count and percentage calculation for the responses of nursing students to the RCPQNS.

Table 1

Frequency and Percentage of Rating

Rating	Frequency	Percentage
Always	3015	70.38 %
Usually	1143	26.68 %
Occasionally	81	1.89 %
Seldom	6	0.14 %
Never	39	0.91 %
Total	4284	100 %

The most frequent response received from the nursing students is 'Always' which amounts to 3015 responses or 70.38 percent. This is the highest rating that the participants could give for each item of the RCPQNS. This was followed by the rating 'Usually,' which has 1143 recorded responses or 26.68 percent. The rating 'Occasionally' placed third with 81 responses or 1.89 percent, followed by 'Never' which has 39 recorded

responses or 0.91 percent, and finally 'Seldom' which only has 6 responses or 0.14 percent.

Frequency and Percentage of Rating by Factors

For the following sub-sections, the frequency and percentage of rating responses are presented according to the six factors of the RCPQNS. The first factor is professional which encompasses question items 1 through 10. Table 2 presents the frequency and percentage of rating responses of nursing students.

Table 2

Frequency and Percentage of Rating by Professional Competence

F1: Professional Competence	Always	Usually	Occasionally	Seldom	Never
1. I am willing to perform specialized, complex, non-routine activities.	73	41	3	1	1
2. I perform my duties as a nurse with care and concentration.	89	29	0	0	1
3. I try to keep my academic knowledge and clinical skills up-to-date.	83	33	2	0	1
4. I perform my duties with self-confidence.	88	30	0	0	1
5. I treat clinical situations with curiosity.	83	32	3	0	1
6. I am willing to acquire independence in performing my nursing duties.	77	36	5	0	1
7. I am not afraid of encountering difficult clinical situations and performing complex procedures.	73	36	8	0	2
8. I imagine myself in my patients' situations in order to understand and analyze their problems better.	73	41	3	1	1
9. I feel responsible for solving my patients' problems and relieving their pain.	89	29	0	0	1
10. I am accountable for my activities as a nurse.	83	33	2	0	1
Total	811	340	26	2	11
Percentage	68.15%	28.57%	2.18%	0.17%	0.92%

The rating 'Always' was recorded as the most frequent response with 811 or 68.15 percent in total. This was followed by 'Usually' with 340 responses or 28.57 percent. There are 26 recorded responses for 'Occasionally,' which is 2.18 percent of the total responses, placing it at third. The fourth most frequent rating is 'Never' which has 11 counts or 0.92 percent, and finally, 'Seldom' which only has 2 counts or 0.17 percent.

The first factor has more rating responses for 'Occasionally,' compared to other factors. Out of the 26 recorded 'Occasional' rating responses, item 7 which pertains to not being afraid of encountering difficult clinical situations, received 8 counts. This indicates that while most nursing students may claim to not feel fear over prospect of complex and difficult clinical situations and procedures, there are still nursing students who have frequent experience of fear over such scenarios. Additionally, item 7 also received a higher 'Never' rating response (i.e., 2 counts) when compared to other items which received only one count of similar response each which confirms that at least two nursing students were always afraid of similar clinical situations. Furthermore, item 6 which pertains to the willingness of nursing students to acquire skills needed to practice the profession independently, 5 participants responded with 'Occasionally' which is the second highest occurrences of the rating following item 7. This may suggest a relationship to the fear of encountering complex and challenging clinical situations that some nursing students feel which means that they manage this fear by relying on their supervisors. There are also 3 responses of 'Occasionally' for items 1 (i.e., willingness to perform specialized, complex, non-routine activities), 5 (i.e., pertaining to curiosity in clinical situations), and 8 (i.e., pertaining to the practice of imagining oneself in patient's situations). These items seem to converge to the complex and challenging clinical

situations referred to in item 7. Lastly, 2 responses of 'Occasionally' were reported in items 3 and 10 which were about updating skills and being accountable as a nurse.

Table 3

Frequency and Percentage of Rating by Internal Sources of Motivation

F2: Internal Sources of Motivation	Always	Usually	Occasionally	Seldom	Never
10. I am accountable for my activities as a nurse.	83	33	2	0	1
11. My beliefs help me reflect on my clinical practice.	88	30	0	0	1
12. My work conscience helps me reflect on my clinical practice.	89	28	1	0	1
13. My belief in showing respect for human values helps me reflect on my clinical practice.	77	36	5	0	1
14. My interest in the field of nursing helps me reflect on my clinical practice.	73	36	8	0	2
15. My desire for progress and success helps me reflect on my clinical practice.	73	41	3	1	1
Total	483	204	19	1	7
Percentage	67.65%	28.57%	2.66%	0.14%	0.98%

For the second factor about internal sources of motivation, 'Always' remains to be the most frequent rating response from the participants at 483 counts or 67.65 percent. The second most frequent rating is 'Usually' with 204 counts or 28.57 percent, followed by 'Occasionally' with 19 counts or 2.55 percent. The fourth most frequent rating is 'Never' with 7 counts or 0.98 percent, and 'Seldom' with only one count or 0.14 percent. Among the included items in this factor is item 14 which received 2 'Never' responses among the

participants. This means that there are 2 nursing students who seem to have no interest in nursing that could help them reflect on their clinical practice. While interest in the nursing profession is absent from the cited literature in this study, there seems to be a need to pay attention as to how the interest of some students may affect their motivation based on this unexpected finding.

Table 4

Frequency and Percentage of Rating by Challenging Situational Clinical Setting

F3: Challenging Situational Clinical Setting	Always	Usually	Occasionally	Seldom	Never
16. Encountering complicated clinical situations helps me reflect on my clinical practice.	89	29	0	0	1
17. Encountering questions and challenges in the clinical environment helps me reflect on my clinical practice.	83	33	2	0	1
18. Fear of making mistakes in clinical situations helps me reflect on my clinical practice.	88	30	0	0	1
19. Inadequate academic and practical preparation for performing clinical activities makes me reflect on clinical practice.	89	28	1	0	1
20. Clinical behaviors contrary to the principles of patient care make me reflect on clinical practice.	93	24	1	0	1
Total	442	144	4	0	5
Percentage	74.29%	24.20%	0.67%	0.00%	0.84%

The third factor, challenging situational clinical settings, 'Always' was recorded as the most frequent response at 442 counts or 74.29 percent, followed by 'Usually' at 144 counts (i.e., 24.20 %). 'Never' received 5 counts of responses or 0.84 percent.

'Occasionally' received 4 counts of responses or 0.67 percent. Meanwhile, no responses were recorded for the rating 'Seldom.' In particular, item 17 which pertains to how encountering questions and challenges in clinical environments help the nursing student to reflect, received the most frequent response for the rating 'Occasionally.' This suggests that although most nursing students can reflect on clinically challenging situations, some of them may have difficulty doing so. An alternative explanation is that the two participants who rated this item 'Occasionally', may have few experiences regarding the scenario indicated in the item.

Table 5

Frequency and Percentage of Rating by Dynamic Organizational Atmosphere

F4: Dynamic Organizational Atmosphere	Always	Usually	Occasionally	Seldom	Never
21. My instructors' feedback and assignments related to patient care make me reflect on encountered situations.	73	36	8	0	2
22. Having to perform nursing activities makes me reflect on encountered situations or my performance as a nurse.	73	41	3	1	1
23. Active learning methods, e.g. formulating questions and case-based learning, make me reflect on encountered situations or my performance as a nurse.	89	29	0	0	1
24. Interaction with my instructors makes me reflect on encountered situations or my performance as a nurse.	83	33	2	0	1
25. Interprofessional relationships based on respect make me reflect on encountered situations or my performance as a nurse.	88	30	0	0	1
Total	406	169	13	1	6
Percent	68.24%	28.40%	2.18%	0.17%	1.01%

For the fourth factor about dynamic organizational atmosphere, 'Always' is the most frequent response with 406 counts or 68.24 percent, followed by 'Usually' with 169 counts or 28.40 percent. The third most frequent rating is 'Occasionally' with 13 counts or 2.82 percent. The fourth is 'Never' with 6 counts or 1.01 percent. And fifth is 'Seldom' with only one count or 0.17 percent. Specific to the rating 'Never,' item 21 received 2 ratings which indicated that some nursing students feel that the feedback of their instructors related to patient care is not helpful at all in making them reflect on clinical situations. This suggests the need for an intervention that may help improve the instructors' use of feedback to facilitate reflection on clinical situations for nursing students.

Table 6*Frequency and Percentage of Rating by Reflection-Based Self-Management*

F5: Reflection-Based Self-Management	Always	Usually	Occasionally	Seldom	Never
26. When reflecting on clinical situations, I reflect on the consequences of my measures as a nurse.	89	28	1	0	1
27. When reflecting on clinical situations, I contemplate all the events in my mind.	93	24	1	0	1
28. I analyze clinical matters from different perspectives in my mind.	83	29	6	0	1
29. When reflecting on clinical situations, I engage in self-questioning to find solutions to problems.	73	41	3	1	1
30. When reflecting on taken clinical measures, I consult others to obtain the information I need.	89	29	0	0	1
31. When reflecting on taken clinical measures, I search in scientific sources to obtain the information I need.	83	33	2	0	1
Total	510	184	13	1	6
Percent	71.43%	25.77%	1.82%	0.14%	0.84%

For reflection-based self-management which consists of question items 26 to 31, 'Always' is the most frequent rating with 510 counts or 71.43 percent. The rating 'Usually' placed second with 184 counts or 25.77 percent. Then 'Occasionally' with 13 counts or 1.82 percent. 'Never' placed fourth with 6 counts or 0.84 percent. Finally, 'Seldom' is the least recorded response with only 1 count or 0.14 percent. In relation to this, the frequency count per items of the 'Occasional' rating is noteworthy. There are 13 responses of 'Occasionally' for this factor with 6 of them coming from item 28. This item pertains to the practice of viewing clinical concerns from different perspectives. This suggests that some of the nursing students seldom view clinical matters using multiple perspectives.

Table 7*Frequency and Percentage of Dynamic Professional Growth*

F6: Dynamic Professional Growth	Always	Usually	Occasionally	Seldom	Never
32. Reflecting on clinical situations helps me do my job correctly and according to the principles of professional ethics.	88	30	0	0	1
33. Reflecting on clinical situations helps me provide evidence-based care.	89	28	1	0	1
34. Reflecting on clinical situations helps me share my experiences with others to improve the quality of nursing care.	93	24	1	0	1
35. Reflecting on clinical situations helps me feel calm and satisfied.	83	29	6	0	1
36. Reflecting on clinical situations helps me participate in patient education.	93	24	0	1	1
Total	446	135	8	1	5
Percent	74.96%	22.69%	1.34%	0.17%	0.84%

The last factor of RCPQNS is dynamic professional growth which includes survey items 32 to 36. The most frequent response is 'Always' at 74.96 percent (i.e., 446 counts), followed by 'Usually' at 22.69 percent (i.e., 135 counts). Then, 'Occasionally' at 1.34 percent (i.e., 8 counts), 'Never' at 0.84 percent (i.e., 5 counts), and finally, 'Seldom' at 0.17 percent (i.e., 1 count). In addition, under 'Occasionally,' item 35 received the most frequent responses. This item pertains to the calming effect of reflection on clinical situations. This suggests that while most students were able to properly calm themselves by reflecting on their a particularly challenging clinical situation that they experienced, some students seldom feel calm and satisfied using the same method.

Conclusion

The study concludes that most nursing students are skillful when it comes to reflecting on clinical situations. However, there are areas wherein their reflection could be improved such as their fear of difficult clinical scenarios, willingness to be independent and be accountable, interest in the nursing profession, and viewing things from multiple perspectives. These areas should be prioritized when constructing reflection questions for the question bank for the general education courses of nursing students.

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