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# SELF-EFFICACY LEVELS AMONG PROFESSION NURSING STUDENTS IN PERFORMING BASIC CLINICAL SKILLS

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**ABSTRACT**

Nursing profession's education is responsible for preparing competent graduates ready to face healthcare challenges. A key indicator of this readiness is the self-efficacy of nursing students, which reflects their confidence in applying clinical skills. It is crucial for these students to be prepared to provide safe, high-quality care as they enter the workforce. This study aims to evaluate the self-efficacy levels in clinical skills among students enrolled in the Nursing Profession Study Program at the Faculty of Nursing, Universitas Padjadjaran. This study employed a quantitative descriptive method using a cross-sectional approach. The population in this study amounted to 150 active students of the Nursing Profession Study Program at the Universitas Padjadjaran and the sample was taken using total sampling type. Data was collected using the Clinical Skills Self-Efficacy Scale (CSES) to measure the level of self-efficacy in performing clinical skills with validity test results after translated to Bahasa ranging from 0.415-0.727, and the reliability test results 0.825. Univariate analysis was carried out using descriptive statistics. The results of the study show that students of the Nursing Professional Education Program at the Faculty of Nursing, Universitas Padjadjaran, have a high level of self-efficacy in performing basic clinical skills, with 80 students (53.3%) demonstrating high self-efficacy. Where the percentage of class 46 students who have a high level of self-efficacy is greater than class 47. This is largely due to the experience they have in carrying out clinical procedures. That's related to the statement one of the main factors that can influence self-efficacy according to Albert Bandura is experience, the experience of someone who is successful in carrying out a task or achieving a goal can increase self-efficacy.

Keywords: clinical skills; nursing students; self-efficacy

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## INTRODUCTION

The nursing professional education bears a significant responsibility in creating competent graduates ready to face challenges in the healthcare industry. A major indicator of this preparedness is the level of student self-efficacy, which signifies how much students believe in and are capable of applying their theoretical knowledge to clinical practice (Kumalasari et al., 2021). The grand theory of self-efficacy by Albert Bandura states that self-efficacy is an individual's belief in their ability to achieve specific performances that affect their lives. The classification of self-efficacy is divided into low self-efficacy and high self-efficacy (Kreitner & Kinicki, 1992). Awareness of one's high self-efficacy will enable students to achieve their clinical goals and enhance their academic abilities, which will positively impact their clinical competence (Ibrahim et al., 2019). Self-efficacy in final-year nursing students, especially at the professional education level, is a vital element that enables them to feel competent when tackling challenges in clinical environments and taking on professional roles. (George et al.,

2020). In other words, self-efficacy is crucial in equipping nursing students with the confidence needed to enter the nursing profession. Self-efficacy serves as a reliable predictor of nursing students' performance in clinical practice, as it empowers individuals with a sense of mastery over their environment through the belief that "I can accomplish it." (Abusubhiah, 2023).

Nursing professional education students are expected to acquire competencies that align with those of a professional nurse, encompassing knowledge, attitudes, and skills (soft and hard skills) (Kemenkes RI, 2020). Nursing professional education students need to have confidence in their abilities to provide nursing care to patients. Good self-efficacy can enhance nursing students' competence (Hart, 2022). Clinical skills are at the core of nursing practice. Nurses are directly involved in providing hands-on care to patients, including performing medical procedures, monitoring patient conditions, and implementing care plans. Clinical skills directly impact care outcomes and patient satisfaction (Meilina, 2021). Expertise in accurately performing medical procedures can significantly affect patient safety and comfort. In the context of nursing professional education, a focus on clinical skills helps assess the effectiveness of educational and training programs (Nelwati & Rahayuningsih, 2022). This ensures that graduates possess the necessary skills to enter nursing practice.

Introducing clinical knowledge and skills to students during nursing programs can alter their clinical self-confidence (Hamilton, 2018). Research findings (Hamilton, 2018) indicate that the average clinical self-efficacy of Bachelor of Science in Nursing (BSN) students in the University of Tennessee's programs, from levels two to four, increases based on clinical experience for each action studied using the Clinical Skills Self-Efficacy Scale (CSES). Additionally, Van Horn and Christman (2017) compared clinical self-efficacy among junior and senior nursing students. They revealed that senior nursing students possessed greater clinical self-efficacy compared to junior students. This suggests that clinical self-efficacy improves with accumulated clinical experience and the acquisition and practice of new skills. In Indonesia, no research has been found that specifically addresses self-efficacy in performing basic clinical skills. Therefore, considering the phenomena, theories, and various existing studies related to self-efficacy and its connection to the abilities of nursing professional education students in clinical practice, the researcher has decided to focus on the topic of self-efficacy among nursing professional education students.

This study aims to evaluate the self-efficacy levels in clinical skills among students enrolled in the Nursing Profession Study Program at the Faculty of Nursing, Universitas Padjadjaran. This could provide an insight into how nursing professional education students will apply their clinical abilities directly to patients in the future, as they are one step closer to the nursing profession.

## METHOD

This study employed a quantitative descriptive method using a cross-sectional approach. The variable of this study is basic clinical skills self-efficacy levels among nursing profession students. the research was conducted from April to May 2024 with a population of 150 active students of nursing profession program at the Faculty of Nursing, Universitas Padjadjaran. The sample was taken using total sampling type, where during informed consent, 22 respondents were unwilling to participate as research samples. In this study, a total of 149 samples were obtained with distribution of 101 PPN 46 students and 48 PPN 47 students. Data were collected using the Clinical Skills Self-Efficacy Scale (CSES) which consist of 9 statements related to confidence in performing clinical skills, each response is scored on a

scale from 0 to 10, with 0 indicating "no confidence" and 10 indicating "total confidence". The questionnaire was designed, developed, and refined by Oetker-Black and Judy Kreye (2016) with validity test results after translated to Bahasa is ranging from 0.415-0.727, and the reliability test results 0.825. Before being distributed, this questionnaire was translated into Bahasa Indonesia with back-translation method by two different translators. This analysis used univariate descriptive statistics to describe the level of self-efficacy in performing clinical skills and displayed it in the form of a frequency distribution. Data was analysed using SPSS version 26.0 The mean score obtained is 72.45, and the frequency distribution of the total score for each respondent is then calculated. The data analysis results were categorized into two categories based on the mean value: high self-efficacy ≥ 72,45 and low self-efficacy < 72,45. This study received approval from the Ethics Committee of Universitas Padjadjaran (Reference No. 664/UN6.KEP/EC/2024).)

## RESULTS

In this study, the demographic data of the respondents includes age, gender, educational level, and experience in performing clinical skills, which are presented in the following table:

Table 1.
Distribution of Respondent characteristics (n=150)

| Age | f | % |
|---|---|---|
| ≤ 21 years old | 2 | 1,3 |
| 22 years old | 46 | 30,7 |
| 23 years old | 66 | 44 |
| ≥ 24 years old | 36 | 24 |
| Gender | | |
| Male | 16 | 10,7 |
| Female | 134 | 89,3 |
| Collage Class | | |
| PPN 46 | 102 | 68 |
| PPN4 7 | 48 | 32 |

Table 1, the data indicates that the most common age group among the participants in this study is 23 years old, with 66 individuals, while the youngest age group is under 21 years old. The proportion of female respondents outnumbered male respondents, with females comprising 89.3% of the sample.

Table 2.
Distribution of Respondent Experience (n=150)

| Experience in Performing Clinical Skills | f | % |
|---|---|---|
| Experience of administered an intramuscular injection | | |
| Ever | 149 | 99,3 |
| Never | 1 | 0,7 |
| Experience of changed addressing using sterile technique | | |
| Ever | 148 | 98,7 |
| Never | 2 | 1,3 |
| Experience of inserted a Foley catheter | | |
| Ever | 146 | 97,3 |
| Never | 4 | 2,7 |
| Experience of inserted a nasogastric tube | | |
| Ever | 132 | 88,6 |
| Never | 18 | 11,4 |

| Experience in Performing Clinical Skills | f | % |
|---|---|---|
| Experience of started an intravenous line | | |
| Ever | 150 | 100 |
| Never | 0 | 0 |
| Experience of calculated a dose of medication | | |
| Ever | 148 | 98,7 |
| Never | 2 | 1,3 |
| Experience of transferred a bedridden patient from bed to chair | | |
| Ever | 139 | 92,6 |
| Never | 11 | 7,4 |
| Experience of hung an intravenous piggy back medication | | |
| Ever | 148 | 98,7 |
| Never | 2 | 1,3 |

Table 2, most students have experience in performing the clinical skills procedures mentioned.

The results of the descriptive analysis of self-efficacy level among profession nursing students are presented in table 3 and 4

Table 3.
Descriptive Analysis of Clinical Skills Self-Efficacy (n=150)

| Respondent Experiences | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|
| Independently administer an intramuscular injection | 7 | 9 | 8 | ,116 |
| Independently administer an insulin injection | 4 | 10 | 9,29 | 1,072 |
| Independently change a dressing maintaining sterile technique | 5 | 10 | 8,14 | 1,210 |
| Independently insert a Foley catheter using sterile technique | 4 | 10 | 8,02 | 1,407 |
| Independently insert a nasogastric tube with correct placement | 4 | 10 | 7,81 | 1,600 |
| Independently start an intravenous line | 4 | 10 | 8,41 | 1,281 |
| Correctly transfer an immobile patient from bed to chair using correct technique | 3 | 10 | 7,79 | 1,416 |
| Independently hang an intravenous piggyback medicine and program the pump accurately | 3 | 10 | 8,53 | 1,299 |
| Administer a tube feeding through a percuraneous endoscopic gastrotomy tube using correct technique | 0 | 10 | 6,45 | 2,307 |
| Total Score | 49 | 88 | 72,45 | 8,107 |

Table 4.
Distribution of clinical skills self-efficacy levels (n=149)

| Category | f | % |
|---|---|---|
| Low | 70 | 46,7 |
| High | 80 | 53,3 |

Tables 3 and 4, it is known about the level of self-efficacy among Professional Nursing Education students at the Faculty of Nursing, Universitas Padjadjaran, in performing basic clinical skills. From all respondents, it is found that there are respondents classified into the category of high self-efficacy, totaling 80 students (53.3%), and 70 students (46.7%) are classified into the category of low self-efficacy.

Table 5.
Crosstab of respondent's clinical skills self-efficacy level with respondent's experience (n=150)

| Respondent's experience | | Clinical skills self-efficacy level | | | |
|---|---|---|---|---|---|
| | | Low | | High | |
| | | f | % | f | % |
| Collage Class | PPN 46 | 45 | 44,6 | 57 | 55,4 |
| | PPN 47 | 25 | 52,1 | 23 | 47,9 |
| Experience of administered an intramuscular injection | Ever | 69 | 46,6 | 80 | 53,4 |
| | Never | 1 | 100 | 0 | 0 |
| Experience of changed addressing using sterile technique | Ever | 68 | 46,3 | 80 | 53,7 |
| | Never | 2 | 100 | 0 | 0 |
| Experience of inserted a Foley catheter | Ever | 67 | 46,2 | 79 | 53,8 |
| | Never | 3 | 75 | 1 | 25 |
| Experience of inserted a nasogastric tube | Ever | 57 | 43,2 | 75 | 56,8 |
| | Never | 13 | 76,5 | 5 | 23,5 |
| Experience of started an intravenous line | Ever | 70 | 47 | 80 | 53 |
| | Never | 0 | 0 | 0 | 0 |
| Experience of calculated a dose of medication | Ever | 68 | 46,3 | 80 | 53,7 |
| | Never | 2 | 100 | 0 | 0 |
| Experience of transferred a bedridden patient from bed to chair | Ever | 61 | 44,2 | 78 | 55,8 |
| | Never | 9 | 81,8 | 2 | 18,2 |
| Experience of hung an intravenous piggy back medication | Ever | 68 | 46,3 | 80 | 53,7 |
| | Never | 2 | 100 | 0 | 0 |

Table 5 is a cross-tabulation between the level of self-efficacy of Professional Nursing Education (PPN) students in performing clinical skills and their experiences based on the educational level they are currently in and their experience in performing various clinical procedures. The data indicates that students in higher educational levels (PPN 46) have a higher percentage of high self-efficacy, with 57% compared to students in lower educational levels (PPN 47) with a percentage of 47.9.

## DISCUSSION

The research findings indicate that the proportion of female respondents outnumbered male respondents, with females comprising 89.3% of the sample. The researcher assumes that the higher representation of females in the study is due to the unequal distribution of respondents by gender, where females dominate the sample. This is also consistent with research conducted by (Aini et al., 2024) at Universitas Padjadjaran which similarly found that the majority of students in the faculty of nursing are female (88%). This aligns with the theory that the nursing profession is predominantly female-dominated, as historically nursing has been perceived as a traditional caregiving role within both family and society (Rollinson et al, 2019). The academic status of the respondents is from active students of the Professional Nursing Education program at the Faculty of Nursing, Unpad, who have completed the Basic Professional Skills (KDP) stage, comprising 68% from PPN 46 and 32% from PPN 47. This aligns with the learning process and application of clinical skills in the professional program.

Based on the research results, 80 students (53.3%) have a high level of self-efficacy in performing clinical skills, while 70 students (46.7%) have a low level of self-efficacy. According to grand theory by Albert Bandura, one of the main factors influencing self-efficacy is experience; successful experiences in performing tasks or achieving goals can enhance self-efficacy, whereas experiences of failure can reduce self-confidence (Apsari et al., 2023). In the study results, respondents' experience was viewed from their current educational level, with 68% being PPN 46 students and 32% being PPN 47 students, and their

experience in performing clinical skills. During data collection, the rotations completed by the two cohorts differed. PPN 46 students had completed rotations in Basic Professional Skills, Pediatric Nursing, Psychiatric Nursing, Maternity Nursing, Medical-Surgical Nursing, Emergency and Critical Care Nursing, Palliative Care Nursing, Community Health Nursing, Nursing Management, and elective rotations, while PPN 47 students had only completed rotations in Basic Professional Skills, Medical-Surgical Nursing, and Maternity Nursing.

The analysis of self-efficacy levels among Professional Nursing Education students in performing clinical skills based on educational experience showed that 55.4% of PPN 46 students had high self-efficacy, while only 47.9% of PPN 47 students had high self-efficacy. This aligns with research by Van Horn and Christman (2017), which found that senior nursing students have higher clinical self-efficacy compared to junior students. Furthermore, the analysis based on clinical skills experience indicated that 75%-80% of respondents who reported having performed the specified clinical skills had high self-efficacy. Hamilton's (2018) study found that the average clinical self-efficacy of BSN (Bachelor of Science in Nursing) students at the University of Tennessee increased from the second to the fourth year based on clinical experience for each skill investigated using the CSES instrument. Research from David Hart (2022), also found that students in the senior class had a higher mean clinical skills self-efficacy rating compared to those in the junior class. Furthermore, research in Korea found that senior nursing students had the highest mean clinical practice self-efficacy compared to junior and sophomore students (Choi et al., 2022).

In this study, respondents had high self-efficacy because they had experience with almost all clinical skills. Thus, the researcher believes that experience in performing clinical skills can influence students' self-efficacy levels. The various clinical situations faced require many ideas or critical thinking to provide proper judgment regarding the nursing care given to patients. Self-efficacy in Professional Nursing Education students helps them feel competent in performing medical actions. The lack of literature on the topic of self-efficacy in clinical skills in Indonesia is a limitation of this study. There hasn't been specific research conducted on self-efficacy in clinical skills in Indonesia. Globally, research on this topic remains quite limited as well, despite numerous studies related to self-efficacy.

## CONCLUSION

In general, active Professional Nursing Education students at the Faculty of Nursing, Padjadjaran University, have a high level of self-efficacy in performing basic clinical skills. The percentage of students from cohort 46 who have high self-efficacy is greater than that of cohort 47. This is largely due to the experience they have gained in performing clinical procedures. Regular and frequent practicum and simulations provide valuable opportunities for students to improve their core clinical skills in a controlled setting, free from the complexities of real patient interactions. This approach effectively strengthens the foundation of basic skills. Further research could be conducted to identify other factors that may influence students' self-efficacy levels, such as social support, learning environment, and academic stress. Expanding the scope of the sample selection to balance the representation between senior and junior professional students could also be beneficial.

Based on the research conclusions indicating that active students in the Nursing Profession Education Program at the Faculty of Nursing, Unpad generally have a high level of self-efficacy in performing basic clinical skills, the following recommendations can be considered by the academic department to enhance and maintain students' self-efficacy levels:

1. Supervising lecturers and clinical instructors should provide constructive and supportive feedback to students to increase their confidence in performing clinical skills.
2. Regularly monitor and evaluate the development of students' self-efficacy by assessing existing learning outcomes and clinical performance.

## REFERENCES

Abusubhiah, M., Walshe, N., Creedon, R., Noonan, B., & Hegarty, J. (2023). Self-efficacy in the context of nursing education and transition to practice as a registered practitioner: A systematic review. Nursing Open, 10(10), 6650-6667.

Aini, E. N., Agustina, H. R., & Permana, R. H. (2024). Overview of the Student Learning Environment of the Universitas Padjadjaran Nursing Profession Study Program. Lectura: Jurnal Pendidikan, 15(1), 245-258.

Apsari, A. P., Widiasih, R., & Mirwanti, R. (2023). Virtual Reality Effectivity To Increase Self-Efficacy In Suction Skill Among Nursing Student: Quasi Experiment Study. Journal of Nursing Care (1411-156X), 6(2), 95–101.

Choi, H., Kim, S., & Jeong, H. (2022). Development and psychometric evaluation of Clinical Practice Self-Efficacy Scale for nursing students. The Journal of Korean Academic Society of Nursing Education, 28(3), 236-247.

Departemen Kesehatan. (2020). Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01/07/MENKES/425/2020 tentang Standar Profesi Perawat. Berita Resmi Kementerian Kesehatan Republik Indonesia, 18(5), 220-225.

George, T. P., DeCristofaro, C., & Murphy, P. F. (2020). Self-efficacy and concerns of nursing students regarding clinical experiences. Nurse education today, 90, 104401.

Hamilton, C. (2018). Progression of Clinical Self-Efficacy Among Baccalaureate Nursing Students (Doctoral Dissertation, Walden University).

Harefa, E. Y., Simamora, E., Trimay, G., Juniarta, J., & Silitonga, E. (2023). Gambaran Efikasi Diri Mahasiswa Keperawatan Di Indonesia. JURNAL KEPERAWATAN CIKINI, 4(1), 6-14.

Hart, D. (2022). Nursing Student Self-Efficacy in Clinical Skills, Levels of Anxiety, and Utilization of Alternative Education Experiences During the COVID-19 Pandemic.

Ibrahim, A. F., Abdelaziz, T. M., & Akel, D. T. (2019). The relationship between undergraduate nursing students' satisfaction about clinical learning environment and their competency self-efficacy. Journal of Nursing Education and Practice, 9(11), 92.

Karisa, P., Fitria, N., & Nurhakim, F. (2022). Description of Academic Learning Environment Undergraduate Nursing Study Program Faculty of Nursing Universitas Padjadjaran. Indonesian Nursing Journal of Education & Clinic (INJEC), 7(2), 204–221. https://doi.org/10.24990/injec.v7i2570

Kumalasari, S. A., Suparti, S., & Raani, K. (2021). Self-Efficacy and Readiness Towards Early Clinical Exposure Among Nursing Students. IJNP (Indonesian Journal of Nursing Practices), 5(2), 104-111.

Lianto, L. (2019). Self-efficacy: A brief literature review. Jurnal Manajemen Motivasi, 15(2), 55-61.

Meilina, M., & Bernarto, I. (2021). Pengaruh Pengetahuan, Sikap dan Keterampilan Perawat Terhadap Kepuasan Pasien. Jurnal Administrasi Bisnis (JAB), 11(1), 1-6.

Moon, H., & Hyun, H. S. (2019). Nursing students' knowledge, attitude, self-efficacy in blended learning of cardiopulmonary resuscitation: a randomized controlled trial. BMC medical education, 19(1), 1-8.

Nash, B., MItchell, A. W., Jones, J., & Etheridge, J. (2022). Student self-efficacy levels for performing clinical skills learned virtually during a pandemic. Journal of Occupational Therapy Education, 6(3), 9.

Nelwati, P. TH, & Rahayuningsih, A. (2022). Hubungan Lingkungan Belajar Klinik dengan Tingkat Kecemasan Mahasiswa pada Program Pendidikan Ners. NERS Jurnal Keperawatan, 8(1), 16.

Oetker-Black, S. L., Kreye, J., Davis, T., Underwood, S., & Naug, S. (2016). The Psychometric Evaluation of the Revised Clinical Skills Self-Efficacy Scale. Journal of nursing measurement, 24(1), 166–175. https://doi.org/10.1891/1061-3749.24.1.166

Purwandari, R., Afandi, A. T., Amini, D. A., Ardiana, A., & Kurniawan, D. E. (2023). The Overview of Self-Efficacy Among Nursing Students. Babali Nursing Research, 4(1), 100-108.

Rahmawati, W. D., Sukmaningtyas, W., & Muti, R. T. (2021). Hubungan antara jenis kelamin dan program studi dalam mempengaruhi pengetahuan bantuan hidup dasar pada mahasiswa. Borneo Nursing Journal (BNJ), 4(1), 18-24.

Sipayung, R. A., Pahria, T., & Praptiwi, A. (2019). Self-Efficacy of internship nursing students in dealing with Palliative patients. Journal of Nursing Care, 2(2), 129–136. https://doi.org/10.24198/jnc.v2i2.18943

Sugiyono. (2019). Metodologi Penelitian Kuantitatif dan Kualitatif Dan R&D. Bandung: ALFABETA.

Van Horn, E., & Christman, J. (2017). Assessment of nursing student confidence using the clinical skills self-efficacy scale. Nursing Education Perspectives, 38(6), 344-346.