

The Effectiveness of Self-Directed Learning Readiness on Competency Achievement of Basic Nursing Clinical Practice Students

Anggia Astuti¹, Dodi Wijaya¹, Nur Yuliani², Zainal Abidin¹, Rizeki Dwi Fibriansari¹

¹ Fundamental of Nursing, Faculty of Nursing, Universitas Jember, Indonesia

² Nurse Practitioner, Indonesian National Nurses Association, Indonesia

Correspondence should be addressed to:
Anggia Astuti
anggiastuti.oj26@unej.ac.id

Abstract:

Basic Nursing Clinical Practice is the first clinical learning experience for vocational nursing students. The achievement of complete competence will provide a positive experience, ability, willingness to learn actively and independently, and direct continuous learning so that competent vocational nurse graduates are achieved. Self-Directed Learning Readiness (SDLR) is a condition where students have full control in the process of making decisions related to their learning and accept full responsibility for it, even though later they need help and advice from lecturers and Clinical Instructors. Therefore, this research was conducted to determine the effectiveness of SDLR on the competency achievement of basic nursing clinical practice students. This study used a quasi-experimental design with one group pretest and posttest design. The sampling technique used total sampling, with as many as 91 respondents. Respondents were 2nd semester D3 Nursing Study Program students. The analysis used an independent sample t-test, with a 95% degree of confidence. The results of statistical tests using the Independent T-Test showed that there was a positive effect of SDLR on the Competency Achievements of Basic Nursing Clinical Students with a p-value <0.05. Of course, a high level of Self Directed Learning Readiness, can have a positive impact on student competency outcomes in carrying out Nursing Clinical Practice, where competency achievement targets will be met. Achievement of plenary competence will provide a positive experience, ability, willingness to learn actively and independently, and direct continuous learning so that competent vocational nurse graduates are achieved.

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INTRODUCTION

Vocational Education is a Diploma Program level of Higher Education that prepares students to work with certain applied skills up to an applied undergraduate program. The main output of Vocational Education graduates is graduates who are ready to work with certain skills (Fitria et al., 2023). The D3 Nursing Study Program is a vocational education level at the University of Jember, Lumajang Campus. This study program prepares graduate students who work as nurses, where they are required to have competencies in accordance with their scientific fields.

Global demands for the quality of Diploma III Nursing Education graduates and the current higher education system have consequences for increasing mastery of increasingly modern technology and science (Muntamah, 2017). Achievement of competence in the scientific field can improve performance and increase motivation in working as a professional nurse. Competence is a strong basis and has a positive and significant effect on professionalism as a nurse (Suprapti,

2019). This competency demand can be realized if students take part in a series of lecture activities that are innovative, effective and student-oriented (Muntamah, 2017) .

Basic Nursing Clinical Practice is the first clinical learning experience for nursing vocational students. Achievement of plenary competence will provide a positive experience, ability, and willingness to learn actively and independently and direct continuous learning so that competent vocational nurse graduates are achieved. Impact caused by nurses who are not competent in carrying out their work students after graduation are not habitually able to carry out their duties as such nurses are less skilled in managing patients, less skilled in carrying out maintenance procedures and not yet optimal in completing problems encountered in the hospital (Rusyani, 2019; Zuliani et al., 2023).

Self-Directed Learning Readiness (SDLR) is a condition where students have complete control in the manufacturing process decisions related to their learning and accept full responsibility for them, although later they need help and advice from lecturers and Clinical Instructors. Difficulties in doing SDLR are often found in first-year students because they are still adapting from the previous learning model, namely Centered Learning (TCL) to Student-Centered Learning (SCL). In addition, a wrong understanding of SDLR will lead to low student readiness to carry out independent learning (Luailiyah et al., 2021). Having a quality SDLR is important to overcome learning failures and psychological failures from children to adults (Riyaningrum & Kusumawati, 2019).

A person's SDLR level is influenced by many factors which have been grouped into internal factors and external factors. Internal factors include age, gender, intelligence, education level, and socialization factors. While external factors include study time, place of study, learning motivation, parenting style, and accessibility of learning resources (Mandolang, 2021; Ramli et al., 2018). In this case, research needs to be carried out to assess the level of student SDLR towards student competency achievements, so that the Lecturer Team can facilitate students in an appropriate learning process so that later competency can be achieved to perfection. Of course, this will have a positive impact on the quality of nurses in providing complete service to patients. Therefore this study was conducted to determine the effectiveness of SDLR against competency achievement of basic nursing clinical practice students.

METHOD

This study used a quasi-experimental design with one group pretest and posttest design. The sampling technique used total sampling, with as many as 91 respondents. Respondents were 2nd semester D3 Nursing Study Program students. The analysis used an independent sample t-test, with a 95% degree of confidence.

The instrument used in this study was the Self-Directed Learning Readiness Scale (SDLRS) questionnaire developed by Fisher (Fisher et al., 2001). The SDLRS questionnaire consists of 40 questions with 3 sub-scales namely self-management, desire to learn, and self-control. Research data collection was carried out by distributing the SDLRS questionnaire. The type of data obtained from the SDLRS questionnaire is data with an interval scale. The effectiveness of SDLR on competency achievement was analyzed using an Independent T-Test with the help of SPSS 26.

The SDLRS questionnaire in the Indonesian version was validated by Nyambe for first, second, and third-year medical students at the Hasanuddin University Faculty of Medicine in the implementation of Problem-Based Learning with validity ($r > 0.268$) and reliability (Cronbach Alpha = 0.90) test scores (Nyambe et al., 2016). There are three aspects assessed, namely self-management (13 subscales), desire to learn (12 subscales), and self-control (15 subscales). There

are three categories, namely high > 132, moderate 84-131, and low < 84 4. The research locations were the D3 Nursing Study Program, Faculty of Nursing, Jember University, Lumajang campus, and dr. Haryoto Lumajang a Basic Nursing Clinic Practice area.

RESULT

Characteristics of Respondents

Table 1. Respondents' Characteristics (n=91)

Characteristic	Frequency (f)	Percentage (%)
Age		
18 years	23	25.2
19 years	60	66
20 years	8	8.8
Sex		
Male	9	9.9
Female	82	90.1

Table 1 shows that the respondents in this study were 91 students aged 18-20 years. Where most of the female sex.

Students' SDLR Level

Table 2. Distribution of Respondents' SDLR Level based on Age and Sex (n=91)

Characteristic	SDLR Level				Total	
	High		Moderate		f	%
	f	%	f	%		
Age						
18 years	1	1	22	24	23	25
19 years	6	6.5	54	60	60	66.5
20 years	2	2	6	6.5	8	8.5
Sex						
Male	0	0	9	10	9	10
Female	9	10	73	80	82	90

Table 2 shows that most of them have moderate SDLR levels, namely 82 students (90.5%) from the age range of 18-20 years. The SDLR level of women is indeed higher than that of men, where the high level of female SDLR is 9 people (10%) and there are 73 people (80%), while all male respondents have moderate SDLR levels.

Student Competency Achievement of Basic Nursing Clinical Practice

Table 3. Competency Achievement of Basic Nursing Clinical Practice

Grade of Achievement	Frequency (f)	Percentage (%)
A	112	93
AB	8	7
B	0	0
Total	120	100

Table 3 shows that all students who underwent basic clinical nursing practice met the competency achievement targets as indicated by the fact that some students got A grades (range of values 80-100) as many as 112 students and those who got AB scores (range of values 75-79) only 8 students.

The Effectiveness of SDLR on Competency Achievement of Students in Basic Nursing Clinical Practice

Table 4. The Effectiveness of SDLR on Competency Achievement of Students in Basic Nursing Clinical Practice

SDLR Level	Mean	SD	p-value	t
Pretest	135.91	17.48	0.000	-4.020
Posttest	144.85	11.99		

DISCUSSION

Characteristics of Respondents

Respondents in this study were 91 students in the 2nd semester of the D3 Nursing Study Program who carried out Basic Nursing Clinical Practices. The number of female respondents (90.1%) was more than male respondents (9.9%), where the age range of the respondents was mostly 19 years old (66%), then 18 years old (25.2%) and at least at the age of 20 years (8.8%).

Student SDLR Level

The competency-based curriculum (KBK) in nursing education is used to meet the standards for Indonesian nurse graduates according to the IQF. Problem-based learning (PBL) is a learning strategy that is often used in CBC (Mandolang, 2021). Independent learning has proven to be beneficial for students doing lifelong learning, providing satisfaction and independence, while problem-based learning is a constructive learning approach by enables students to find solutions to complex problems in the real world. The PBL process makes students train themselves to improve their problem-solving skills (Anwar et al., 2021). The benefits of implementing PBL can increase student interest and the quality of learning because students become more independent in learning (Ramli et al., 2018). The purpose of implementing PBL is to build and develop learning in the psychomotor field in terms of scientific reasoning, critical assessment, information literacy, independent learning, and Life-Long Learning which includes Directed Learning (SDL) (Ahmar et al., 2020; Ramli et al., 2018).

Self Directed Learning Readiness (SDLR) is a person's readiness as indicated by attitudes, abilities and personal characteristics needed in independent learning (Baptista et al., 2021; Nyambe et al., 2016). A person's SDLR level is influenced by many factors which have been grouped into internal factors and external factors. Internal factors include age, gender, intelligence, education level, and socialization factors. While external factors include study time, place of study, motivation to learn, parenting style, and accessibility of learning resources (Mandolang, 2021; Ramli et al., 2018).

Determining the SDLR level among nursing students can serve as a foundation for the institution providing feedback on student learning needs as well as supervision during the academic program. In addition, this can be a guide for lecturers or teaching teams in identifying students who need to be improved, or supervised based on their learning readiness and can also

be implemented into nursing programs at either the diploma or undergraduate level in a university as a modern approach to learning activities. teaching (Koirala et al., 2021).

Table 2 shows that most of them have moderate SDLR levels, namely 82 students (90.5%) and only 9 students (9.5%) who have high SDLR levels from the age range of 18-20 years. A person's SDLR level increases as they get older because with increasing experience they will evaluate their learning (Paramata & Sabudi, 2020). In this study, the age of respondents was included in the adult age group (18-21 years). The student development process has entered the early adult phase which not only demands to improve the quality of knowledge, but also skills and personal qualities as a provision for independent living. Early adult students have a higher motivation to learn than middle adult students because middle adult students have other life burdens so that their attention is not only on studying. In addition, early adult students are in a period of productive work. Students aged 18-25 years are in a transitional stage from college to productive work. In addition, at the age of early adulthood, there is a development of intelligence and a mature mindset. With increasing age, students have been able to prepare themselves to face the practice of learning in the clinic (Lindasari et al., 2020). And in the process students will adapt to situations and conditions from just doing learning activities in class, to situations where they have to adapt in clinical practice. Therefore, those who have entered the age of 18-25 years or early adulthood will find it easier to adapt because they experience changes in their mindset that are more mature.

Table 2 shows that the SDLR level of women is indeed higher than that of men, where the high level of female SDLR is 9 people (10%) and there are 73 people (80%), while all male respondents have a moderate level. This happens because: (a) Women's intellectual ability is consistently higher than that of men, as seen from several tests that show several abilities, (b) School achievement, women are judged to be more consistent than men, women consistently do more verbal assignments better than men, thus placing women in the top positions in achievement (Sugianto & Lisiswanti, 2016). So it is not surprising that the SDLR rate for women is higher than the SDLR rate for men.

Student Competency Achievement of Basic Nursing Clinical Practice

Basic Nursing Clinic Practice is the first clinical practice carried out by nursing students while they are studying at Diploma III Nursing. This practice provides an opportunity for students to perform nursing care for patients in meeting basic human needs with a five-process approach to nursing that is do an assessment, formulate nursing diagnoses, make _ nursing interventions, perform nursing actions, and evaluate. While running Basic Nursing Clinic Practice, students are required to be able to achieve competency targets that have been determined in the basic nursing clinical practice curriculum (Lindasari et al., 2020).

The success of clinical learning is influenced by knowledge, mental, and emotional readiness, and the availability of a conducive learning environment. Students who practice in clinics and act as nurses will shape student motivation to be able to carry out work as nurses (Pertiwi & Ermayani, 2017). The results showed that most of the scores for achieving the basic clinical practice competency targets were in the very good category (93%). Where there are 112 students with grades A (score range 80 – 100) and 8 students with grades AB (grades 75 – 79).

Several factors that affect lower clinical competence are the presence of individual factors, the environment and the nursing learning curriculum which are the three main factors that influence student success in achieving competency in clinical nursing practice in hospitals (Kurniawan, 2020).

The Effectiveness of SDLR on Competency Achievement of Students in Basic Nursing Clinical Practice

The results of statistical tests using the Independent T-Test showed that there was a positive effect of SDLR on the Competency Achievements of Basic Nursing Clinical Students with a p-value <0.05 . A high level of Self-Directed Learning Readiness is dominated by individual characteristics with an attitude of controlling the learning experience, individuals who can self-manage such as managing time, and individuals who can change themselves in their work. In addition, students who have a high level of Self Directed Learning Readiness can be responsible and able to control all the learning processes they are undergoing, this happens because these students have a strong desire to learn, have a high curiosity about the scientific objects being studied and driven by the dominant internal motivation to successfully carry out their professional duties in the future (Isnaini et al., 2019). The characteristics of students who have a high level of Self Directed Learning Readiness are students who know their learning objectives, can choose their learning resources, and are someone who can assess their level of ability (Puspitaningsih & Azizah, 2022). Of course, a high level of Directed Learning Readiness can have a positive impact on student competency outcomes in carrying out Nursing Clinical Practice, where competency achievement targets will be met. Achievement of plenary competence will provide a positive experience, ability, and willingness to learn actively and independently and direct continuous learning so that competent vocational nurse graduates are achieved (Rusyani, 2019; Zuliani et al., 2023). This is in line with research conducted by (Isnaini et al., 2019), Although this study did not assess the competence achievements of nursing students, this study showed that there was a positive relationship between Self Directed Learning Readiness abilities and learning achievement achievements. This can be interpreted that every increase in the score of Directed Learning Readiness is followed by an increase in the score of achieving learning outcomes in the clinic. Of course, a high level of Self-Directed Learning Readiness, can have a positive impact on student competency outcomes in carrying out Nursing Clinical Practice, where competency achievement targets will be met. Achievement of plenary competence will provide a positive experience, ability, willingness to learn actively and independently, and direct continuous learning so that competent vocational nurse graduates are achieved.

CONCLUSION

Based on this study, shows that there is a positive effect of SDLR on the Competency Achievement of Students in Basic Nursing Clinical Practice with a p-value <0.05 . Of course, a high level of Self-Directed Learning Readiness can have a positive impact on student competency outcomes in carrying out Nursing Clinical Practice, where competency achievement targets will be met. Achievement of plenary competence will provide a positive experience, ability, willingness to learn actively and independently, and direct continuous learning so that competent vocational nurse graduates are achieved.

REFERENCES

- Ahmar, H., Budi, P., Ahmad, M., Mushawwir, A., & Khaidir, Z. (2020). Penerapan Model Pembelajaran Problem Based Learning: Literature Review. *Jurnal Keperawatan Muhammadiyah, Edisi Khusus*, 10–17. <https://doi.org/10.30651/Jkm.V5i2.3949>
- Anwar, S., Hussain, M., Afzal, M., & Gilani, S. A. (2021). Assessment Of Enhancement In Self-Management, Self-Control And Learning Desire As A Result Of Self-Directed Learning

- Readiness In Nursing Students. *Journal Of Advanced Psychology*, 3(1), 33–44. <https://doi.org/10.47941/Japsy.565>
- Baptista, Y., Setianingrum, E. L. S., Dedy, M. A. E., & Kareri, D. G. R. (2021). Hubungan Self Directed Learning Readiness Dengan Prestasi Belajar Mahasiswa Fakultas Kedokteran Universitas Nusa Cendana. *Cendana Medical Journal (Cmj)*, 9(2), 207–215. <https://doi.org/10.35508/Cmj.V9i2.5967>
- Fisher, M., King, J., & Tague, G. (2001). Development Of A Self-Directed Learning Readiness Scale For Nursing Education. *Nurse Education Today*, 21(7), 516–525. <https://doi.org/10.1054/Nedt.2001.0589>
- Fitria, D., Rahmawati, V. Y., Siddiq, F. A., & Ramadiyani, S. C. (2023). Refleksi Dua Tahun Pandemi Covid-19: Dampak Pembelajaran Daring Pada Lulusan Vokasi. *Jurnal Ilmiah Permas: Jurnal Ilmiah Stikes Kendal*, 13(1). <https://doi.org/10.32583/Pskm.V13i1.630>
- Isnaini, M., Adi Putra, A. B., Sartika, F. D., & Arifuddin, F. (2019). Kemampuan Self Directed Learning Dan Pencapaian Hasil Belajar: Studi Cross Sectional. *Journal Of Islamic Nursing*, 4(2), 68. <https://doi.org/10.24252/Join.V4i2.10039>
- Koirala, N., Kafle, S. P., & Koirala, A. (2021). Factors Affecting Self-Directed Learning Readiness Of The Undergraduate Nursing Students From Purbanchal University, Nepal: A Cross-Sectional Study. *Journal Of Chitwan Medical College*, 11(3), 31–35. <https://doi.org/10.54530/Jcmc.480>
- Kurniawan, D. (2020). Faktor Yang Mempengaruhi Terjadinya Kesenjangan Antara Pengetahuan Dan Praktik Klinik Mahasiswa Keperawatan Di Rumah Sakit. 2(1).
- Lindasari, S. W., Nuryani, R., & Sopiiah, P. (2020). Hubungan Kecemasan Dengan Pencapaian Target Kompetensi Praktek Klinik Keperawatan Dasar Mahasiswa Prodi Keperawatan Upi Kampus Sumedang. *Syntax Literate ; Jurnal Ilmiah Indonesia*, 5(1), 135. <https://doi.org/10.36418/Syntax-Literate.V5i1.863>
- Luailiyah, A., Oktaviana, R. I., & Utami, K. D. (2021). Motivasi Dan Task Value Berhubungan Dengan Self-Directed Learning Readiness Mahasiswa Kedokteran Tahun Pertama. *Jurnal Ilmu Keperawatan Jiwa*, 4(1). <https://doi.org/10.32584/Jikj.V4i1.806>
- Mandolang, A. C. (2021). Gambaran Self Directed Learning Readiness (Sdlr) Pada Mahasiswa Tingkat Pertama Program Studi Pendidikan Dokter Di Fakultas Kedokteran Universitas Sam Ratulangi. *Medical Scope Journal*, 3(1), 33. <https://doi.org/10.35790/Msj.3.1.2021.33772>
- Muntamah, U. (2017). Analisis Pengaruh Metode Pembelajaran Praktik Laboratorium Berdasarkan Target Kompetensi Terhadap Peningkatan Skill Pada Mata Ajar Keperawatan Gawat Darurat Dan Manajemen Bencana. *The 1st Education And Language International Conference Proceedings Center For International Language Development Of Unissula*, 1(1), 880–881.
- Nyambe, H., Mardiyoto, H., & Rahayu, G. R. (2016). Faktor-Faktor Yang Mempengaruhi Self Directed Learning Readiness Pada Mahasiswa Tahun Pertama, Kedua, Dan Ketiga Di Fakultas Kedokteran Universitas Hasanuddin Dalam Pbl. *Jurnal Pendidikan Kedokteran Indonesia: The Indonesian Journal Of Medical Education*, 5(2), 67. <https://doi.org/10.22146/Jpki.25318>
- Paramata, N. R., & Sabudi, N. H. (2020). Self-Directed Learning Pada Mahasiswa Keperawatan Semester Ii Universitas Negeri Gorontalo. *Jambura Nursing Journal*, 2(1), 146–155. <https://doi.org/10.37311/Jnj.V2i1.6861>
- Pertiwi, G. H., & Ermayani, M. (2017). The Relationship Of Motivation Provision By Clinical Instructor With Student's Readiness To Experience Clinical Practice In Hospital. *Nurseline Journal*, 2(1), 30. <https://doi.org/10.19184/Nlj.V2i1.4171>
- Puspitaningsih, D., & Azizah, N. (2022). Persepsi Tentang Lingkungan Pembelajaran Klinik Dengan Kesiapan Self Direct Learning Mahasiswa Profesi Keperawatan. *Medica Majapahit*, 14(1), 1–7.
- Ramli, N., Muljono, P., & Afendi, F. M. (2018). External Factors, Internal Factors And Self-Directed Learning Readiness. *Journal Of Education And E-Learning Research*, 5(1), 37–42. <https://doi.org/10.20448/Journal.509.2018.51.37.42>

- Riyaningrum, W., & Kusumawati, W. (2019). Pentingnya Self-Directed Learning Readiness (Sdlr) Terhadap Motivasi Belajar, Manajemen Diri Dan Pengendalian Diri Pada Mahasiswa Kesehatan: A Literature Review. *Jurnal Penelitian Keperawatan*, 5(1), 26–34. <https://doi.org/10.32660/Jurnal.V5i1.333>
- Rusyani, Y. (2019). Pengaruh Pelatihan Quality And Safety Education For Nurses (Qsen) Terhadap Kompetensi Safety Preceptor Di Rsup Soeradji Klaten. *Jurnal Ilmu Kesehatan Stikes Duta Gama Klaten*, 11(1), 19–31.
- Sugianto, I. M., & Lisiswanti, R. (2016). Tingkat Self Directed Learning Readiness (Sdlr) Pada Mahasiswa Kedokteran. *Medical Journal Of Lampung University*, 5(5), 27–31.
- Zuliani, Z., Hariyanto, S., Maria, D., Tauran, I., Urifah, S., Sugiarto, A., Muhsinah, S., Kurwiyah, N., Marisi, E. L. D., Manik, M. J., Juliani, E., & Kuswati, A. (2023). *Keperawatan Profesional*. Yayasan Kita Menulis. <http://Repository.Uki.Ac.Id/10379/1/Keperawatanprofesional.Pdf>

