

The Relationship Between *Anxiety* and *Self-Directed Learning Readiness (SDLR)* of Nursing Students in Preparing for Facing Competency Exams at the Faculty Health Sciences at Abulyatama University.

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Abstract *Anxiety* is a subjective emotional state that can trigger feelings of discomfort, vague fear, and restlessness, and is often accompanied by autonomic system responses in the individual's body. This study aims to explore the relationship between *anxiety* and *Self-Directed Learning Readiness (SDLR)* among nursing students as they prepare for competency exams at the Faculty of Health Sciences, Abulyatama University. The study employed a quantitative approach with a descriptive analytical design based on a cross-sectional study. All 41 nursing students in the competency exam preparation phase were involved as respondents through total sampling. Bivariate analysis revealed a significant relationship between *anxiety* and *Self-Directed Learning Readiness (SDLR)* (p-value of 0.034; $p < 0.05$), indicating rejection of H_0 and acceptance of H_a based on hypothesis testing criteria. Thus, it was found that there is a meaningful relationship between *Anxiety* and *Self-Directed Learning Readiness (SDLR)* among nursing students preparing for competency exams. The conclusion of this study confirms the existence of a strong relationship between *Anxiety* and *Self-Directed Learning Readiness (SDLR)* among nursing students preparing for competency exams at the Faculty of Health Sciences, Abulyatama University. As stated by the researcher, "Students are expected to be able to control *Anxiety* so that the *Self Directed Learning Readiness (SDLR)* process can run optimally." Recommendations for further research are to explore other methods or new variables that may influence *Self Directed Learning Readiness (SDLR)* more comprehensively.

Keywords: *Anxiety, Self-Directed Learning Readiness (SDLR), Students, Competency Exam.*

1. Introduction

Anxiety describes a set of conditions associated with excessive worry, accompanied by behavioral, cognitive, affective, psychological, and physiological responses.^[1] In the context of higher education, particularly in the field of health such as nursing, anxiety is a common experience among nursing students, especially when they are about to take the Indonesian Nursing Competency Test (UKNI), which is a primary requirement for graduation and professional licensure in nursing.^[2] The UKNI aims to assess nursing graduates' competencies in knowledge, attitude, and clinical skills according to national standards. However, national data shows fluctuations in UKNI pass rates, with a declining trend since 2015, with only around 50–60% of participants deemed competent.^[3]

In some regions such as Sulawesi, the pass rate is as low as 22–23%, indicating that many students are struggling with this exam.^[3] This situation imposes additional psychological pressure, particularly on nursing students who are in the final stage of their clinical education.

¹ Nazarianpirdosti, M., Janatolmakan, M., Andayeshgar, B., Khatony, A., & Namaziandost, E. (2021). Evaluation of Self-Directed Learning in Nursing Students: A Systematic Review and Meta-Analysis. *Education Research International*, 2021, 1-8. <https://doi.org/10.1155/2021/2112108>.

² Ministry of Education and Culture of the Republic of Indonesia (Kemdikbud). (2020). *Kemdikbud Nursing Competency Test 2020*. Ministry of Education and Culture of the Republic of Indonesia.

³ Ristek Dikti. *National Report on the Results of the National Competency Test (UKNI) 2015–2020*. Jakarta: Directorate of Quality Assurance; 2020.

In the nursing learning process, the *Self-Directed Learning* (SDL) approach is now widely applied. *Self-Directed Learning* (SDL) emphasizes student independence in managing their own learning process, requiring *Self-Directed Learning Readiness* (SDLR) which includes internal motivation, self-regulation, and learning discipline.^[4] Nursing students are expected to have high SDLR to effectively address clinical and academic challenges independently, including managing anxiety prior to competency exams.^[5]

Various studies have indicated that *anxiety* levels negatively impact students' readiness for *self-directed learning* (SDLR). Individuals with high anxiety levels generally demonstrate lower ability to achieve readiness for managing the learning process autonomously. Another finding, as noted by Wardani in 2024, identified that more than half of nursing students, specifically 52%, had low SDLR levels. This result is also consistent with the findings of Pattimura and colleagues in 2022, who concluded that there is a significant relationship between anxiety and students' readiness to face the UKNI.^[6]

At the Faculty of Health Sciences, Abulyatama University, Aceh Besar, based on preliminary data, it was found that out of 55 nursing students who took the UKNI, only 73% were declared competent. A preliminary survey of students who were about to take the UKNI showed that most felt anxious and were not fully prepared for independent learning, thereby highlighting the need for this study.

Against this backdrop, this study focuses on nursing students at the Faculty of Health Sciences, Abulyatama University, with the aim of exploring the relationship between *anxiety* levels and *Self-Directed Learning Readiness* (SDLR) when facing competency exams. The findings from this study are expected to serve as a reference for educational institutions and academic advisors in developing intervention strategies, both academically and psychologically, to optimize readiness and improve the passing rate of nursing students.

2. Literature Review

The Relationship Between *Anxiety* and *Self-Directed Learning Readiness* (SDLR) Among Nursing Students in Preparing for Competency Exams at the Faculty of Health Sciences, Abulyatama University.

2.1 Anxiety

Anxiety is an emotional response to a situation that is perceived as threatening or burdensome, characterized by feelings of fear, discomfort, and tension. The causes of anxiety can vary widely and are often unclear to the individual. Feelings of anxiety can be seen through changes in the body and actions taken, or through the emergence of symptoms and ways of coping with anxiety. Anxiety arises when a person feels there is a threat or danger that is not real but could happen at any time, and the presence of things that are rejected by society can make a person feel anxious, especially when in a new environment.

Anxiety is a feeling of fear, worry, and uneasiness that is not rational. As a result, a person will feel anxious, and this can cause changes in behavior, such as withdrawing from their surroundings, difficulty concentrating while doing activities, difficulty eating, being easily

⁴ Koç, S. E. (2019). The Relationship Between Emotional Intelligence, Self-Directed Learning Readiness, and Achievement. *International Online Journal of Education and Teaching*, 6(3), 672-688.

⁵ Lutfianawati, D., Lestari, S. M. P., & Istiana, S. (2018). The Relationship Between Among First-Year Medical Students at Malahayati University in 2017. *Journal of Medical and Health Sciences*, 5(4), 232-44.

⁶ Pattimura, N., Latuheru, I., & Ruhukael, N. L. (2022). The Relationship Between Among Nursing Students at Pasapua Health College in Ambon. *Pasapua Health Journal*, 4(1), 74-78.

irritated, decreased emotional control, being overly sensitive, thinking irrationally, and difficulty sleeping.^[7]

Anxiety can be divided into two types: *state anxiety* (temporary anxiety due to a specific situation) and *trait anxiety* (part of an individual's personality).^[8] There are four levels of *anxiety*, including: mild, moderate, severe, and panic. In nursing students, anxiety often arises when facing academic burdens, clinical practice, and competency exams. Excessive anxiety can hinder concentration and reduce learning performance.^[9]

2.2 Self-Directed Learning Readiness (SDLR)

Self-Directed Learning Readiness (SDLR) refers to the level of readiness of an individual to manage and direct their learning activities independently, including the ability to take responsibility for all stages of the learning process. According to Guglielmino, SDLR encompasses motivation, self-confidence, curiosity, and the ability to set learning goals.^[10] In the context of nursing, a high level of SDLR is essential for students to be able to face academic and practical challenges independently.^[11] Students with high SDLR tend to be more effective in developing learning strategies and solving problems independently.^[12]

Therefore, individuals are required to master *Self-Directed Learning Readiness (SDLR)* in order to fulfill their responsibilities optimally. SDLR readiness is not uniform among individuals, as there are various aspects that shape it. In general, there are seven main components that play a role in determining an individual's SDLR ability. There are seven factors that influence *Self-Directed Learning Readiness (SDLR)*. These factors consist of learning attitudes, learning management, application and creativity, learning control, confidence and independence in learning, self-concept in learning, and proactive learning.

2.4 Nursing Students and Competency Tests

Nursing students are final-year students in nursing education who are required to take a competency test to obtain certification as professional nurses. This exam covers cognitive, affective, and psychomotor aspects, often leading to high levels of anxiety.^[13] The ability to manage learning independently and manage emotional stress plays an important role in determining an individual's level of readiness for competency exams. Thus, students with optimal *Self-Directed Learning Readiness* are more likely to prepare themselves

⁷ Jarnawi, J. (2020). Managing Anxiety During the Coronavirus Pandemic *At-Taujih: Islamic* 3(1), 60-73.

⁸ Leal, P. C., Goes, T. C., da Silva, L. C. F., & Teixeira-Silva, F. (2017). Trait VS. State Anxiety in Different Threatening Situations. *Trends in Psychiatry and Psychotherapy*, 39(3), 147-157.

⁹ Nurkarim, A. W., Qonita, W., & Isroil, A. (2024). Mathematics Anxiety Scale for Students: Measurement of Physiological, Psychological, Behavioral, and Cognitive Symptoms in Mathematics. *Journal of Mathematics and Technology Studies*, 1(2), 60-68.

¹⁰ Geng, S., Law, K. M., & Niu, B. (2019). Investigating Self-Directed Learning and Technology Readiness in Blending Learning Environment. *International Journal of Educational Technology in Higher Education*, 16(1), 1-22.

¹¹ Guglielmino, L. M. (1977). *Development of The Self-Directed Learning Readiness Scale (University of Georgia)*. University of Georgia.

¹² Yasmin, S., Ghafoor, H. B., Rabbani, A. E., Ayub, N., Subhani, F. E. R., Danish, F. I. A., & Koul, S. S. (2022). A Cross-Sectional Study to Determine Self-Directed Learning Readiness Amongst Post-Graduate Trainees at Shifa International Hospital.

¹³ Amaliya, F. (2023). *The Relationship Between Cumulative Grade Point Average (CGPA) and the Results of the Indonesian Nursing Competency Test (UKNI)* (Doctoral dissertation, Sultan Agung Islamic University, Semarang).

comprehensively to face various demands and challenges that arise during the competency exam process.^[14]

3. Method

This study employs a quantitative approach with a descriptive analytical design and a cross-sectional model, conducted at the Faculty of Health Sciences, Abulyatama University, from February 22 to April 15, 2025. The primary objective of this study is to investigate the relationship between *anxiety* and *Self-Directed Learning Readiness* (SDLR) among nursing students, particularly through field practice activities, teamwork, and the integration of artistic elements as a means to deepen their understanding of non-concrete kinematic concepts. The research model adopted is considered appropriate for assessing SDLR among nursing students. All 41 nursing students were selected as research subjects using a total sample extraction method. In this study, *anxiety* was set as the independent variable, while *Self-Directed Learning Readiness* served as the dependent variable for analysis.

Data collection was conducted through three types of questionnaires: a demographic form to obtain respondent profiles, the STAI (State-Trait *Anxiety* Inventory) to assess *anxiety* levels, and the SDLRS (*Self-Directed Learning Readiness* Scale) to measure the level of *Self-Directed Learning Readiness* among participants. The STAI questionnaire has high validity (0.88) and excellent reliability (Cronbach's alpha 0.93 for state and 0.91 for trait), while the SDLRS questionnaire has validity ranging from 0.88 to 0.90 and reliability of 0.960.

The research procedure began with obtaining permission, distributing the questionnaires accompanied by informed consent, and collecting and reporting the data. The collected data were analyzed univariately to describe the respondents' profiles, while bivariate analysis was conducted using the chi-square test with SPSS version 25 and a significance level of 0.05. If the chi-square test requirements were not met, alternative approaches such as the Fisher Exact Test or Continuity Correction were used as alternative solutions.

Research ethics were applied by prioritizing the principles of *informed consent*, anonymity, data *confidentiality*, and honesty and fairness in the research process. This study did not involve any risky actions, but only the completion of questionnaires.

4. Findings and Discussion

This study was conducted on 41 nursing students at Abulyatama University from February to April 2025. The majority of respondents were 23 years old (41.5%), female (75.6%), and from the 2019 cohort (56.1%). Based on the findings from the univariate analysis, the majority of participants were recorded as having moderate *anxiety* levels, totaling 28 individuals or approximately 68.3%. Meanwhile, 24 respondents (58.5%) demonstrated low *Self-Directed Learning Readiness*.

Through bivariate analysis using the Chi-Square method, it was found that there was a significant correlation between *anxiety* levels and readiness for independent learning among respondents, with a significance value of $p = 0.034$ (p less than 0.05) (see Table 1). The majority of study participants in the moderate *anxiety* category exhibited low levels of *self-directed learning* readiness, accounting for 71.4%. Conversely, in the group with high *anxiety* levels, the proportion of individuals with good self-directed learning readiness was more prominent, at 69.2%.

¹⁴ Lutfianawati, D., Lestari, S. M. P., & Istiana, S. (2018). The Relationship Between Among First-Year Medical Students at Malahayati University in 2017. *Journal of Medical and Health Sciences*, 5(4), 232-44.

Table 1
Relationship Between *Anxiety* and *Self-Directed Learning Readiness* (SDLR) Among
Nursing Students in Preparing for Competency Exams at the Faculty of Health Sciences,
Abulyatama University, Aceh Besar Regency, in 2025
(n=41)

<i>Anxiety</i>	<i>Self-Directed Learning Readiness</i>				Total		P
	Low		Good				Value
	F	%	F	%	F	%	
Moderate	20	71.4	8	28.6	28	100.0	0.034
Severe	4	30.8	9	69.2	13	100.0	
Total	24	58.5	17	41.5	41	100	

Source: Primary Data (Processed in 2025)

The findings of this study indicate a significant trend, namely that students with moderate *anxiety* levels tend to have lower optimal *Self-Directed Learning Readiness*. These findings support the view of Cantillon et al., who suggest that *anxiety* has the potential to act as a barrier for students in managing and taking control of their learning activities.^[15] However, the phenomenon of , where students with high anxiety have high SDLR, suggests the possibility of compensatory mechanisms or high motivation to overcome challenges, which was also found in the study by Judha & Lorica (2022)^[16] and Pattimura et al. (2022).^[17]

Mild to moderate anxiety is often disruptive but still manageable. Conversely, at severe levels of anxiety, students may be more driven to prepare intensively, either due to external pressure or the need to prove themselves. This leads to the hypothesis that not all forms of anxiety have negative effects; at certain levels, anxiety can serve as a motivator for learning readiness.

Other factors such as the frequency of enrichment activities, perceptions of task difficulty, and emotional support also influence SDLR. Research conducted by Ngongoloy et al. in 2024 further confirms that motivation to learn plays a crucial role in enhancing individuals' readiness for *Self-Directed Learning Readiness*.^[18] Thus, this study highlights the importance of identifying and managing anxiety in health professional education. Interventions such as counseling, coping strategy training, and enhancing learning motivation should be considered as part of strategies to improve students' readiness to face competency exams.

¹⁵ Cantillon, P., Wood, D. F., & Yardley, S. (Eds.). (2017). *ABC of Learning and Teaching in Medicine*. John Wiley & Sons.

¹⁶ Judha, M., & Lorica, J. D. (2022). The Relationship Between Anxiety Levels and Self-Readiness in Facing Competency Exams Among Nursing Students in Yogyakarta, Indonesia. *Mikki: Indonesian Journal of Nursing and Health Sciences*, 11(1), 8-16.

¹⁷ Pattimura, N., Latuheru, I., & Ruhukael, N. L. (2022). The Relationship Betweenin Nursing Students at the Pasapua Health College in Ambon. *Pasapua Health Journal*, 4(1), 74-78.

¹⁸ Ngongoloy, J. J., Berhimpon, S., & Pangemanan, D. (2024). The Relationship Between Learning Motivation and Self-Directed Learning Readiness in First-Year Students at the Faculty of Medicine, Sam Ratulangi University. *e-CliniC*, 12(3), 356-361.

5. Conclusion and Recommendations

Based on the results of this study involving 41 nursing students, there is a significant correlation between *anxiety* levels and readiness for *Self-Directed Learning* Readiness (SDLR) when preparing for competency exams. This finding is supported by a p-value of 0.034, which confirms a significant relationship between the two variables. These findings suggest that poorly managed anxiety can hinder students' readiness for independent learning. Therefore, it is recommended that students be able to recognize and manage anxiety appropriately, while educational institutions are expected to provide support services such as counseling and stress management training. Further research is encouraged to continue supporting access to information for improving learning quality, and future researchers are advised to explore new variables or approaches related to *Self-Directed Learning* Readiness (SDLR) and anxiety.

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