

Research Article

SELF - DIRECTED LEARNING AMONG NURSING STUDENTS AT NGUYEN TAT THANH UNIVERSITY

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Abstract

Aims: The objective of the study is to determine self-directed learning (SDL) among nursing students and identify associated factors. **Methodology:** A descriptive cross-sectional study was carried out of 316 nursing students from March to July 2024 at Nguyen Tat Thanh University. Self-Directed Learning Readiness Scale for Nursing Education (SDLRSNE) was used to collect the information regarding self-directed learning of nursing students. **Results:** The majority of participants were female (83.2%). The proportions of students from year 1 to year 4 are 9.5%, 20.3%, 53.8%, 16.5% respectively. Of these, 57% of them have attained a good level of GPA and 21.5% of nursing students were at a very good level of GPA. More than a half of participants (59.8%) have spent 1 to 3 hours per day for self-study, while only 10.8% have spent more than 6 hours per day for self-study. 43.4% of participants have had a part-time job. The majority (54.4%) of the students rated moderate level of readiness to self-directed learning. Meanwhile, 42.3% had a high level of readiness to self-directed learning. Moreover, the mean score of self-directed learning among nursing students was 148 (SD: 18.0). The mean score of self-management; desire for learning; self-control domains were 45.02; 49.1; 48.10 respectively. There was an association between self-directed learning of nursing students and their year of study, GPA, and time for self-study. **Conclusion:** The study highlights the strengths and weaknesses in nursing students' SDL skills, emphasizing the need for educational strategies that focus on improving self-management and self-control while capitalizing on their existing desire for learning. By addressing these areas, nursing education programs can better prepare students for lifelong learning in their professional careers.

Key words: Nursing students, Self-directed learning, SDLRSNE, Associated factors.

INTRODUCTION

Self-directed learning (SDL) is the degree to which an individual possesses attitudes, abilities, and personality characteristics necessary for self-directed learning. It is described as the process where the learner actively judges his learning needs with or without the help from others, formulates learning objectives, determines human and material resources for learning, selects and implements appropriate learning strategies and evaluates learning outcomes. It is one of the important aspects of learning [1]. Nowadays, E-learning has become more common and is a critical part of the solution to our growing healthcare crisis [2]. Self-directed learning readiness is one of the significant requirements among nursing students for achieving success in E-learning. To adapt to the change in nursing education trend, nursing students require strict competencies in self-directed learning. With the growing trend of continuous and rapid changes in medical sciences and the need to prepare nursing students for lifelong learning. Lifelong learning through the self-directed learning readiness approach leads to successful adaptation to the healthcare system [3]. In addition, after COVID-19, the shift to online teaching and learning is more frequent, which leads to the importance of self-directed learning skills becoming more significant [4]. Self-directed learning readiness is a method of instruction used in pedagogy education, mainly in tertiary education or higher education centers. The process of SDLR is also employed in steps that would enable students to develop into self-directed students.

The steps include the following: identification of their learning needs and goals; selection of their learning resource and the most appropriate strategies to learn and evaluation of if their identified goals were reached [5]. SDL plays an important role in nursing education and is associated with academic achievement, communication self-efficacy, assertiveness, responsibility, and students' clinical competencies. Students who are self-directed in learning also take responsibility for their own learning needs and goals, and this feature helps them achieve professional competencies in nursing. Lifelong learning through the SDLR approach leads to successful adaptation to the healthcare system [3]. The lack of self-directed learning has had a negative impact on students' academic performance. For the above discussion, I decided to conduct the study which aims to assess the self-directed learning readiness among nursing students at Nguyen Tat Thanh university which objectives:

Objective of the study

- To investigate the self-directed learning level among nursing student at Nguyen Tat Thanh University
- To evaluate associated factor of self-directed learning level among nursing students.

METHODOLOGY

Research Design

A descriptive cross-sectional study was conducted from March to July 2024 at Nguyen Tat Thanh University

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Population, Sample Size and Sampling Technique

Population: Population of this study are nursing students who are studying Bachelor of Science in Nursing at Nguyen Tat Thanh university, Vietnam.

Sample size: The sample size is determined based on Yamane formula [6].

$$n = \frac{N}{1 + Ne^2}$$

Where,

N is population (In this study, N is 1500 nursing students)

e is the margin of error (e =5%)

n is the required sample size

The sample size was calculated to be 316 participants.

Sampling Technique: A purposive sampling technique was used for the selection of samples.

Research Instrument

The questionnaire consisted of two parts.

Part I of the questionnaire pertains to the clinico-demographic profile which include participant's age, gender, years of study, Average time per day for self- study, GPA.

Part II of the questionnaire pertains to The Self-Directed Learning of nursing students in terms of three domains: Self-management, Desire of learning and Self- control. The questionnaire was adopted from the "Self-Directed Learning Readiness Scale for Nursing Education (SDLRSNE)" which was developed by Fisher in 2001 [7].

The questionnaire consists of 40 items across three subscales: Self-management (13 items), Desire for learning (12 items) and Self-control (15 items). Participants were asked to indicate the degree each item reflected their own characteristics using a five-point Likert scale where a score of 1 indicated strongly disagree and a score of 5 indicated strongly agree. A range of total scores was from 40 to 200. A total score > 150 was set as a cut-off indicating SDL readiness. Students scoring >150 indicating high level of readiness to SDL; scoring 100 – 150 indicating moderate level of readiness to SDL; scoring <100 indicating low level of readiness to SDL. For each domain, Self-management scoring >47 indicating high level of readiness of SDL, Desire for learning scoring > 44 indicating high level of readiness of SDL and Self-control scoring > 59 indicating high level of readiness of SDL [8].

Data Collection

Data was collected by using a self- administered questionnaire. Participants were interviewed face to face after they agreed for participants and signed in consent form. Participants were directly interviewed by researchers and answer the questions in the prepared questionnaire. Face-to-face interviews will be carried out about 30 minutes for interviewing process.

Statistical Analysis

Data was analyzed by using Jamovi version 2.4.14. For categorical variables, we used descriptive statistics which

performed with frequencies and percentages. One – way Anova test and independent sample T- test were employed to identify any associated factors of SDL among nursing students. All of the significant differences in variables were considered if the p-value showed <0.05.

RESULTS AND DISCUSSION

Baseline Characteristics of Respondents

Table 1 shows the demographic profile characteristics of the respondents. A total of 316 nursing students participated in the study. The majority of participants were female (83.2%). The proportions of students from year 1 to year 4 are 9.5%, 20.3%, 53.8%, 16.5% respectively. Of these, 57% of them have attained a good level of GPA and 21.5% of nursing students were at a very good level of GPA. More than a half of participants (59, 8%) have spent 1 to 3 hours per day for self-study, while only 10.8% have spent more than 6 hours per day for self – study. 43.4% of participants have had a part – time job.

Table 1. Baseline demographic profile of the participants (n=151)

Profile	Frequency	Percentage (%)	
Gender	Male	53	16.8
	Female	263	83.2
Year of study	1 st year	30	9.5
	2 nd year	64	20.3
	3 rd year	170	53.8
	4 th year	52	16.5
GPA	Excellent (3.6 – 4.0)	14	4.4
	Very good (3.2 – 3.59)	68	21.5
	Good (2.5 – 3.19)	180	57.0
	Fair (2.0 – 2.49)	54	17.1
Average time per day for self- study	1-3hours	189	59.8
	3-6hours	93	29.4
	> 6 hours	34	10.8
Part – time job	Yes	137	43.4
	No	179	56.6

This finding is consistent with many previous studies. A study which was conducted in two private universities in Vietnam indicated that almost all of the participants (91.2%) were female and had attained a good level of GPA (57.9%). Moreover, the majority of nursing students (72.3%) have spent 1 to 3 hours studying in a day (Diem et al., 2023). Another study among 171 nursing students in a public university also reported that the majority of nursing students were female; 75.4% of them have spent 1 to 4 hours per day studying. Additionally, 66% of nursing students have attained a good level of GPA [9]. This study finding also is in line with a previous study in Malaysia which indicated that the majority of the respondents (92%) were females; more than a half of nursing students spent 1 to 4 hours of self – studying in a day [10].

Self – directed learning among nursing student respondents

Table 2 displays the level of self-directed learning among nursing students on three self-directed learning dimensions. The majority (54.4%) of the students rated moderate level of readiness to self- directed learning readiness. Meanwhile, 42.3% had high levels of readiness to self-directed learning. Moreover, the mean score of self – directed learning among nursing students was 148 (SD: 18.0). This finding concurs with many previous studies. According to Diem et al. (2023), nearly a half of nursing students (47.4%) had a high level of self – directed learning with the mean of SDL was 148.42 [8].

Moreover, study among 11134 health science undergraduate population at the University of Girona (Spain) also indicated that an overall mean (standard deviation) score of self-directed learning readiness among participants was at 143.65 (11.76) points [11]. Another study conducted Omani nursing students during COVID-19 pandemic in Omani also showed that nursing students were identified as having a low level of self-directed learning readiness (mean = 149.58). 62% of participants had scored > 150 [4]. Meanwhile, a study among 4135 nursing students from the Czech Republic, Finland, Italy, Portugal, Slovakia and Spain showed that the nursing students' (N = 1,746) overall self-directed learning abilities were at high level in all countries. The mean total scores of self-directed learning readiness was 156.65 (SD 20.74) [1]. In detail, the result showed that the domain of self-management was in the interval of the minimum value of 33 and the maximum value of 65, with a mean score of 45.02 (SD 6.78). The desire for learning domain was in the interval of the minimum value of 30 and the maximum value of 60, with a mean score of 49.1 (SD 5.7). The self-control domain was in the interval of the minimum value of 35 and the maximum value of 75, with a mean score of 48.10 (SD 7.12). The score obtained from the desire for learning domain is the highest with 40% having a high level of SDL, and the score obtained from the self-management net domain was better (32.9% high level of SDL) than that obtained from the self-control domain (30.7% high level of SDL). This finding is consistent with many previous studies. According to Visiers-Jiménez et al. reported a similar finding. The highest score was found on student response to self-desire of study dimension followed by self-management for learning dimension. Nursing students' readiness to self-control dimension was the lowest. Mean score self-management, desire of study, self-control subscales were at 49.03; 59.53; 48.10 respectively. Most of nursing student had high level in desire of study, while they were lack of self-control ability in self-directed learning [1]. The study in Omani also presented the similarly result which showed that. The mean scores for the SDRNE subscales were follow: self-management = 46.85 (SD=8.56), desire for learning = 45.94 (SD =9.71) and self-control = 56.79 (SD=11.96) [4]. Moreover, this result is in total agreement with another study which identified that nursing students in Vietnam which also indicated that the mean domains' scores for self-management, desire for learning, and self-control were 44.74, 47.42, and 56.26, respectively [8].

Table 2. Summary of the mean scores and level of self-directed learning readiness of participants

Domain of SDL	Level	Frequency	Percentage (%)	Mean ± SD
Self-management	High	104	32.9	45.2 ± 6.78
	Moderate	212	67.1	
Desire for learning	High	120	40	49.1 ± 5.70
	Moderate	196	60	
Self-control	High	97	30.7	56.5 ± 7.81
	Moderate	219	69.3	
Self-directed learning	High	144	45.6	148 ± 18.0
	Moderate	172	54.4	

The high score in the desire for learning reflects nursing students' enthusiasm for gaining professional knowledge and their eagerness to learn. Key components of this desire include a passion for new information, a willingness to tackle challenges in their studies, an understanding of the reasons behind their learning, a readiness to seek help when needed, and the ability to assess their own performance. In contrast, the low score in self-control highlights the significant confidence

and maturity of nursing students. Aspects of self-control encompass the capacity to set goals, make informed decisions, maintain high personal standards, act logically and responsibly, and recognize their own strengths and limitations.

Associated Factors between Characteristic of Participants and Self-Directed Learning

A one-way ANOVA and T test was used to identify any relationship between the student's level of study and self-directed learning skills. The study findings revealed that self-directed learning had a positive relationship to the year of study, GPA and spending time for self-studying. Meanwhile, there is no relationship between self-directed learning of nursing students and their gender and part-time job status. In detail, the result showed that nursing students who studied in 4th years had the highest mean score of SDL (F = 4.12, P = .009). Similarly, nursing students who spent much more self-study time per day had a better mean score of SDL (F = 27.4, P = .000). Nursing students who had spent more than 6 hours on their own-studying had a higher mean score of SDL (168 ± 17.4) in comparison with other groups. Lastly, nursing students who have obtained a better level of GPA had a better mean score of SDL learning (F = 17.1, P = .000). This finding is in line with a study which was conducted by Diem et al. which indicated that self-directed learning of nursing students had association with their year of study, GPA and time for self-study per day [8]. This result is in total agreement with another study which identified that self-directed learning among nursing students in Malaysia associated with their year of study [10]. Besides, another study among nursing students in Vietnam indicated that self-directed learning ability is associated with their current GPA [12].

The study highlights a clear positive relationship between the year of study and SDL skills. Fourth-year and third-year nursing students demonstrated the higher mean scores for SDL, indicating that as students progress in their education, their readiness and ability for self-directed learning tend to improve. Additionally, the study presented that students who dedicate more time to self-study show significantly higher SDL scores. This suggests that increased self-study time is a critical factor in enhancing SDL skills. Finally, there is a strong association between a higher GPA and better SDL scores. This indicates that academic performance may reflect or contribute to a student's ability to engage in self-directed learning effectively.

Table 3. Analysis of associated between self-directed learning and characteristics profile

	Profile	Mean ± SD	t	F	p
Gender	Male	147 ± 18.8	-1.36		.174
	Female	151 ± 13.3			
Year of study	1 st year	142 ± 18.6		4.12	.009*
	2 nd year	145 ± 15.0			
	3 rd year	148 ± 18.7			
	4 th year	155 ± 17.4			
GPA	Excellent (3.6 – 4.0)	176 ± 27.8		17.1	.000**
	Very good (3.2 – 3.59)	156 ± 15.5			
	Good (2.5 – 3.19)	147 ± 19.1			
	Fair (2.0 – 2.49)	143 ± 14.4			
Average time per day for self-study	1-3hours	144 ± 15.6		27.4	.000**
	3-6hours	149 ± 18.2			
	> 6 hours	168 ± 17.4			
Part-time job	Yes	150 ± 19.2	1.73		.084
	No	146 ± 17.0			

Conclusion

The study highlights that the majority of nursing students are moderately prepared for self-directed learning, efforts to enhance their readiness could be beneficial, particularly targeting the significant percentage who are already exhibiting high readiness. Moreover, the student showed that nursing students are generally enthusiastic about acquiring new knowledge, which is a crucial component of SDL. Whereas, many students may struggle with self-regulation, goal setting, and maintaining focus in their studies. Additionally, associated factors of self – directed learning among nursing students were identified which are the student's year of study, GPA, and spending time for self – study. These findings highlight the strengths and weaknesses in nursing students' SDL skills, emphasizing the need for educational strategies that focus on improving self-management and self-control while capitalizing on their existing desire for learning. By addressing these areas, nursing education programs can better prepare students for lifelong learning in their professional careers.

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Competing interests

The authors state no conflict of interest

Ethical approval

Respondents' right to privacy, anonymity and right to withdraw from the study were fully ensured. Students signed an informed consent when agreeing to participate in the study. The ethical approval was obtained from the Ethics Committee of the Trinity University of Asia, Philippine (Protocol Code: 2024- 1st-CNU – Vu – v2).

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