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Original Research Article

Readiness for Self-directed Learning among Nursing Students of Lumbini Medical College and Teaching Hospital: A Cross-sectional Study

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ABSTRACT

Introduction: Self-directed learning is an independent learning approach and especially appropriate for adult learners where control over the learning is exerted by the learners than by teachers. **Methods:** A descriptive cross-sectional study was conducted among 147 nursing students. All the students of 2nd and 3rd years Proficiency Certificate Level (PCL) and 2nd, 3rd, and 4th-year bachelor in science (B.Sc) nursing were selected purposefully. The level of readiness was assessed through internationally validated "Self-Directed Learning Readiness Scale (SDLR)". Data were analyzed using descriptive and inferential statistics. The p-value was set at <0.05. **Results:** The mean age of participants was 20.10±1.73 years and 55.1% of participants were from PCL nursing and 51.7% were from Brahmin/Chhetri ethnicity. Nearly three quarter (72.3%) were hosteller. A majority (83.7%) of participants had a high level of readiness for self-directed learning with an overall mean score of 158.78±14.27. The mean score (60.42±6.99) of self-control subscale was higher than the mean score of self-management (49.82±5.01) and desire for learning (48.53±5.47). The year of study (p<0.001), level of study (p<0.001), age (p<0.001), and grade obtained in previous level education (p<0.001) were statistically significant with the readiness level for self-directed learning. **Conclusion:** Nursing students had a higher level of readiness for self-directed learning, so the teachers need to adopt those learning strategies that help and encourage nursing students for independent learning which enhance student's learning with better retention, good decision making, and confidence.

Keywords: Nursing students; Readiness; Self-directed learning

INTRODUCTION:

Self-directed learning (SDL) is an art and science of helping adults to meet their learning needs and this learning approach is based on the concept called andragogy. Here, the students direct their learning and the teacher just plays the role of facilitator. According to Knowles "S*elf-directed learning is defined as " a process in which individuals take initiative, with or without help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes*."[1] This learner-centered approach operates based on the learners' maturation in terms of their readiness to assume responsibility for his or her own learning.[2] In this approach, learners have the freedom to set their priorities for learning as to how they feel learning is important for them. The degree of self-control depends on the learner's ability, personality character, and attitude. In SDL, learning can be done in an informal setting as well.[3]

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The scope of nursing has expanded, and nurses are working in multifaceted health care settings. Along with their changing scopes, various challenges emerging from advanced science and technology are unavoidable. The responsibility of nursing education is to prepare such nurses who can successfully combat the challenges of quality nursing services by developing independent learning, assertiveness, accountability, critical thinking, and worthy decision-making capacity.[4,5] Being nursing students as the future health manpower, nursing educators need to adopt creative learning approaches like SDL with the primary aim of preparing such nurses who can provide quality service through critical thinking and good decision making.[5] To adapt and stimulate self-directed learning among nursing students, it is important to regularly investigate, and analyze their state of self-directed readiness.[6] And, in the context of Nepal, the educational system is largely based on teacher-centered approach. So, the present study aimed to explore the nursing students' state of readiness for self-directed learning.

METHODS:

A descriptive cross-sectional study design was adopted to investigate the nursing students' readiness for self-directed learning. Ethical approval was taken from the Institutional Research Committee of Lumbini Medical College and Teaching Hospital (LMCTH) (IRC-LMC 01-D/021).

This study was conducted among the nursing students of LMCTH. There were total of 147 nursing students from the second and third year of Proficiency Certificate Level (PCL) in nursing and second, third and fourth year of Bachelor in Science (B.Sc) nursing, who were selected purposefully. Participation was voluntary. First-year students of PCL and B.Sc nursing and those who were absent during data collection time were excluded. The paper and pencil technique were used for data collection. All the students were gathered in their respective classrooms. After giving clear instructions and obtaining verbal consent, questionnaires were distributed to them. In the presence of the researcher, questionnaires were filled by participants and around 10 minutes were taken for completion. The data was collected in the first week of September 2021.

The self-administered questionnaire used in this study consisted of two parts; Part I: Socio-demographic variables. Part II: Self Directed Learning Readiness (SDLR) scale to assess the readiness level of nursing students. It is an internationally validated and standard self-perception scale that was first developed and tested by Fisher et al.[3,7] There is a total of 40 items grouped under three subscales; self-management (13), the desire for learning (12), and self-control (15). The responses were rated in a five-point Likert scale format, where '1' indicated strongly disagree, and '5' indicated strongly agree. Whereas, reverse scoring was done for 4 negative statements (I am poor at managing my time, I dislike studying; I am disorganized, and I am not in control of my life). The minimum score of total items was 40 and the maximum score was 200. The content validity of the instrument was established through the use of a modified reactive Delphi technique using experts from the nursing field. The internal consistency for each component was estimated using Cronbach's coefficient alpha. The computed values of Cronbach's coefficient alpha for the total 40 items was 0.924 and self-management subscale, the desire for learning subscale and the self-control subscale were 0.85, 0.847 and 0.830 respectively.[7] A score of 150 or greater is indicative of students' high level of readiness in self-directed learning.[3]

After checking for completeness, the collected data were entered in Microsoft Excel 2007 and transformed in Statistical Package for the Social Sciences (SPSS) version 16 for statistical analysis. Descriptive statistics- frequency, percentage, mean, standard deviation, and range; and inferential statistics (Chi-square and Fisher's exact test) were used for the analysis of data. The p-value was set at <0.05 for statistical significance.

RESULTS:

Almost all (99.3%) of the participants were unmarried, whereas nearly three-fourth (72.8%) of them were hostellers. Slightly more than three quarter (78.2%) of the participants were from nuclear family and 51.7% of them were the first child of their parents. A majority (93.2%) belonged to the Hindu religion. Regarding parent's education, 47.6% of fathers and 53.8% of the mother had a secondary level of education. A majority (78.2%) of participants' mothers were housewives, whereas, 34.7% of the father had their own businesses. The remaining profiles are depicted in table 1.

Table 1. Participants' Demographic Profiles (N=147).

Characteristics	n (%)
Age in years	
≤20	82(55.8)
>20	65(44.2)
Mean±SD=20.10±1.73, Range=17-24	
Level of education	
PCL in Nursing	81 (55.1)
B.Sc. in Nursing	66 (44.9)
Year of study	
2nd year	54 (36.7)
3rd year	63 (42.9)
4th year	30 (20.4)
Ethnicity	
Brahmin/Chhetri	76 (51.7)
Janajati	68 (46.3)
Dalit	3 (2.0)
Grade obtained in the previous level	
Distinction	54 (36.7)
First	86 (58.5)
Second	7 (4.8)
Voluntarily selection of profession	
Yes	133 (90.5)
No	14 (9.5)

A majority (83.7%) of the participants had a high level of readiness for self-directed learning. The self-control subscale has the highest mean score (66.42) followed by self-management (49.82) and desire for learning (48.53). The overall mean score percent of SDLR was slightly more than three quarters (79.39). The results are shown in table 2 and table 3.

Table 2. Participant's Level of Readiness in Self Directed Learning (N=147).

Variables	n (%)
High level of readiness (≥150)	123 (83.7)
Low level Readiness (<150)	24 (16.3)

There was a statistically significant relationship between the level of self-directed learning readiness with age (p<0.001), level of education (p<0.001), year of study (p<0.001), and grade obtained in previous level education (p<0.001). But there were no statistical significant relationship with voluntarily selection of profession (p=0.193), type of family (p=0.508), place of residence (p=0.154), ethnicity (p=0.109) and religion (p=0.368) as illustrated in table 4.

DISCUSSION:

It is crucial for nursing educators to search for the most effective and appropriate learning approaches for their students and it is determined by students' readiness state to adopt any type of learning approach. Therefore, this investigation was done to find out the self-directed learning readiness state of bachelor and proficiency certificate level nursing students of LMCTH. The present study reported that the majority (83.7%) of nursing students had a high level of readiness. A study conducted in Chitwan, Nepal also reported the same finding.[3] Similarly, studies from other countries also reported a high level of self-directed learning readiness among nursing students.[4,6,8,9]

Though there are varieties of learning approaches, Nepal is still practicing teacher-directed learning style, but the findings of the present study indicated that nursing students of Lumbini Medical College and Teaching Hospital are independent learners. The study revealed that most of the participants possessed a high level of preparedness and willingness to adopt the SDL approach. Nurses and nursing students need to be updated with changing knowledge, skills and technology to provide quality care to the health service consumers, so SDL is one of the most effective learning strategies that is essential for students of the medical field to be life-long learner. Integration of SDL in the nursing curriculum would help deeper logical understanding, memorizing the content, and promoting the exchange of ideas.[10]

Table 3: Mean Score obtained by Participants in Subscale of SDLR (N=147).

Variables	Items	Range	Obtained score (range)	Mean score	SD	Mean %
Self-Management	13	13-65	38-63	49.82	5.013	80.88
Desire for Learning	12	12-60	18-60	48.53	5.479	60.42
Self-Control	15	15-75	26-73	60.42	6.990	80.56
Overall	40	40-200	82-186	158.78	14.273	79.39

*SD= Standard Deviation

Table 4. Associations between SDLR and Selected Demographic Variables (N=147).

Variables	Level of Readiness		χ^2 value	p value
	High	Low		
	n (%)	n (%)		
Age in years				
≤20	77 (93.9)	5 (6.1)	14.204	<0.001
>20	46 (70.8)	19 (29.2)		
Level of education				
PCL in Nursing	80 (98.8)	1 (1.2)	30.079	<0.001
B.Sc. in Nursing	43 (65.2)	23 (34.8)		
Year of study				
2nd year	47 (87.0)	7 (13.0)	16.001	<0.001
3rd year	58 (92.1)	5 (7.9)		
4th year	18 (60.0)	12 (40.0)		
Ethnicity				
Brahmin/Chhetri	60 (78.9)	16 (21.1)	2.573	0.109
Others (Janajati/Dalit)	63 (88.7)	8 (11.3)		
Grade obtained in the previous level				
Distinction	54 (100)	0 (0)	16.655	<0.001
Others (First/Second)	69 (74.2)	24 (25.8)		
Present place of residence#				
Home	6 (66.7)	3 (33.3)	-	0.165
Out of home	117 (84.8)	21 (15.2)		
Types of family				
Nuclear	95 (82.6)	20 (17.4)	0.438	0.508
Joint	28 (87.5)	4 (12.5)		
Voluntarily selection of Nursing Profession#				
Yes	114 (85.0)	20 (15.0)	-	0.174
No	10 (71.4)	4 (28.6)		

Fisher exact test

Since SDL is an effective learning style for adult learners and self-control is a very essential component that has occupied a total of 15 out of 40 statements in the SDLR tool. Self-control indicates independence and maturation in learning with minimum guidance only. The present study reported that nursing students had the highest level of the mean score (60.42±6.99) in self-control amongst all subscales of SDL. Similar findings were reported from other studies as well.[3,4,6,8,9,11,12,13] But they had the lowest (48.53±5.48) mean score on subscale desire for learning which is consistent with other studies.[3,4,9,11] The study finding suggested that there is a need to change traditional teacher-centered learning with a more independent, self-controlled and student-centered learning style. Similarly, course contents should be relevant for changing situations so that students can find relevancy and become enthusiastic in their learning. On the other hand, teachers could play significant role to provide effective learning environment so that students' desire for learning could be promoted.

Present study explored that there are statistically significant differences between some socio–demographic characteristics like age ($p<0.001$), level of education ($p<0.001$), year of study ($p<0.001$), and the grade obtained in previous level education ($p<0.001$) with a level of readiness on SDL. Whereas, other studies only found the statistical difference with age and level of education to level of readiness in self-directed learning. [3,6,14,15]

The study cannot escape from limitations. This study was conducted in only one setting so the findings of the study cannot be generalized. Further, the study was self-responding so, along with the subjective interpretation, recall bias might be present.

CONCLUSION:

Self-directed learning readiness among nursing students of LMCTH was high. The desire for learning subscale was lowest amongst other subscales. Nursing educators can adopt this student-centered learning approach by being supportive, encouraging and having positive attitude which creates a conducive environment to make students' learning in-depth, creative and relevant.

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Conflict of Interest:

The authors declare that no competing interests exist.

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