Readiness for Self-Directed Learning among Undergraduate Nursing Students

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ABSTRACT

Introduction: Self-directed learning is a type of instructional strategy and plays an important role in nursing education, associated with academic achievement, communication self-efficacy, assertiveness, responsibility, and students' clinical competencies.

Objective: To identify the level of readiness among undergraduate nursing students.

Methodology: Descriptive cross-sectional study was conducted among the undergraduate nursing students of Manmohan Memorial Institute of Health Sciences from October 2023 to April 2024. All the nursing students of Bachelor of Nursing Science and Bachelor of Science in Nursing program were included in the study. Total enumerative sampling technique was used with total sample size of 202. Self-Directed Learning Readiness Scale was used to identify the students' readiness. Data were collected using self-administered questionnaire. Bivariate logistic regression analysis was carried out. Ethical approval obtained from Nepal Health Care Cooperative Institutional Review Committee.

Results: The mean ± SD age of the participants was 22.7 ±2.9. The mean score of self-directed learning readiness was 112.6. More than half 104(51.48%) of them had low level of readiness for self-directed learning. A significant positive correlation was found between self-management and desire for leaning (r=0.46, p value <0.001); self-management and self-control (r=0.46, p value <0.001) and desire for learning and self-control (r=0.48, p value <0.001). None of the students' characteristics were significantly associated with the readiness of Self-directed learning.

Conclusion: More than half of the students have low level of readiness for Self-directed learning. No any students' socio-demographic and academic characteristics were significantly associated with the readiness for Self-directed learning.

Keywords: Nursing students; Psychological cognition; Readiness; Self-directed learning,

INTRODUCTION

Self-directed learning (SDL) includes numerous elements of learning for instance, self-monitoring, interpersonal communication, motivation, planning and implementing[1] SDL is based on the principles of adult education and has many benefits. Nurse educators have an important role to play in assisting nurses to acquire the skills for self-directed learning, and to do this they need to understand the concept of self-directed learning.[2]

In nursing education, the use of lifelong learning strategies leads to a better quality of education, professional competence, and eventually, better nursing care outcomes.[3] A study conducted among Omani nursing students showed the positive correlation between Students' SDL readiness and their learning style. In addition, readiness for SDL was significantly associated with Students' grade point average (GPA).[4] Continuing education should include all of the self-directed learning activities rather than solely focusing on cognitive dimensions of nursing.[5] Self-directed learning

plays an important role in nursing education and is associated with academic achievement, communication self-efficacy, assertiveness, responsibility, and students' clinical competencies.[6] To initiate self-directed learning among students their readiness is important. Thus, this study aimed to identify the level of readiness among undergraduate nursing students

METHODOLOGY
Descriptive cross-sectional research design with total enumerative sampling technique was used for the study. The research was conducted among the undergraduate nursing students of Manmohan Memorial Institute of Health Sciences (MMIHS). All the students of Bachelor in Nursing Science (BNS) and Bachelor of Science in Nursing (BSN) program were included in the study. All the BNS and BSN students of Manmohan Memorial Institute of Health Sciences were included. Thus, total sample size was 202. The study was conducted from October 2023 to April 2024. Self-Directed Learning Readiness Scale (SDLRS) developed by Fisher and colleagues (2001). This scale consists of 29 items that are scored into three dimensions of SDLR: self-management (10 items), self-control (10 items), and desire for learning (Nine items). Initially developed for use with nursing students, but may be applicable to a wider population. The self-directed learning readiness scale is homogeneous and valid. The scale assists nurse educators in the diagnosis of student learning needs, in order for the educator to implement teaching strategies that will best suit the students.[7] Data were collected using self-administered questionnaire. After taking written informed consent, questionnaire was distributed to the students in classroom. The filled-out questionnaire was checked for completeness and inconsistent information and they were coded, entered and analysed into database using statistical package for social sciences, IBM SPSS Statistics for Windows version 21 (IBM Corp., Armonk, N.Y., USA). Bivariate logistic regression analysis was carried out. Readiness

for self-directed learning score was normally distributed as indicated by Shapiro Wilk test (P- 0.191).[8] Mean of readiness for self-directed learning score was 112.6. The total score was categorized into two as low readiness and high readiness based on mean score. Ethical approval obtained from Institutional Review Committee of Nepal Health Care Cooperative (Ref. NEHCO/IRC/080/022). Written informed content was taken from students.

RESULTS
Most of the participants 182 (90.10%) were young adult and 20 (9.90%) were adolescent with the mean ± SD of 22.7 ±2.9. Most of the participants 172 (85.10%) were from Kathmandu valley and more than half 107 (52.97%) were living with their parents. Only 8 (3.96%) of them were living with their husband. In regard to their academic characteristics majority 122 (60.40%) were BSN students and remaining were BNS. Majority 143 (70.79 %) passed their previous year exam in regular basis. The mean score of total SDLR was 112.6 (BNS: 114.1; BSN: 111.6). In all the subscale of readiness for self-directed learning, BNS students had higher mean score than of BSN students (Table 1). There is significant positive correlation between self-management and desire for leaning (r=0.46, p value <0.001); self-management and self-control (r=0.46, p value <0.001) and desire for learning and self-control (r=0.48, p value <0.001) among participants (Table 2). More than half 104(51.48%) of the participants had low level of readiness for self-directed learning (Fig 1).

Socio-demographic variables and academic characteristics were not significantly associated with the readiness for self-directed learning among undergraduate nursing students (Table 3 and 4). However, more than half 45(56.25%) of BNS students had high level of readiness and less than half (43.75%) BSN students had high level of readiness (Table 4).

Table 1: Mean Score of Different Sub-scale of Readiness for Self-directed Learning

| Subscale | Total Score | Mean Score | | Mean ± SD |
		BNS	BSN	Total
Self-management	50	38.5	36.6	37.3 ± 4.2
Desire for learning	45	36.0	35.2	35.5 ±3.4
Self-control	50	39.7	39.8	39.8 ±4.5
Total	**145**	**114.1**	**111.6**	**112.6 ± 9.7**

Table 2: Correlation between Self-management, Desire for Learning and Self-control.

Sub-domain of SDLR	Desire for Learning		Self-control	
	r	p-value	r	p-value
Self-management	0.46	<0.001*	0.46	<0.001*
Desire for learning			0.48	<0.001*

p-value <0.05 significant *= Pearson's correlation

Table 3: Association of Readiness for Self-directed Learning with Socio-demographic Characteristics

Variables	Level of readiness		UOR	p-value
	Low n (%)	High n (%)	(95% CI)	
Age				
Adolescents	14(70.00)	6(30.00)	Ref.	0.08
Young adults	90(51.14)	86(48.86)	2.4(0.88-6.48)	
Address				
Inside Kathmandu valley	92(53.49)	80(46.51)	Ref.	0.18
Outside Kathmandu valley	12(40.00)	18(60.00)	1.7(0.78-3.79)	
Living with				
Hostel/with friends in rent	43(55.84)	34(44.16)	Ref.	0.42
With parents	54(50.47)	53(49.53)	1.2(0.69-2.23)	
With husband and in-laws	7(38.89)	11(61.11)	1.9(0.69-5.67)	

p-value <0.05 significant ,UOR: Unadjusted Odds Ratio, Ref: reference

Table 4: Association of Readiness for Self-directed Learning with Academic Characteristics

Variables	Level of readiness		UOR (95% CI)	p-value
	Low n (%)	High n (%)		
Program				0.07
BNS	35 (43.8)	45(56.2)	1.6(0.95-2.96)	
BSN	69(56.6)	53(43.4)	Ref.	
Regularly passed previous year (n-194)				0.15
Yes	70(49.0)	73(51.0)	0.62(0.84-3.19)	
No	31(60.8)	20(39.2)	Ref	

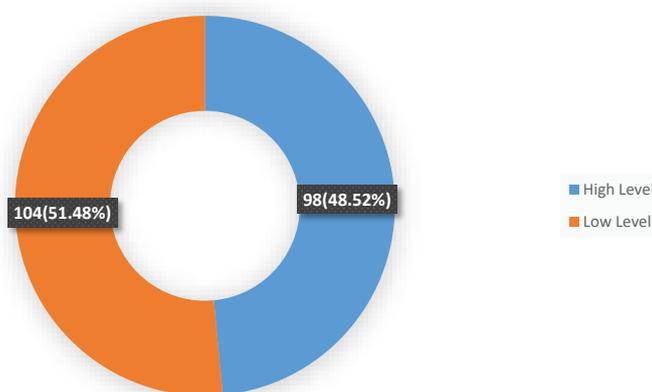p-value <0.05 significant ,UOR: Unadjusted Odds Ratio, Ref: reference

Fig 1: Level of Readiness for Self-directed Learning

DISCUSSION

The current study showed that more than half 104 (51.48%) of the participants had low level of readiness for self-directed learning. A study carried out in Lumbini medical college showed 83.7% PCL nursing and BSN nursing students had high level of readiness for learning.[9] Another study carried out in undergraduate medical students at Manipal College of Medical Sciences, Pokhara showed that 72.7% had higher than of mean score on SDLR.[10] A study conducted in Malaysia among nursing students showed that, 56.4% of the students had high self-directed learnings skills, 46.3% moderate, and 1.3% had low self-directed learning skills.[11] A study among Omani nursing students showed that 62% students scored more than mean score.[12]

In current study, age of the students was not associated significantly with the level of readiness for self-directed learning, however, more than half of young adult students had high level of readiness compared to adolescence, that 30% had high level of readiness. A study conducted by Philips et.al, 2015 showed that younger students were less ready for self- directed learning.[13] whereas a study conducted among Omani nursing students showed that age of the students was not associated with the readiness for the self-directed learning.[12]

Current study showed no any significant relationship between the address of the students and readiness for self-directed learning. However, the higher numbers of students from outside Kathmandu valley had high level of readiness compared to the students from inside Kathmandu valley. In current study, students' living status was not significantly associated with readiness for SDL. Nevertheless, compared to students living in hostel or with parents or only with husband, students living with in-laws and husband had high readiness score. The program of the study was not significantly associated with the readiness for SDL but BNS students had higher score of readiness for SDL compared to BSN students as BSN students were younger than of the BNS and BNS students already have previous job experience but BSN students do not have it. Those students who regularly passed previous academic year exam had higher readiness score compared to those who did not pass.

CONCLUSION

More than half of the students have low level of readiness for SDL. Socio-demographic and academic characteristics were not significantly associated with the readiness of SDL. Nonetheless, younger students, students living inside Kathmandu valley, students of BSN program, students' with failed previous academic year exam had lower level of readiness for SDL. It would be better if teachers encourage and motivate the nursing students for SDL.

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