

# Self-Directed Learning Readiness towards Online Classes among Baccalaureate Nursing Students

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**Abstract:** *Traditional classroom learning has been an essential part of undergraduate nursing education in India. With Covid-19 pandemic, nursing education has not been an exception to explore and adapt to alternative strategies of teaching and learning. Many institutions have moved to online classes with little or no time for students to be prepared for this sudden paradigm shift in newer learning techniques. Hence, a study was conducted to determine the level of self-directed learning readiness towards online classes among baccalaureate nursing students. A descriptive cross-sectional study design was adopted. Proportionate Stratified Random Sampling technique was used to collect data from 92 students. A standardised (Self-Directed Learning Readiness Scale for Nurse Education) was used to collect data. Data were analysed using descriptive and inferential statistics. The overall self-directed learning readiness of students was found to be 72.8% with mean score of self-management higher than mean score of self-control and desire for learning. The levels of readiness for self-directed learning were not found to be associated with any of the demographic and educational variables with differences considered significant at  $p < 0.05$ .*

**Keywords:** Self-Directed Learning Readiness, Online Classes, Baccalaureate Nursing Students.

## 1. Introduction

Self-Directed Learning describes a process in which individuals take the initiative, with or without the 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]. Learning the concepts of nursing in most developing countries is largely carried out using the traditional classroom method as it provides a sound platform for acquiring nursing skills in addition to knowledge. While, there are other methods of teaching-learning process gradually diffusing into the nursing education, the Covid-19 pandemic has pushed educational institutions and learners into a sudden paradigm shift of exploring and implementing newer teaching-learning strategies.

Self-directed learning is one of the approaches that can be used by learners for which they need to be ready. Readiness for self-directed learning is individualized with varying degrees of self-management, desire for learning and self-control. A study carried out among 91 students from four nursing degree awarding institutions of Peshawar, Pakistan revealed that 60% of the students reflected high level of readiness for self-directed learning with higher mean subscale score for self-control [2]. Another study carried out among 107 baccalaureate nursing students in Nepal revealed that 72% of the students had a high level of readiness for self-directed learning with higher mean subscale score for self-control [3]. This study was aimed to determine the level

of Self-Directed Learning Readiness towards Online Classes among Baccalaureate Nursing Students and to find association of their readiness with demographic and educational variables.

## 2. Methodology

A descriptive cross-sectional was used to study the self-directed learning readiness towards online classes. The population consisted of Baccalaureate Nursing Students studying at College of Nursing, Christian Medical College Vellore. There were 92 nursing students chosen from first, second, third and final year using Proportionate Stratified Random Sampling technique based on the known prevalence of 60% from a previous study. A standardized tool on Self-directed Learning Readiness Scale for Nurse Education [SDLRSNE] by Fisher et al [4][7] was used to collect data by obtaining permission from the author to use the tool. The tool comprised of 40 items on a Five-point Likert Scale [Strongly Disagree, Disagree, Unsure, Agree and Strongly Agree]. The scale was divided into subscales of Self-Management [15 items], Desire for Learning [12 items] and Self-Control [13 items]. The total score on the scale ranged from 40 – 200 with a score above 150 indicating a high level of readiness for self-directed learning while a score of less than or equal to 150 indicated a low level of readiness for self-directed learning. Four negatively phrased items in the scale were scored in a reverse manner. Written consent was obtained from all participants prior to the data collection. Anonymity, Privacy and Confidentiality was maintained throughout the study. Descriptive and Inferential statistics

was used to analyse the data with SPSS 16.0 version. Differences were considered significant at  $p < 0.05$

### 3. Results

Table 1 shows that out of 92 participants, 58.7% belonged to age group less than or equal to 20 years. Majority of the participants resided in urban areas (59.8%) and more than half of them (52.2%) had good knowledge on computer applications. Majority of the participants (92.4%) and (95.7%) had adequate usage of technical skills but had no previous exposure to online classes respectively. More than half (52.2%) the participants had interruptions in the internet connectivity for online classes.

**Table 1:** Distribution of participants according to the Demographic and Educational Variables [n = 92]

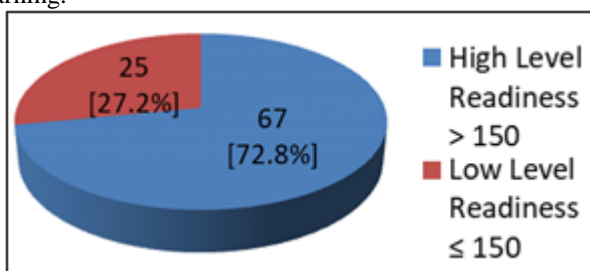
Variables	Number	Percentage	
Age	≤20 years	54	58.7
	> 20 years	38	41.3
Place of Residence	Urban	55	59.8
	Rural	34	37.0
	Tribal	3	3.3
Knowledge on Computer Applications	Good	48	52.2
	Fair	42	45.7
	Poor	2	2.2
Usage of Technical Skills	Adequate	85	92.4
	Inadequate	7	7.6
Internet Connectivity	Uninterrupted	44	47.8
	Interrupted	48	52.2
Previous Exposure to Online Classes	Yes	4	4.3
	No	88	95.7

Table 2 indicates the participant's subscale scores on the readiness for self-directed learning. The subscale self-management had highest mean score (57.41) followed by self-control (52.10). The subscale desire for learning had the lowest mean score (47.20).

**Table 2:** Sub-Scale Score of students on Self-directed Learning Readiness [n = 92]

Sub-Scale	Minimum	Maximum	Mean	Standard Deviation
Self Management	45	70	57.41	4.76
Desire for Learning	37	56	47.20	3.87
Self- Control	40	63	52.10	4.06
<b>Total</b>	<b>132</b>	<b>180</b>	<b>156.72</b>	<b>9.72</b>

Figure 1 depicts that more than two-third (72.8%) of the participant's had a high level of readiness for self-directed learning.



**Figure 1:** Distribution of participants according to their Level of Readiness for Self-Directed Learning [n = 92]

Table 3 indicates that the participant's level of readiness for self-directed learning was not associated with any of the demographic or educational variables.

**Table 3:** Association of Self-directed Learning Readiness of students with Demographic and Educational Variables [n = 92]

Variables	Level of Readiness				X <sup>2</sup>	P value	
	High Level		Low Level				
	No	%	No	%			
Age	≤20 years	39	72.2	15	27.8	0.02	0.88
	> 20 years	28	73.7	10	26.3		
Place of Residence	Urban	42	76.4	13	23.6	0.87	0.65
	Rural	23	67.6	11	32.4		
	Tribal	2	66.7	1	33.3		
Knowledge on Computer Applications	Good	37	77.1	11	22.9	1.99	0.37
	Fair	28	66.7	14	33.3		
	Poor	2	100.0	0	0.0		
Usage of Technical Skills	Adequate	62	71.8	24	28.2	0.76	0.69
	Inadequate	5	83.3	1	16.7		
Internet Connectivity	Uninterrupted	34	77.3	10	22.7	0.84	0.36
	Interrupted	33	68.8	15	31.3		
Previous Exposure to Online Classes	Yes	4	100.0	0	0.0	1.56	0.21
	No	63	71.6	25	28.4		
Year of Study	Juniors [1 & 2 Yr]	35	72.9	13	27.1	0.00	0.98
	Seniors [3 & 4 Yr]	32	72.7	12	27.3		
Duration of online classes	≤ 6 Hours/ Day	42	75.0	14	25.0	0.34	0.56
	> 6 Hours/ Day	25	69.4	11	30.6		
No of Subjects Learnt online	≤ 5	33	73.3	12	26.7	0.01	0.92
	> 5	34	72.3	13	27.7		

It was also observed that at 95% confidence interval, there was no statistically significant difference between student groups in their total score ( $t = -0.405$ ,  $p = 0.686$ ) on overall level of readiness for self-directed learning and also on sub scales [ $t = -0.603$ ,  $p = 0.548$ ) on self-management subscale, ( $t = -0.812$ ,  $p = 0.419$ ) on desire for learning subscale and ( $t = -1.038$ ,  $p = 0.302$ ) on self-control subscale]. One-way ANOVA test revealed that there was no significant difference found in the total score ( $F = 0.300$ ,  $p = 0.825$ ) on overall level of readiness for self-directed learning between and within groups and also on sub scales [ $F = 0.488$ ,  $p = 0.691$ ) on self-management subscale, ( $F = 0.221$ ,  $p = 0.882$ ) on desire for learning subscale and ( $F = 2.581$ ,  $p = 0.059$ ) on self-control subscale].

### 4. Discussion

The findings of this study reveal that more than two-third of the students (72.8%) had a higher level of readiness according to the SDLRSNE by Fisher et al. The mean score on 40 items in this study was  $156.72 \pm 9.72$  while mean scores of the subscale on self-management, desire for learning and self-control were  $57.41 \pm 4.76$ ,  $47.20 \pm 3.87$  and  $52.10 \pm 4.06$  respectively. In the study by Fisher et al

(2001) carried out on Australian undergraduate nursing students, the overall mean score was 150.5 while mean score of subscales were: 44.26, 47.31 and 58.98 for self-management, desire for learning and self-control respectively [4]. In another research conducted by Gilany & Abusaad (2012) on Saudi undergraduate nursing students, the overall mean score was 159.6 and that of subscales were: 51.3, 48.4 and 59.9 on self-management, desire for learning and self-control respectively [6]. The total mean score of this study is closer to the study done by Fisher et al and Gilany & Abusad. However, the findings on the highest mean score of subscales (self-management) in this study are not supported [4][6]. The findings of this study also revealed that the level of readiness for self-directed learning had no significant association with demographic or educational variables. These findings are not congruent with the findings of Williams et al (2013) [7] study which concluded that SDL readiness increases as the age increases. The findings of this study was also dissimilar with the research conducted by University of Lahore, Pakistan (2018) it was concluded that final year students were readier towards self-directed learning than junior students with overall score of  $158.57 \pm 17.64$  and the mean score for self-management, desire for learning and self-control being  $49.79 \pm 6.61$ ,  $47.80 \pm 5.75$  and  $60.98 \pm 7.83$  respectively [8]. Whereas, in the study of Gilany & Abusaad (2012) [6] it was reported that majority (77%) of students possess high level of readiness for SDL and is not influenced by students demographics and learning style that supports the findings of this study. The study of Shahin & Tork (2013)[9] revealed that instructions along with problem solving strategies improves the readiness for SDL and critical thinking among student nurses' in Egypt and Kingdom of Saudi Arabia. An experimental study in Malaysia by Bagheri et al (2013) [10] concluded that students SDL skills were better who were taught by project based learning strategy than those who were taught by using conventional teaching strategy. A research carried out by (Haung, 2008) on Taiwanese nursing students suggested that students' readiness toward SDL is significantly influenced by their perception of learning environment and also by their achievement of goals. [11]

## 5. Conclusion

The findings of this study will be useful for the curriculum development of nursing education in promoting self-management skills and improving the components of desire for learning and self-control among nursing students.

## 6. Limitations and Recommendations

The study has a limitation of sample size which could be the cause of differences in the results. A similar study with large sample size can be planned and conducted.

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