Readiness for Self-Directed Learning Among Students of Bachelor of Science in Nursing Program of Selected Colleges in Kathmandu, Nepal

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ABSTRACT: Self-Directed Learning (SDL) is a process in which the learner takes self-initiation for assessing own learning needs and work accordingly with the help of available resources for achievement of required learning. The objective of this study is to identify the readiness for self-directed learning among the Bachelor of Science in Nursing (BSN) students. A descriptive cross sectional study was conducted among BSN students of Yeti Health Science Academy and Kantipur Academy of Health Science, Kathmandu, Nepal. Complete enumerative sampling technique was used in this study where 107 students were involved. Questionnaire method with SDL scale was used for data collection. Most of the respondents 74(69.2%) had high level of readiness for self-directed learning and 33(30.8%) of respondents had low level of readiness for self-directed learning. The association between academic year with the level of readiness for self-directed learning were statistically significant (p=0.045) whereas the association between other variables (age, ethnicity, religion, marital status, family type and residence) with the level of readiness for self-directed learning were statistically insignificant (p>0.05). It is concluded that depending upon the academic year, seniors are more ready towards self-directed learning than junior nursing students.

KEY WORD: Self-Directed Learning, Readiness for SDL

I. INTRODUCTION

Self-Directed Learning (SDL) is 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]. SDL is the most commonly used method in adult learning practices. For the better outcomes, SDL is considered to be associated with the management of lifelong learning. It is more of learner-centered instead of instructor-centered in which learner determines what, how, where and when to learn. SDL provides learner to be responsible, self-confident, manage learning with planning and be self-controller until the result of decision made, improved skills of learning and self-evaluation [2].

Although this method seems to be new in teaching learning process at modern era, it had been existed since classical period of education system. Even in colonial America, there was lack of formal educational institutions where many people had to learn by their own ways. Formally, self-directed learning had taken place about 150 years ago in the United States [3]. There are different methods to develop the readiness to learn among nursing students through the appropriate assessment of their learning needs. The appropriate assessment includes informal conversations, focus group discussion, case studies, pre-tests, self-administered questions and observations [4].

While doing survey among 142 Saudi students from nursing and emergency medical services undergraduate programs, it was found that SDL level positively influenced students’ academic performance [5]. In Australia 407 students of three years of Bachelor of Nursing program had mean of the total self-directed learning readiness with 159.27 (SD 14.62). It is found that overall students in the later year of their degree had significantly higher scores of SDL than first year [6].

Due to the complexity and changes in nursing profession development, self-directed learning has become a focus for nursing education in past few decades [7]. Nurses have to work in multifaceted healthcare settings where they have to face constant challenges from the ongoing social and scientific changes in the healthcare field. Hence, the responsibility of nursing education is to support and prepare for those challenges so that they can successfully adjust and respond in such healthcare field for which self-directed learning can be one of the very effective ways [8].
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II. METHODOLOGY

A. Methods
A descriptive cross-sectional study was conducted among the students studying Bachelor of Science in Nursing program.

B. Sampling and Setting
Non-probability, enumerative sampling technique was used among 107 students. The study was conducted in Yeti Health Science Academy and Kantipur Academy of Health Science, Kathmandu which are affiliated to Purbanchal University of Nepal.

C. Instrumentation
Structured self-administered questionnaire was administered which consisted two parts:

Part I: Socio-demographic Data

Part II: Self-directed Learning (SDL) scale
Self-directed learning scale for nursing education was developed by Murray Fisher, Jennie King and Grace Tague in 2001. It comprises three dimensions i.e. self-management, desire for learning and self-control. It has 40 items with 5 point Likert scale which means it has 200 scores in total.

D. Data Collection
The researchers obtained permission to collect data from two nursing college authorities. After that questionnaires were distributed to the students and collected soon after the students filled up the questionnaire.

E. Data Analysis
The collected data was coded and then entered in IBM SPSS 20 version. The data was analyzed in terms of descriptive statistics i.e. frequency, percentage, mean, standard deviation. Similarly Chi-square was used to measure the association between respondents’ readiness level for SDL with socio-demographic variables.

III. RESULTS

Table 1. Socio Demographic Information of the Respondents

| Variables          | Frequency | Percent |
|--------------------|-----------|---------|
| Age (years)        |           |         |
| 16-20              | 73        | 68.2    |
| 21-25 Mean age 20 years | 34        | 31.8    |
| Ethnicity          |           |         |
| Janajati           | 40        | 37.4    |
| Madhesi            | 4         | 3.7     |
| Brahmin/Chhetri    | 63        | 58.9    |
| Religion           |           |         |
| Hinduism           | 96        | 89.7    |
| Non Hinduism*      | 11        | 10.3    |
| Academic year      |           |         |
| BSN 1st year       | 36        | 33.6    |
| BSN 2nd year       | 36        | 33.6    |
| BSN 3rd year       | 35        | 32.7    |
| Marital status     |           |         |
| Unmarried          | 104       | 97.2    |
| Married            | 3         | 2.8     |
| Family type        |           |         |
| Nuclear            | 94        | 87.9    |
| Joint              | 13        | 12.1    |
| Residence          |           |         |
| With family        | 70        | 65.4    |
| Hostel or Rented   | 37        | 34.6    |

* Buddhism, Christianity
Table 2. Distribution of Response of Respondents for Self-management
N=107

| Items                                               | Strongly Disagree F(%) | Disagree F(%) | Neutral F(%) | Agree F(%) | Strongly Agree F(%) | Mean ± SD       |
|-----------------------------------------------------|------------------------|---------------|--------------|------------|---------------------|----------------|
| I solve problem using a plan.                       | 0(0)                   | 3(2.8)        | 27(25.2)     | 63(58.9)   | 14(13.1)            | 3.82 ± 0.684   |
| I prioritize my work.                               | 5(4.7)                 | 0(0)          | 15(14.0)     | 68(63.6)   | 19(17.8)            | 3.90 ± 0.857   |
| I do manage my time well.                          | 4(3.7)                 | 7(6.5)        | 41(38.3)     | 48(44.9)   | 7(6.5)              | 3.44 ± 0.860   |
| I have good management skills.                     | 1(0.9)                 | 10(9.3)       | 53(49.5)     | 40(37.4)   | 3(2.8)              | 3.32 ± 0.722   |
| I set strict time frames.                          | 1(0.9)                 | 20(18.7)      | 51(47.7)     | 33(30.8)   | 2(1.9)              | 3.14 ± 0.770   |
| I prefer a plan my own learning.                   | 0(0)                   | 2(1.9)        | 35(32.7)     | 55(51.4)   | 15(14.0)            | 3.78 ± 0.705   |
| I am systematic in my own learning.                | 1(0.9)                 | 6(5.6)        | 38(35.5)     | 54(50.5)   | 8(7.5)              | 3.58 ± 0.753   |
| I am confident in my ability to search out information. | 0(0)                   | 3(2.8)        | 25(23.4)     | 66(61.7)   | 13(12.1)            | 3.83 ± 0.666   |
| I set specific time for my study.                  | 2(1.9)                 | 15(14.0)      | 37(34.6)     | 39(36.4)   | 14(13.1)            | 3.45 ± 0.954   |
| I am self-discipline.                              | 1(0.9)                 | 4(3.7)        | 14(13.1)     | 60(56.1)   | 28(26.2)            | 4.03 ± 0.795   |
| I am organized.                                    | 0(0)                   | 11(10.3)      | 28(26.2)     | 47(43.9)   | 21(19.6)            | 3.73 ± .896    |
| I am methodical.                                   | 1(0.9)                 | 5(4.7)        | 60(56.1)     | 38(35.5)   | 3(2.8)              | 3.35 ± 0.660   |
| I can be trusted to peruse my own learning.        | 0(0)                   | 5(4.7)        | 26(24.3)     | 58(54.2)   | 18(16.8)            | 3.83 ± 0.758   |

F: frequency

Table 2 shows the response of students for self-management in which the item ‘I am self-discipline’ have highest mean ± SD (4.03 ± 0.795) whereas the item ‘I set strict time frames’ have lowest mean ± SD (3.14 ± 0.770).

Table 3. Distribution of Response of Respondents for Desire for Learning
N=107

| Items                                                   | Strongly Disagree F(%) | Disagree F(%) | Neutral F(%) | Agree F(%) | Strongly Agree F(%) | Mean ± SD       |
|---------------------------------------------------------|------------------------|---------------|--------------|------------|---------------------|----------------|
| I need to know why.                                    | 1(0.9)                 | 0(0)          | 14(13.1)     | 65(60.7)   | 27(25.2)            | 4.09 ± 0.680   |
| I critically evaluate new ideas.                       | 1(0.9)                 | 6(5.6)        | 30(28.0)     | 60(56.1)   | 10(9.3)             | 3.67 ± 0.762   |
| I learn from my mistakes.                              | 1(0.9)                 | 0(0)          | 8(7.5)       | 39(36.4)   | 59(55.1)            | 4.45 ± 0.717   |
| I am open to new ideas.                                | 0(0)                   | 1(0.9)        | 18(16.8)     | 66(61.7)   | 22(20.6)            | 4.02 ± 0.644   |
| When presented with a problem, I can resolve I will ask for assistance. | 1(0.9) | 5(4.7) | 39(36.4) | 50(46.7) | 12(11.2) | 3.63 ± 0.783 |
| I like to evaluate what I do.                          | 0(0)                   | 1(0.9)        | 11(10.3)     | 70(65.4)   | 25(23.4)            | 4.11 ± 0.604   |
| I do enjoy studying.                                   | 2(1.9)                 | 4(3.7)        | 42(39.3)     | 44(41.1)   | 15(14.0)            | 3.62 ± 0.843   |
| I have a need to learn.                                | 0(0)                   | 1(0.9)        | 18(16.8)     | 63(58.9)   | 25(23.4)            | 4.05 ± 0.664   |
| I enjoy a challenge.                                   | 1(0.9)                 | 1(0.9)        | 27(25.2)     | 62(57.9)   | 16(15.0)            | 3.85 ± 0.711   |
| I want to learn new information.                       | 0(0)                   | 0(0)          | 7(6.5)       | 52(48.6)   | 48(44.9)            | 4.38 ± 0.609   |
| I enjoy learning new information.                      | 0(0)                   | 1(0.9)        | 6(5.6)       | 57(53.3)   | 43(40.2)            | 4.33 ± 0.626   |
| I like to gather the facts before I make a decision.   | 0(0)                   | 0(0)          | 21(19.6)     | 64(59.8)   | 22(20.6)            | 4.01 ± 0.637   |

F: frequency

Table 3 shows the response of students for desire for leaning in which the item ‘I learn from my mistakes’ have highest mean ± SD (4.45 ± 0.717) whereas the item “I do enjoy studying” have lowest mean ±SD (3.62 ± 0.843).
Table 4. Distribution of Response of Respondents for Self-control

| Items                                         | Strongly Disagree F(%) | Disagree F(%) | Neutral F(%) | Agree F(%) | Strongly Agree F(%) | Mean ± SD |
|----------------------------------------------|------------------------|-------------|-------------|-----------|---------------------|-----------|
| I am able to focus on a problem.             | 0(0)                   | 5(4.7)      | 19(17.8)    | 71(66.4)  | 12(11.2)            | 3.84 ± 0.675 |
| I prefer to set my own learning goals.       | 0(0)                   | 1(0.9)      | 22(20.6)    | 67(62.6)  | 17(15.9)            | 3.93 ± 0.634 |
| I am responsible.                            | 0(0)                   | 3(2.8)      | 13(12.1)    | 57(53.3)  | 34(31.8)            | 4.14 ± 0.733 |
| I have high personal expectations.           | 0(0)                   | 2(1.9)      | 39(36.4)    | 46(43.0)  | 20(18.7)            | 3.79 ± 0.765 |
| I have high personal standards.              | 0(0)                   | 8(7.5)      | 41(38.3)    | 48(44.9)  | 10(9.3)             | 3.56 ± 0.767 |
| I have high beliefs in my abilities.         | 0(0)                   | 3(2.8)      | 34(31.8)    | 54(50.5)  | 16(15.0)            | 3.78 ± 0.731 |
| I am aware of my own limitations.            | 0(0)                   | 1(0.9)      | 21(19.6)    | 51(47.7)  | 34(31.8)            | 4.10 ± 0.739 |
| I am logical.                                | 0(0)                   | 5(4.7)      | 36(33.6)    | 53(49.5)  | 13(12.1)            | 3.69 ± 0.745 |
| I evaluate my own performance.               | 0(0)                   | 4(3.7)      | 16(15.0)    | 65(60.7)  | 22(20.6)            | 3.98 ± 0.713 |
| I prefer to set my own criteria on which to evaluate my performance. | 0(0)                   | 1(0.9)      | 27(25.2)    | 66(61.7)  | 13(12.1)            | 3.85 ± 0.627 |
| I am responsible for my own decisions/actions. | 0(0)                   | 1(0.9)      | 9(8.4)      | 67(62.6)  | 30(28.0)            | 4.18 ± 0.611 |
| I can find out information for myself.       | 0(0)                   | 3(2.8)      | 25(23.4)    | 58(54.2)  | 21(19.6)            | 3.91 ± 0.734 |
| I like to make decisions for myself.         | 0(0)                   | 4(3.7)      | 19(17.8)    | 57(53.3)  | 27(25.2)            | 4.00 ± 0.765 |
| I prefer to set my own goals.                | 0(0)                   | 0(0)        | 11(10.3)    | 60(56.1)  | 36(33.6)            | 4.23 ± 0.623 |
| I am in control of my life.                  | 0(0)                   | 4(3.7)      | 25(23.4)    | 46(43.0)  | 32(29.9)            | 3.99 ± 0.830 |

Table 4 shows the response of students for self-control in which the item 'I prefer to set my own goals' have highest mean ± SD (4.23 ± 0.623) whereas the item "I have high personal standards" have the lowest mean ± SD (3.56 ± 0.767).

Table 5. Respondents’ Level of Readiness for Self-directed Learning

| Level of readiness | Frequency | Percent |
|--------------------|-----------|---------|
| Low level (<150 scores) | 33       | 30.8    |
| High level (≥150 scores) | 74      | 69.2    |

Table 5 shows that 69.2% of the respondents have high level of readiness for self-directed learning while only 30.8% respondents have low level of readiness for self-directed learning.

Table 6. Association between Respondents Level of Readiness for Self-directed Learning with Socio-demographic variables

| Level of readiness | Low Level F(%) | High Level F(%) | P-value |
|--------------------|----------------|----------------|---------|
| Age (years)        |                |                |         |
| 16-20              | 25(34.2)       | 48(65.8)       | 0.264   |
| 21-25              | 8(23.5)        | 26(76.5)       |         |
| Ethnicity          |                |                |         |
| Janajati           | 12(30.0)       | 28(70.0)       | 0.208*  |
| Madhesi            | 0(0.0)         | 4(100.0)       |         |
| Brahmin/Chhetri    | 21(33.3)       | 42(66.7)       |         |
| Religion           |                |                |         |
| Hinduism           | 29(30.2)       | 67(69.8)       | 0.679*  |
| Non Hinduism       | 4(36.4)        | 7(63.6)        |         |
Table 6 reveals that there is statistically significant association between academic year and respondents’ level of readiness for self-directed learning whereas no any statistically significant association between respondents’ level of readiness for self-directed learning and other socio demographic variables i.e. ethnicity, age, religion, marital status, family type and residence.

IV. DISCUSSION
Here mean scores ≥ 150 indicates a high level of SDL, while mean scores <150 represents low level of SDL according to Fisher’s et al criteria [9]. In this study, the total score of 69.2% of students had ≥150 scores which indicate high level of the readiness for SDL which suggest that most of the respondents were ready for self-directed learning. Somehow similar finding was found in the study by Bajracharya, Jha, Gurung, Ansari and Thapa in which 72.7% students’ scores were ≥150 scores [10]. In the present study, the association of the level of readiness for self-directed learning with the academic year of students is significant (P = 0.045) while the association of the level of readiness for self-directed learning with age, ethnicity, religion, marital status, family type and residence were not significant. Similar findings was found in the study conducted by Ejaz, Afzal, Hussain, Majeed and Gilani among 133 students (2-years BSN Post RN) and (4-years BSN Generic) degree programs which showed that level of readiness for self-directed learning were significant with academic years only [11].

V. CONCLUSION
Based on the findings, it can be concluded that there is high level of readiness in majority of the students of Bachelor of Science in Nursing for SDL. A significant association was found only between academic years of students with the level of readiness for SDL which shows that depending upon the academic year seniors are more ready toward self-directed learning than junior nursing students.

AKNOWLEDGEMENTS
Authors would like to express sincere gratitude to Yeti Health Science Academy and Kantipur Academy of Health Science, Kathmandu for providing administrative support and opportunity to conduct this study among the students enrolled in Bachelor of Science in Nursing Program. They would also like to thank to all the students who participated in the study and provided the valuable and realistic information for the study.

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