

Factors That Affect Self-directed Learning of Faculty Nursing Students at Minia University

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Abstract

This study aimed to detect the factors that affect nursing students' self-directed learning at faculty of nursing in Minia University. **Setting:** The present study was conducted at nursing faculty in Minia University. **Research design:** This study used descriptive comparative research design. **Subjects:** Subjects of the study included a total coverage sample of all four academic years nursing students during academic year (2013-2014). Total number of students were (n=777). **Tools of data collection** included two parts, part one: demographic characteristics of the sample, Part two comprised of scale for self-directed learning factors (three major factors subtitled by 60 statements) **Results:** female nursing students have the highest mean score for all major factors related to feeling successful and satisfied in studies and their characteristics which were 28.45, 44.19 and 145 respectively. The 1st year nursing students have the highest mean score for the same factors were (29.75 ±4.37), (44.91±5.42) and (1.51E2 ±19.04) respectively. **Conclusions:** the 1st year nursing students and female students have the highest mean score for all major factors. **This study recommended** providing self-directed learning opportunities for promoting SDLR of the nursing students by motivating them and providing training, and educational resources for carrying out teaching learning process.

Keywords: *Self-Directed Learning (SDL) & Self-Directed Learning Readiness (SDLR).*

Introduction

In learning environment, faculty staff provide students with models of the nursing role, they are the reference group. The models of standers as well as behaviors for professional nursing **Saber, (1995)**

The teacher helps students to make a smooth transition from teacher-directed to self-directed learning. So he/she must assess the readiness of his students' for the method, establish the boundaries of the students' decisions about their learning and teach about the methodology (**Iwasiw, 2014**)

Also educator should manage teaching time effectively by planning, organizing, directing, guiding, following up and evaluating all of the available resources (human and physical). (**Kan, & Staber, 2009**)

Therefore the teacher in SDL moves to provocation instead of recitation, from instruction to guidance, from telling to asking, and teaching students to think and find out for themselves. (**Nantz, & Klaf, 2012**)

The teacher use teaching strategies to support students to be independent. These teaching strategies shift to be learning strategies when the students can independently select the suitable ones and effectively use them to perform activities and tasks and to achieve goals. Effective teaching learning strategies can be applied for different grade levels and subject areas, and can adjust for student differences, motivate and support students to focus

their attention, organize information to understand and monitor learning. (**HLSGI, 2002, Oxford, 2009**) Learning Strategy instruction focuses on making students more active learners by teaching them how to learn and how to use what they have learned to be successful **Joseph, & Hall, (2009)**

When students become self-directed learners they are aware of their needs and interests which are important for the process of self-directed learning process. The interest and desire of the learners to learn result in beingsatisfied while the student is conducting the learning activity **Webster, (2012)**, such as participation in study groups, self-guided reading, electronic dialogue, reflective writing activities and internships. **Hiemstra, (1994)** **Ambrose, et al., (2010)** stated that student important role is to be a self-directed learner: Students should learn to assess and accommodate their approaches to learning, to become self-directed learners.

Self-directedlearners prefer to be engaged in their learning...not just listening but doing ,Adult learners are self-directed they seek out learning activities to enhance their own knowledge-and especial to meet a need, wants to draw on their rich personal and professional experiences. (**TADTS, 2014**)

Successful learners use **step-by-step** strategy, different learningdimension and learning materials, suitablehelpin the form of modeling, guiding and

autonomy in practice, chances to transfer experiences from one situation to another, rational connections between skills and ideas, and real-life situations, chances to show what they know, reinforcement to self-monitor, different tools for evaluating own learning. (Rosenshine, 2012)

Significance of the study

According to my experience in nursing education and many previous researches addressed self-directed learning, and recommended to do more researches on this topic because nursing field is an ever changing field, so preparing students to be self-directed learners for lifelong learning. To be independent learner the student must be motivated and satisfied with his studies, added to the student characteristics and studying behaviors that affect directly their readiness for self-directed learning, so investigating the previous factors affecting SDL may help in improvement of nursing education.

Aims of the Study

The aim of this study was to investigate the factors that affect self-directed learning readiness according to the nursing students' opinions at faculty of nursing in Minia University.

Research questions:

What are the factors that influence the readiness for self-directed learning in different academic years and different gender?

Subject & Method

Study Design

descriptive comparative research design was applied.

Setting

The present study was conducted at faculty of nursing in Minia University.

Subjects

The sample of the study included all four academic years nursing students at Faculty of Nursing in Minia University during academic years 2013-2014.

Data collection tools

The study tool included two parts:

- A sheet for personal data was used to collect information about nursing students at Minia University including name, age, gender, and academic year.
- A scale for Factors affecting the readiness of self-directed learning (Adopted. By Huang, 2008). It included three parts related to three major factors subtitled by 60 sub-items or specific factors. The first major factor related to when the student feels successful (8 statements), the second major factor related to when the student feels satisfied with studies (12 statements), the third major factor

related to the characteristics of student studying behaviors (40 statements). The used scoring system is rated on a 5-point likert scale from Grade (1): never or rarely true. Grade (2): sometimes true Grade (3): half the time true. Grade (4): frequently true. Grade (5): always or almost always true.

Pilot study

A pilot study was performed for 78 students from faculty of nursing students at Minia University. Thus, as no modification in the study sheet needed as the questions were clear and understandable, the pilot study included in the main study sample. Reliability of A scale for Factors affecting the readiness of self-directed learning is measured by a cronbach's $\alpha = (96\%)$ statistical method.

Fieldwork

A paper for official permission was signed from the Dean of nursing faculty in Minia University for the collection of the needed data. After the study tool was finalized, the collection of actual data was started in November 2013 and ended in June 2014. In the presence of the researcher with nursing students the questionnaire distributed and completed to be sure that all items were answered for those who agreed to participate. The whole duration for data collection took about eight months.

Ethical considerations

A consent from the participants for the agreement was taken orally after explaining their rights to participate, refuse, or withdraw at any time. Total confidentiality of any obtained information was confirmed. The study operation did not include any harmful effects on participants.

Statistical analysis

The analysis of the data was done by the statistical package for social science (SPSS) version (17), numerical data were expressed as mean and SD, comparison between two variables was done using t-test and four variables by ANOVA test were also used. Significant is considered at ($p < 0.05$).

Results

Table (1): Distribution of nursing students according to demographic characteristics (n = 777).

Characteristics	N	%
A- Academic year		
- 1 st	212	27.3%
- 2 nd	224	28.8%
- 3 rd	162	20.9%
- 4 th	179	23%
B- Gender		
- Male	274	35%
- Female	503	65%
Total	777	100%

Table (2): Student feeling successful with studies as reported by the studied subject (n= 777).

When did you feel most successful			
N	Items	Mean	Percentage of mean
1	When a lecture or tutorial made you think about things	3.683	73.7%
2	When you did almost no work and got away with it	3.641	72.8%
3	When you got a higher mark than other students	3.992	79.9%
4	When you learned something interesting	4.153	83%
5	When you showed people that you were smart	2.529	50.9%
6	When something you learned make you want to find out more	4.058	81.2%
7	When you didn't have to work too hard.	3.534	70.9%
8	When you were the only one who could answer the lecturer's questions	2.337	46.7%

***The negative statements have been reversed in direction

Table (3): Student feeling satisfied with studies as reported by the studied subject (n= 777).

How satisfied did you feel when you...			
N	Items	Mean	Percentage of mean
1	Learned something new	3.798	76%
2	Did better than the other students in the class	2.230	44.6%
3	Realised you were getting through the course without having to work hard	2.886	57.7%
4	Read something interesting	3.898	78%
5	Realised you didn't have to prepare for tutorials.	2.918	58.4%
6	Worked on a challenging task or assignment.	3.775	75.5%
7	Accomplished something that others couldn't do.	3.938	78.8%
8	Understood something from the first time.	4.030	80.6%
9	Were involved totally in something that you were doing.	3.942	78.8%
10	Received recognition or prestige	3.982	79.6%
11	Enhance your status in the group	3.806	76.1%
12	I like to be the top person in my group	3.922	78.4%

Table (4): Characteristics of student studying behavior as reported by the studied subject (n= 777)

N	Items	Mean	Percentage of mean
1	I solve problems using a plan	3.417	68.3%
2	I priorities my work	3.817	76.3%
3	I do not manage my time well	2.991	59.8%
4	I have good management skills	3.543	70.9%
5	I set strict time frames	3.318	66.4%
6	I prefer to plan my own learning	3.683	73.7%
7	I am systematic in my learning	3.387	67.8%
8	I am able to focus on a problem	3.712	74.2%
9	I need to know why	3.74	74.8%
10	I critically evaluate new ideas	3.555	71.1%
11	I prefer to set my own learning goals	3.776	75.5%
12	I learn from my mistakes	3.874	77.5%
13	I am open to new ideas	3.762	75.2%
14	When presented with a problem I cannot resolve, I will ask for assistance	2.763	55.3%
15	I am responsible	3.812	76.2%
16	I like to evaluate what I do	3.803	76%
17	I have high personal expectations	3.897	77.9%
18	I have high personal standards	3.752	75%
19	I have high beliefs in my abilities	3.762	75.2%
20	I am aware of my own limitations	3.79	75.8%
21	I am confident in my ability to search out information	3.629	72.6%
22	I do not enjoy studying	2.896	57.9%
23	I have a need to learn	3.721	74.4%
24	I enjoy a challenge	3.745	74.9%
25	I want to learn new information	3.815	76.3%
26	I enjoy learning new information	3.73	74.6%
27	I set specific times for my study	3.431	68.6%
28	I am self-disciplined	3.561	71.2%
29	I like to gather the facts before I make a decision	3.561	71.2%
30	I am disorganized	3.122	62.5%
31	I am logical	3.605	72.1%
32	I am methodical	3.395	67.9%
33	I evaluate my own performance	3.539	70.8%
34	I prefer to set my own criteria on which to evaluate my performance	3.64	72.8%
35	I am responsible for my own decisions/actions	3.855	77.1%
36	I can be trusted to pursue my own learning	3.69	73.8%
37	I can find out information for myself	3.635	72.7%
38	I like to make decisions for myself	3.748	75%
39	I prefer to set my own goals	3.833	76.7%
40	I am not in control of my life	3.215	64.3%

Table (5): Comparison among different years of nursing students related to major factors that affect SDLR* as reported by studied subject (n= 777).

Major Factors	Academic year	N	Mean ± SD	F	Sig
1- when usually feeling successful.	1 st	212	29.75 ±4.37	23.345	.000 (**)
	2 nd	224	28.06±4.28		
	3 rd	162	26.1±3.94		
	4 th	179	27.26 ±4.75		
2- when usually feeling satisfied with studies.	1 st	212	44.91±5.42	11.292	.000 (**)
	2 nd	224	43.38 ±6.59		
	3 rd	162	41.31 ±6.32		
	4 th	179	42.34 ±6.77		
3-The characteristics of your study behavior	1 st	212	1.51E2 ±19.04	17.442	.000 (**)
	2 nd	224	1.44E2 ±22.09		
	3 rd	162	1.39E2 ±18.11		
	4 th	179	1.38E2 ±23.48		

*N.B (SDLR): self-directed learning readiness.

(**) – Means there is significant differences (< 0.05).

Table (6): Differences between males and females nursing students by Using T-Test related to major factors that affect SDLR*.

Major factors	gender	N	mean	T	DF	Sig. (2-tailed)
1-When usually feeling successful.	M	274	26.96	-4.428	775	.000(**)
	F	503	28.45			
2-When usually feeling satisfied with studies.	M	274	41.17	-6.445	775	.000(**)
	F	503	44.19			
3- The characteristics of your study behavior	M	274	1.41E2	-2.806	775	.005 (**)
	F	503	1.45E2			

(**) – Means there is significant differences (< 0.05).

*N.B (SDLR): self-directed learning readiness.

Table (1): This table described the demographic characteristics of the studied subjects. It revealed that the highest percentage of them were females (65 %). The highest percentage of students in different academic years was among the second year students it was 28.8% .

Table (2): In relation to when the student feels most successful, the highest percentage of mean for factor no. 4 was (83%) which is: when you learned something interesting. And the lowest percentage of mean for factor no. 8 was (46.7%) which is: when you were the only one who could answer the lecturer's questions.

Table (3): In relation to student feels satisfied with studies, the highest percentage of mean for factor no. 8 was (80.6%) which is: understood something from the

first time. And the lowest percentage of mean for factor 2 was (44.6%) which is: did better than the other students in the class.

Table (4): In relation to characteristics of students studying behavior, the highest percentage of mean score for factor no. 17, 12, and 35 related to: I have high personal expectations (77.9%), and: I learn from my mistakes(77.5%),and:I am responsible for my own decisions/actions(77.1%). While the lowest percentage of mean score for factor no. 14 related to: when presented with a problem I cannot resolve, I will ask for assistance, was (55.3%).

Table (5): In relation to the comparison among different years of nursing students, table(5) revealed that there were statistical significant differences among groups.

The 1st year students have the highest mean for factors (1), (2) and (3) related to when usually feeling successful, when usually feeling satisfied with studies and the characteristics of your study behavior, were (29.75 ±4.37), (44.91±5.42) and (1.51E2 ±19.04) respectively.

Third year students have the lowest mean in factors (1) and (2) related to: when usually feeling successful, and when usually feeling satisfied with studies, were (26.1±3.94) and (41.31±6.32) respectively.

In relation to differences between males and females nursing students, it was observed that there were statistical significant differences between males and females nursing students regarding factors 1 and 2 and 3. Females had the highest mean in the previous factors which were related to: when usually feeling successful and when usually feeling satisfied with studies, and the characteristics of your study behavior as shown in **table (6)**.

Discussion

Self-directed learning requires the ability to identify one's own learning needs, develop and implement a plan to gain knowledge and to monitor one's own progress. (Van Rensburg, & Botma, 2015). A high percentage of nursing students were female -nearly double the number. This finding might be referred to the acceptance of the society to the idea of being female nurse than being a male nurse and nursing profession commonly was known be female long time ago. This finding was consistent with Walling (2011) who mentioned that the entering of male to the nursing profession has been increase; it is still a female-dominated occupation. Regarding to 1st year nursing students had the highest mean and percentage of when usually feeling successful and feeling satisfied with studies, and the characteristics of your study behavior.

This might be attributed to student enrolling in nursing college with high expectation and high self-esteem, because nursing nowadays attract scientific students ambitious to achieve high grades.

This finding was compatible to Chaves, et al., (2013) who stated that most of the 1st year nursing students presented high self-esteem, which was related to the professional perspective.

This finding was in contrast to Andrew, et al., (2009) indicated that while most of 1st year nursing students seem to understand the role for being nursing students, this understanding of what is expected from them is less clear. And, Hakim (2014) added that most 1st year nursing students had little satisfaction concerning their field of study.

Female nursing students have the highest mean of feeling successfully and feeling satisfied and

characteristics of study behavior. These finding were consistent with Reio & Choi (2004) & Reio & Davis (2005) who stated that female students had higher level of the self-directed learning than male students. the highest percentages regarding nursing students feeling satisfied was for "understood something from the first time" and "learning something interesting".

This might be due to students accustomed tounderstand from several repeating and not allowed to choose interesting topics, so new and interesting information motivate them to learn more and increase their satisfaction.

This finding is matched with Truby (2010), Clifton & Mckillup (2012) who mentioned that nursing student showed satisfaction with the course content, learning materials, students will be more motivated when given choices, doing something one chooses rather than what one has been told to do, can be very motivating.

Furthermore, Joshua (2013), Douglass & Morris (2014) stated that the most successful students are those who feel real ownership of their education. Students feel personally can make a difference in their own outcomes and that education will make a difference for their future.

Moreover, Williams & Williams (2011) clarified that students' success creates self-confidence to engage more in learning, students experience success in their understanding, feel some ownership of a decision when agree to it.

The highest percentage of mean score regarding "characteristics of student studying behavior" was for "having highly personal expectation" and "students learn from their mistakes".

This finding might be due to students trust in self-abilities and accustomed to learn from the trial and error when teachers inform students about mistakes and give immediate feedback this might help students try not to repeat the same mistakes every time.

This finding is supported by Marann & Barbara (2005), Evans & Stevenson (2009) who reported that students who have strong self-belief and high personal expectations and high levels of self-confidence are more likely to actively participate in learning tasks than those who doubt their abilities.

Charles & Kathleen (2009) asserted that even during carefully planned lessons, students make mistakes, answer incorrectly, give incomplete answers, or do not respond at all, students learn by doing, but if errors are repeated, students may be learning how to perform skills incorrectly. Students learn better by "doing with feedback." The biggest problem with delayed feedback is that it allows students to practice errors.

Conclusions

- The first year nursing students have the highest mean score in relation to major factors no. 1 "Student feeling successful with studies", no. 2 "Student feeling satisfied with studies", and 3 "Characteristics of student studying behavior".
- the female nursing students have the highest mean score in relation to major factors no. 1 "Student feeling successful with studies", no. 2 "Student feeling satisfied with studies", and 3 "Characteristics of student studying behavior".

Recommendations

- Providing self-directed learning opportunities for promoting SDLR of the nursing students by motivating them and providing training, and educational resources for carrying out teaching learning process.
- Recommend the nursing faculty staff members to motivate nursing students to use self-directed learning activities.
- Provide information through discussion and seminars to increase the nursing students' awareness about importance and self-directed learning activities.

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