The Relation Between Readiness for Self-learning and Learning Style Preferences Among Nursing Students

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ABSTRACT

Background: Self-directed learning is a needful skill for students to remain lifelong learners. As they gain knowledge and succeed academically in their chosen disciplines. Therefore, awareness of learning styles should be promoted. Aim: the study aimed to study the relation between readiness for self-learning and learning style preferences amOng nursing students. Subjects and method: the study was conducted at faculty of nursing/Port-Said University using a descriptive correlational research design; 174 students from the four undergraduate academic years were enclosed in the study. Two tools were used namely; Self-Directed Learning Readiness Scale (SDLRS) and Learning Styles Self-Assessment Questionnaire. Results: 27% of studied nursing students had average score for self-directed learning readiness while 41.4% were blew average and 31.6% were above average. Moreover, the most preferred learning style among student was kinesthetic (44.8%), then visual (28.2%) and auditory (27%). *Conclusion:* The study findings concluded that there was no statistically significant relation between selfdirected learning readiness and learning style. **Recommendations:** Students needs to be supported to move from conventional education to more active and autonomous education, depend on self-directed learning.

Key words: nursing students, learning style, self-learning

INTRODUCTION

In a rapidly changing and unstable world, many countries strive to remain competitive by updating the national education strategies (Kan'an and Osman,2015). As well, given the continuous advances in nursing sciences, nurses need to develop the skills that will enable them to be lifelong learners. Self-directed learning (SDL) is considered by many researchers as the most appropriate methodology to allow nurse-practitioner to stay up-to-date and knowledgeable (Murad, et al ,2010)

Accordingly, Self-learning is a needful skill for students to remain lifelong learners as it considered an educational tool increasingly used in adult education within higher education institutions (Örs, 2018). It leads to the development of skills to meet the challenges associated with modern global systems (Siminică and Traistaru, 2013).

In addition, self-learning skills (SDL) enable students to identify and manage their own learning needs rather than depending on their teachers. Hence, schools' learning activities must encOurage the development of SDL skills so that it may help students to succeed in their present and future learning (Kan'an and Osman, 2015)

Readiness for self-directed learning is defined as the degree to which an individual has the attitudes, talents, and personality traits necessary for self-directed learning (Prabjanee and Inthachot, 2013).

SDL readiness naturally exists along a continuum ranging from high levels to moderate and that individual's level of readiness can be demonstrated through individual personal characteristics such attitude, values, and abilities; and It is appropriate to establish SDL readiness because appropriate intervention can enhance learners' readiness for self-directed learning (Guglielmino, 2013).

Fein (2014) revealed that students who are motivated for learning their performance will be better in future and they will become independent and have good readiness for self-directed learner. Students will work independently. In nursing profession students enter with professional training, learn from mistakes, continually up to date their knowledge and skills through self-reliant abilities (Fein, 2014). Current patterns in training and education highlighted that undergraduates get new skills and practices so, they could become lifelong learner and have better readiness of self-learning (El-Gilany and Abusaad, 2013).

Supporting self-directing learning, nurse-educators should facilitate student's development and socialization by determining individual's learning style preferences and needs. Learning style can be defined as the way people absorb process and retain information (Francis, Mahlomaholo, and Nkoane, 2010). Moreover, Moran (1991) defined it as individual differences in thinking, differences in interests, differences in literature, and differences in cognitive backgrounds addressed by people's behavior.

As stated by Gerding (2007), there are many ways to categorize learning approaches. Many common learning styles theories are based on sensory preference with broad categories that include visual, auditory, kinesthetic. Visual style: in this style learners are distinguished by possessing two sub-channels Linguistic and Spatial. Auditory style: in this style learner learns easily through verbal lessons and anything that allows them to talk out what they are learning. Kinesthetic style: This group is mainly marked by two sub-channels: Kinesthetic having to do with movement and Tactile pertaining to the sense of touch (Bill and Rosie, 2019).

SDL readiness and learning styles have been explored in numerous studies due to the need to understand the components and relationships among their constructs, which in turn, may enhance students' learning outcomes (Alharbi, 2018).

Significance of the Study

As self-directed learning is vital in today's world, educational institutions are expected to consider the individual differences of learners in order to encourage them to direct their own learning. A literature review strongly indicates how important understanding of learning styles and the role of learning styles in teaching / learning process are important for effective teaching. When students understand how they learn and their preferred ways of learning, the likelihood of learning increases.

AIM OF STUDY:

Study the relation between readiness for self-learning and learning style preferences among nursing students at Port-Said University

Objectives:

The objectives of this study are to:

- Assess the nursing student's readiness for self-learning at Port-Said University
- Identify the nursing students' learning style preferences at Port-Said University
- Find-out the relation between nursing students' readiness for self-learning and their learning style preferences at Port-Said University

Research Question:

- Are the students ready for self-directed learning at Port-Said Faculty of Nursing?
- What is the most learning style preference of the students at Port-Said Faculty of Nursing?
- Is there a relationship between nursing students' readiness for self-learning and their learning style preferences at Port-Said University?

SUBJECTS AND METHOD:

Research design: this descriptive correlational study

Setting: the study was conducted in the Faculty of Nursing, Port- Said University, that adopting innovative approaches in education, such as Problem Based Learning (PBL), Community Based Learning (CBL), and Self-Learning (SL).

Subjects: the study was carried out on 174 nursing students chosen by Stratified Random Sample from entire population (316): 56 from first year, 75 from second year, 82 from third year and 103 from forth year

Tools of data collection:

Data collected by using two tools; Self-Directed Learning Readiness Scale and VAK Learning Styles Self-Assessment Questionnaire.

TOOL I:

This tool consists of two parts

Part 1: personal and academic characteristics Data Sheet

This part aimed to collect data regarding student' age, academic year, gender and training programs

Part 2: Self-Directed Learning Readiness Scale

Self-Directed Learning Readiness Scale developed by Guglielmino (1977). It consists of 58(MCQ) items, these items rated on 5-point Likert-type scale. The 58 items divided to four dimension Self confidence in abilities and skills for learning (18), Learning is a tool for life (14), and Responsibility for own learning (14) and Curiosity (12), this dimensions were categorized by **Hoban, Lawson, Mazmanian, Best, and Seibel (2005)**.

Scoring system of Self-Directed Learning Readiness Scale:

SDLR(Self-Directed		(Self-Directed Learning Readiness	Readiness for Self-		
Learning	Readiness	Scale) mean percent	Directed Learning		
Scale) score					
58-201		Less than 69	Below average		
202-226		From 70 to 78	Average		
227-290		More than 78	Above average		

TOOLII: VAK Learning Styles Self-Assessment Questionnaire

It was developed by **Chislett and Chapman** (2005), consists of 30 (MCQ) questions every question has 3answer (A's, B's, C's).

Scoring system of VAK Learning Styles

If student choose mostly A, have a visual learning style.

If student choose B mostly, have an auditory learning style.

If student choose C mostly, have a kinesthetic learning style.

Face Validity of a Structured questionnaire sheet tool: -

It was ascertained by five experts in nursing administration. Necessary modifications were done according to the experts' opinions. Translation of some items has been modified.

Reliability of a Structured questionnaire sheet tool:-

It was held on 10% of total number of studied participants in Faculty of Nursing – Port-Said University. Cronbach's alpha coefficient was used to assess the internal consistency of data collection for Adult Learning Questionnaire was 0.75 while for VAK Learning Styles Self-Assessment Questionnaire was 0.78.

Pilot Study:

A pilot study was carried out on 10% of the included total sample of student nurses from Port Said University. The purpose of the pilot study was to test applicability, clarity, relevance, feasibility of the research tool. Pilot study conducted before starting of data collection. It took about one month from December 2018 to January 2019. Based on the findings of pilot study, no modifications carried out on the tools.

Field of work

Upon fulfillment of all administrative arrangements, data collection phase was initialized by meeting with students in the beginning, ending or in the break of PBL sessions for four days per week, according to their academic time schedule. The researcher introduced himself to students; and distributed the tools and asked them to fill it after explaining the aims of the study and its implication on the spot in the presence of the researcher to ensure the objectivity of the responses. The researcher collected data by himself with assistance from sessions' tutors. The filled forms were then collected and revised for completeness. The time needed to fill questionnaires was 15-20 minute. The study was conducted during the academic year 2018 - 2019 from beginning of December 2018 to the end of March 2019 after obtaining the official permission to conduct the study.

Administrative and ethical consideration: A written permission to carry out the study was obtained from Faculty Dean, with coordination of Vice-Dean of Education and student's affair and academic years' coordinators to facilitate the process of data collection. The purpose of the study was explained to the students before taking their informed consent and informed of their right to refuse to participate in the study. Also, they were secured that any information obtained would be confidential and used only for purpose of the study.

Statistical analysis:

The collected data was organized, revised, stored, tabulated and analyzed using the number and percentage distribution. Statistical analysis was done by computer using Statistical Package of Social Science program (SPSS). Proper statistical tests were used to determine whether there was a significant statistical difference between the variables of the study. Data were presented in tables and figures. Percentage, Pearson correlation (r), chi-square (x2), proportion probability of error (p-value) were used.

RESULTS:

Table (1): displays that 82.2% of studied nursing students had 20 years old or more, 67.8% were female, 32.2% were in the fourth academic year and 87.4% of studied nursing students had attended training program.

As shown in **Table (2)** more than one quarter (27%) of studied nursing students had an average score for self-directed learning readiness while 41.4% were blew average and 31.6% were above average.

Table (3): demonstrates that the higher dimension among SDL readiness scale dimensions is self confidence in abilities and skills for learning (68.8 ± 13.4) , followed by responsibility for own learning (56.7 ± 10.9) , learning is a tool for life (50.2 ± 9.8) , then curiosity (41.8 ± 8.1)

As for the nursing students' preferred learning style **Table (4)** illustrated that the most preferred learning style was kinesthetic (44.8%), then visual (28.2%) and auditory (27%)

Concerning the relation between SDLR and preferred learning style **Table** (5) demonstrates that there is no significant relation between SDLR and preferred learning style in the four academic years (p=0.492, 0.142, 0.129 & 0.139).

Table (1): Frequency distribution of personal and academic characteristics of studied nursing students (n=174)

personal and academic characteristics	No= 174	%	
Age (years)			
< 20 years	31	17.8	
≥20 years	143	82.2	
Min. – Max.	19.0 – 23.0		
Gender			
Male	56	32.2	
Female	118	67.8	
Current Academic Year			
First	32	18.4	
Second	41	23.6	
Third	45	25.9	
Fourth	56	32.2	
Attending Training program			
Not have courses	152	87.4	
Yes have courses	22	12.6	

Table (2): Number and percent distribution of students according to their self-directed learning readiness score (n 174)

# SDLR score		No= 174	%		
below average	(58-201)	72	41.4		
Average	(202-226)	47	27		
above average	(227-290)	55	31.6		

[#] SDLR (self-directed learning readiness)

Table (3): Mean score of self-directed learning readiness dimensions.

# SDLR Dimensions	number of	mean ±SD
	item	
self confidence in abilities and	18	68.8 ±13.4
skills for learning		
Learning is a tool for life	14	50.2±9.8
Responsibility for own learning	14	56.7 ±10.9
Curiosity	12	41.8 ± 8.1

[#] SDLR (self-directed learning readiness)

Table (4): Mean score of learning style as reported by students (n 174)

Learning Style	No = 174	%	mean ±SD
Visual	49	28.2	9.78 ± 3.797
Auditory	47	27.0	9.14 ± 3.9
Kinesthetic	78	44.8	11.07 ± 4.693

Table (5:) Difference description of learning styles and self-directed learning readiness

	learning styles						2			
# SDLR	Visual		Auditory		Kinaesthetic		Total		\mathbf{X}^2	P
	N	%	N	%	N	%	N	%		
First year (32) Below average Average Above average Total of first year	3 2 10	9.4 6.3 31.3 46.88	2 2 1	6.3 6.3 3.13 15.62	4 1 7	12.5 3.13 21.88 37.5	9 5 18	28.13 15.62 56.25	0.337	0.492
Second level (41) Below average Average Above average Total of second year	12.195 0 4.88	17.073	3 2 2	7.317 4.88 4.88 17.073	8 10 9	19.51 24.39 21.951 65.85	16 12 13	39.024 29.27 31.71 100	0.268	0.142
Third year (45) Below average Average Above average Total of third year	6 2 1	13.33 4.44 2.22 20	12 5 3	26.66 11.11 6.66 44.44	11 4 1	24.44 8.89 2022 35.56	29 11 5	64.44 24.44 11.11 100	0.945	0.129
Forth year (56) Below average Average Above average Total of forth year	4 5 7	7.14 8.93 12.5	7 5 1	12.5 8.93 1.79	7 9 11	12.5 16.07 19.64	18 19 19	32.14 33.93 33.93	0.195	0.139

^{*}Significant at P<0.05

DISCUSSION:

The aim of this study is study readiness for self-learning and learning style preferences among nursing students at Port-Said University. this study also investigated whether there were association between self-directed learning readiness and learning style preferences.

The first objective of the study was to assess the nursing student's readiness for self-learning at Port-Said University. The study findings showed that slightly more than two-

fifths of studied nursing students' had low readiness for self- learning. This may be attributed to the transition from traditional education that students depended on teacher in secondary school. This finding is consistent with the study of Yuan, Williams, Fang and Pang (2012) who found that more than one third of Chinese baccalaureate nursing students reported a low SDLR. Moreover, Lestari and Widjajakusumah (2009) in Indonesia indicated that only half of the students had low to moderate scores for self-directed learning readiness.

In contrast a study by El-Gilany and Abusaad (2013) who reported that more than three quarters 0f Saudi nursing students in Al Gouf university had high level of self-directed learning. Similarly, Safavi, et al(2010) found that the majority of Jordanian and Iranian nursing students enjoyed a high level of SDLR.

The study demonstrates that the higher dimension among SDL readiness scale highest means score is self confidence in abilities and skills for learning. This contradicted with the results of Saleh, Sambawa, Bardawan and Naqali, (2016) who found that the highest dimension in the SDL readiness scale in the standard and normative deviation is responsibility for own learning in their study on medical students at Umm Al-Qura University, Saudi Arabia.

The second objective of the study was to identify the nursing students' learning style preferences at Port-Said University The second objective of the study is to identify the nursing students' learning style preferences at Port Said University. The present study findings displayed that the higher percentage of studied nursing students were prefer kinesthetic learning style. This may be attributed to students are most successful when they are engaged on activity rather than sitting for hours in a classroom.

The findings of the present study were consistent with what Vaishnav and Chirayu (2013) who found in their study on a sample of 200 students various schools at Nagpur City in Maharashtra in India that the majority of learners prefer kinaesthetic learning style. In addition to Peacock (2001) has examined the learning style preferences of students in the Department of English at the City University of Hong Kong. The results of his study show that students prefer kinaesthetic learning style.

However, this finding contradicted with the findings of Abidin, Rezaee, Abdullah and Singh (2011) who found out that kinesthetic learner were the least among students' in

Malaysia in their studies that investigate the relationship between learning styles and overall academic achievement.

In the same line, Gilakjani (2012) find out that more than half of the students preferred visual learning style, more than one third of the students' preferred auditory learning style, and only lowest percent of the students preferred kinesthetic style, in his study about learning styles of the learners and teaching styles in Islamic Azad University of Lahijan in Iran.

The third objective of the study was finding-out the relation between nursing students' readiness for self-learning and their learning style preferences at Port-Said University. The present study findings showed that there is no significant relation between nursing students' readiness for self-learning and their preferred learning style.

The findings were consistent with what AbuAssi and Alkorashy (2016) who found that there was no statistically significant relation between nursing students' readiness for self-learning and their learning style preferences in their study am0ng nursing students at king Saud University. Similarly, El-Gilany and Abusaad (2013) in there study find out that the SDLR score does not affect learning style. As well this is in agreement with Iranian study conducted by Safavi et al., (2010), but is in contrary to Linares (1999) study in USA reported that SDLR appears to affect learning style (Linares, 1999)

Finally, the need for nursing students to be self-directed learning and to pursue knowledge and skills is critical aspect in their role is important for maintaining up to date. The opportunity to learn through self-direction already exists in undergraduate nursing students. This encourages college policymakers to implement the SDL policy.

CONCLUSION:

Based on the study findings concluded that two fifths of students had low readiness for self- learning at Port-Said University. Moreover, the most preferred learning style among studied nursing students was kinesthetic. As well, there is no statistically significant relation between self-directed learning and learning style.

RECOMMENDATIONS:

The following recommendations were inferred from the study:

- 1. Students need support to move from traditional education to more active and independent education, relying on self-learning.
- 2. Students need to continuously assess opportunities for readiness for self-directed learning.
- 3. Faculty should develop strategies to promote SDLR. And Students' educators should assess and assist their students in identifying and learning through their own style preferences.

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العلاقة بين الاستعداد للتعلم الذاتي وأسلوب التعلم المفضل بين طلاب التمريض احمد محمد مجاهد سالم¹، ا.د ساميه عبدالله ادم²،د مروه عبد العليم³

(بكالوريوس التمريض - جامعة بورسعيد $-^1$ ، استاذ اداره التمريض كليه التمريض جامعه عين شمس 2 ،مدرس اداره التمريض ،كليه التمريض ،كليه التمريض عليه التمريض عليه التمريض أ

الخلاصة

يعد التعلم الذاتي مهارة ضرورية للطلاب ليظلوا في تعلم مستمر مدى الحياة وليتمكن طلاب الجامعة من اكتساب المعرفة والنجاح أكاديمياً كما ينبغي تعزيز الوعي بأساليب التعلم لديهم. الهدف من الدراسه: دراسة العلاقة بين الاستعداد للتعلم الذاتي وتفضيلات أسلوب التعلم بين طلاب التمريض. الموضوع والطريقة: أجريت الدراسة في كلية التمريض / جامعة بورسعيد باستخدام تصميم بحثي وصفي مترابط تم ضم 174 طالبًا من السنوات الأكاديمية الأربعة في الدراسة تم استخدام أداتين هما: مقياسالاستعداد للتعلم الذاتي واستبيان التقييم الذاتي لأنماط التعلم النتائج: حصل 27٪ من طلاب التمريض الذين تمت دراستهم على درجة متوسطة في الاستعداد للتعلم الموجه ذاتيًا ، بينما كان 4.14٪ منهم متوسطًا و 3.16٪ أعلى من المتوسط. علاوة على ذلك ، كان أسلوب التعلم الأكثر تفضيلًا بين الطلاب هو الحركية (44.8٪) ، ثم البصري (28.2٪) والسمعي (27٪). الخلاصة: خلصت نتائج الدراسة إلى عدم وجود علاقة ذات دلالة إحصائية بين استعداد التعلم الذاتي وأسلوب التعلم المفضل. التوصيات: يحتاج الطلاب إلى الدعم للانتقال من التعليم الثقليدي إلى التعليم الأكثر نشاطًا واستقلالية والمعتمد على التعلم الذاتي.

الكلمات المرشده: التعلم الذاتي، أسلوب التعلم، طلاب التمريض