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Self-directed learning readiness among Nursing Students at King Abdulaziz University, Saudi Arabia.

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Abstract: Teaching-learning contributes to the development of professional values, attitudes and behavior through a partnership of accountability between teacher and learner. Self-directed learning (SDL) has evolved as a method of learning into nursing education over the last few years. It is an educational concept aimed to advances in learning process that has been used increasingly in adult education. It provides a more flexible approach with regards to the time and place for learning to be undertaken. **Method:** A cross sectional descriptive study was conducted from February up to April, 2015 at College of Nursing, King Abdulaziz University, Saudi Arabia. A total of 145 undergraduate nursing students' were involved in the study. **A structured questionnaire consisted of two parts: Part I: Socio-demographic data and Part II: Fisher's Self-Directed Learning Readiness scale.** Data analysis was carried out by using the latest version of the statistical software package SPSS (Version-21). Descriptive and analytical statistical test were used to analyze the data. **Results:** the mean percentage scores of overall self-directed learning readiness of the nursing students at KAU was relatively high $100.6 \pm (SD 10.8)$. The highest mean scores percentages of readiness were found on students' response to self-control dimension $39.4 \pm (SD 4.8)$. However, participants' readiness to self-management dimension of self-directed learning was the lowest score $30.5 \pm (SD 4.2)$. **Conclusion:** nursing students of KAU in Saudi Arabia had high level of self-directed readiness, moreover, the present study revealed that there was no statically significant difference between demographic data with overall score of self-directed learning readiness.

Key words: Self-directed learning (SDL), Self-directed learning readiness (SDLR), Nursing Students, Self-control, Self-management, Desire of learning.

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I. Introduction

Self-directed learning (SDL) is a method of instruction used increasingly in adult education and it is needed for nursing students, to be prepared for present as well as for the future challenges in the healthcare system.^(1, 2) To develop self, it is highly recommended that learners manage their own learning process through engagement. Self-directed learning can be defined in terms of the amount of responsibility the learner accepts for his or her own learning. The self-directed learner takes control and accepts the freedom to learn what they view as important for themselves. The degree of control the learner is willing to take over their own learning will depend on their attitude, abilities and personality characteristics. In Self-directed learning approach, learning does not necessarily occur in formal, educational settings because learners can learn all by themselves in informal settings.^(3,4)

Self-directed learning is essential skill for students and workers to remain lifelong learners. Professors should encourage and develop SDL skill in their students so that they will be equipped for educational opportunities and challenges beyond their formal education. In the field of nursing, there is increased need for professional nurses to update their knowledge, become autonomous, capable of independent thought, able to make their own

assumptions and decisions. So, attention to self-directed lifelong learning has become increasingly common place in the literature of education and considered as a critical educational goal.^(5,7)

Student nurses are expected to act in a professional and ethical manner, identify the actual and potential health needs of clients, when faced with new and complex situations, demonstrate professional knowledge and skills, and are accountable for their own personal and professional development. So, they are expected to engage in self-directed learning through, identifying their own learning needs, setting goals, choosing learning strategies, identifying human and material resources and evaluating outcomes of their learning process. Nursing Education programs should reflect a modification of teaching methods through shifting from content driven curricula to new learner-centered approach, as no one teaching approach will address the learning needs of every student. In addition teacher and professors in nursing colleges and institution have to encourage and develop this skill in their students so that they will be equipped for educational opportunities and challenges beyond their formal education.⁽⁸⁾

SDL is a proactive approach to learning where individuals take responsibility for identifying necessary learning resources and implementing strategies appropriate for their goals...SDL exist when individuals take initiative and responsibility for learning where individuals select, manage, and assess their own learning activities. Motivation and volition are critical for students when independence in setting goals defining what is worthwhile to learn. Teachers have to provide support, mentoring, and advising to promote SDL. Self-directed learning achieved when learners direct and regulate their own learning process and experience self-actualization through deciding on the materials, methods, and goals of learning.^(9,10)

SDL is 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. Positive outcomes for the learner incarnate as self-directed learners are motivated, persistent, independent, self-disciplined, and self-confident and goal oriented. Self-directed learning includes three dimensions; self-management; desire for learning; and self-control. Self-Management subscale is a construct of the students' ability to be able to implement their own learning goals, and effectively manage the learning resources available to them. This subscale includes components such as ability to manage time effectively, ability to apply systematic and methodical approaches to learning, set times for learning, prioritizing and seeking additional information and resources, and problem solving. It describes the students setting goals and managing available resources and support. Moreover the students assumes primary responsibility for planning, implementing, and evaluating the learning process. While Desire for Learning Subscale was applied to the participating students to determine their motivation for learning and if they are able to reflect on this motivation. The desire for learning imply a learner's desire or preference for assuming responsibility for learning. Whilst Self-Control Subscale is used to determine the students' ability to self-evaluate and as a result determine their own Learning goals and outcomes. Self-control means learners taking control of the learning context to reach their learning objectives. Control did not mean independence, but rather collaboration with other people within the context.⁽¹¹⁻¹²⁾

Self-directed learning readiness (SDLR) is defined by Wiley (1983) as 'the degree the individual possesses the attitudes, abilities and personality characteristics necessary for self-directed learning. Since readiness for SDL is individualized. Nursing educational institutions should investigate whether nursing students are ready to undertake the responsibilities involved in self-directed learning or not.'⁽¹²⁾

According to Karimi et al (2010) benefits of self-directed learning includes increases confidence, autonomy and motivation, develop the ability to assess their knowledge deficits and seek out relevant resources to help learners address these deficits as well as develop skills necessary for lifelong future career. Moreover, Self-directed learning empowers learners to: respond and adapt to change, accommodates differences in individual learners, models democratic participation in learning, fosters curiosity, self-initiated inquiry and encourages self-determination. Students' self-direction in nursing is measured and represented by their level of SDL readiness.^(13,14)

In Saudi Arabia, there is still changing in the health care delivery system and educational system as other parts of the world. Current trends in education and training emphasize that university nursing students need to acquire skills which will enable them to become independent and self-directed learners. It is well known that professional nurses ought to be independent learners to be competent care providers. The understanding of SDLR can lead to the creation of educational climates that will foster learner-centered approaches which indeed promote nurses autonomy and mutual responsibility for lifelong learning. In order to stimulate self-directed learning among nursing students, it is important to regularly investigate, and analyze their self-directed readiness.^(16,17)

Assessment of self-directed learning readiness among Saudi nursing students at College of Nursing, King Abdulziz University will provide educators and educational institution with information about the extent of self-direction possessed by students' enrolled in undergraduate program. This may contribute to program change and

future development of self-directed learning which may lead to the creation of educational environment which is appropriate for students to develop better self – direction in learning, foster student-centered learning approaches, and gradually promoting student autonomy, mutual responsibility result in better academic achievement. Moreover, there is lack of studies measuring self-directed learning readiness among nursing students at King Abdulaziz University. So, this study was carried out to determine the self-Directed Learning readiness among undergraduate nursing students at College of Nursing, King Abdulaziz University.

II. Materials and Methods

Design

A cross-sectional descriptive study design was used.

Setting

The study was conducted in College of Nursing, Jeddah, King Abdulaziz University, Saudi Arabia. The College of Nursing is pioneer of its more than 50 year history of education and pioneering position in research. Established in 1977, this college has always been one of the strongest College of Nursing nationally and regionally.

Subjects

All undergraduate nursing college students at King Abdulaziz University, Saudi Arabia, and willing to participate in the study. All undergraduate nursing students (n=300) who enrolled in both 4 year program (210) and 2- years bridging program (n= (90)

Sampling Size

It was planned to include all students at the Faculty of Nursing, King Abdulaziz University, Saudi Arabia, but due to the ethical consideration of Saudi kingdom only females who agreed to participate in the study and all accessible students during study period were included (n=145) included 47 student in 2-year bridging program and 98 students in 4-year undergraduate program.

Tool: A structured questionnaire consisted of two parts:

Part I: Socio- demographic data

This part developed by the researcher. It included data as age, marital status, permanent residence area, current nursing program, working experience and how many hours per week on average do you spend studying or preparing class assignments.

Part II: Self-directed learning readiness scales (SDLRS)

This scale developed by Fisher and colleagues in 2001. ⁽²⁾ The scale most widely used in educational and nursing research to measure SDL readiness. It consists of 40 items grouped into three dimensions: Self-management (13 items), Desire for learning (12 items), Self-Control (15 items). Students' responses were assessed using a Likert scale ranging from strongly agree (3) to strongly disagree (1) Negative items were given reverse scored. The higher scores indicated higher readiness to SDL.

Method:

The Ethics Committee of Faculty of Nursing, king Abdulaziz University has approved the study protocol. Before embarking to data collection, an informed consent was obtained from each student to share in the study. All participants were assured that their participation is voluntary. Also their privacy and confidentiality were maintained.

In addition, the reliability of the tool was tested using Cronbach's alpha coefficient test (0.852). A pilot study was carried out on 10 % of nursing students to test clarity and feasibility of the tools and necessary modifications were introduced.

The tool was hand delivered to each study participant. An average of 20 minutes allowed for every participant to fill the questionnaire. Data collection took from February 2015 up to April 2015.

All statistical analysis was done utilizing mean, standard deviation and Mont Carlo exact probability test. Software SPSS version 21 was used. Internal consistency for the scale was tested using alpha Cronbach's.

III. Results

Background characteristics of the participants

Table 1 shows that more than one half of the nursing students (60%) were in the age group from 20 to less than 30 with mean age of 20.2 ± 5.8 . It was found that the majority of them (86.9%) were married. Also nursing students has the same percentage (31.6 %) for those who had no children or had three or more. About 91.7 % of them live with their families. Also 67.6 % of students study 4-year undergraduate program compared to 32.4% study 2-year bridging program. Furthermore, 32.4% had work experience in the nursing field, more than half of them had

five or more years' works experience .More than half of the nursing students (53.1 %) spent from 5-10 hours studying / preparing assignment / week.

Table 1: Socio -demographic characteristics of nursing student's

Socio -demographic characteristics		No	%
Age in years	<20 years	41	28.3%
	20-	87	60.0%
	30-40	17	11.7%
Mean ± SD		20.2 ± 5.8	
Marital status	Single	126	86.9%
	Married	19	13.1%
No of children	None	6	31.6%
	1	4	21.1%
	2	3	15.8%
	3+	6	31.6%
Residence	Campus	4	2.8%
	Alone	8	5.5%
	With family	133	91.7%
Current undergraduate program	2-year bridging program	47	32.4%
	4-year undergraduate program	98	67.6%
Have work experience	Yes	42	29.0%
	No	103	71.0%
If yes, for how many years	1-4	20	47.6%
	5-9	22	52.4%
Mean ± SD		4.9 ± 2.1	
Hours for studying / preparing assignment / week	< 5 hours	40	27.6%
	5-10	77	53.1%
	> 10 hours	28	19.3%

Table 2 indicates the mean scorepercentages of nursing students readiness of self-directed learning at KAU, where the mean percentage scores of the nursing students' overall readiness of self-directed learning was relatively high 100.6 ± (SD 10.8). The highest mean scores percentages of readinesswere found on students responseto self-control dimension 39.4 ± (SD 4.8), However, participants' readiness to self-management dimension of self-directed learning was the lowest item 30.5 ±(SD 4.2).

Table 2: Mean scores of nursing students' readiness of self-directed dimensions sub items at KAU

Domain	Low		Moderate		High		Mean ± SD	α-Cronbach's
	No	%	No	%	No	%		
Self-management	0	0.0%	58	40.0%	87	60.0%	30.5 ± 4.2	0.824
Desire for learning	0	0.0%	19	13.1%	126	86.9%	30.8 ± 3.6	0.816
Self-control	2	1.4%	17	11.7%	126	86.9%	39.4 ± 4.8	0.844
Overall	1	.7%	18	12.4%	126	86.9%	100.6 ±10.8	0.852

Low: Score % < 50% Moderate: Score % 50%-<75% High: Score % ≥ 75%

Figure 1 illustrates the percentages of nursing students' readiness of self-directed learning dimensions at KAU, where 86.9% of the nursing students had high readiness for all dimension. Also more than three fourths (86.9%) of the students had high readiness for bothdesire for learning and self-control dimensions.Moreover, more than half (60%) had moderatereadiness for self-management dimension.

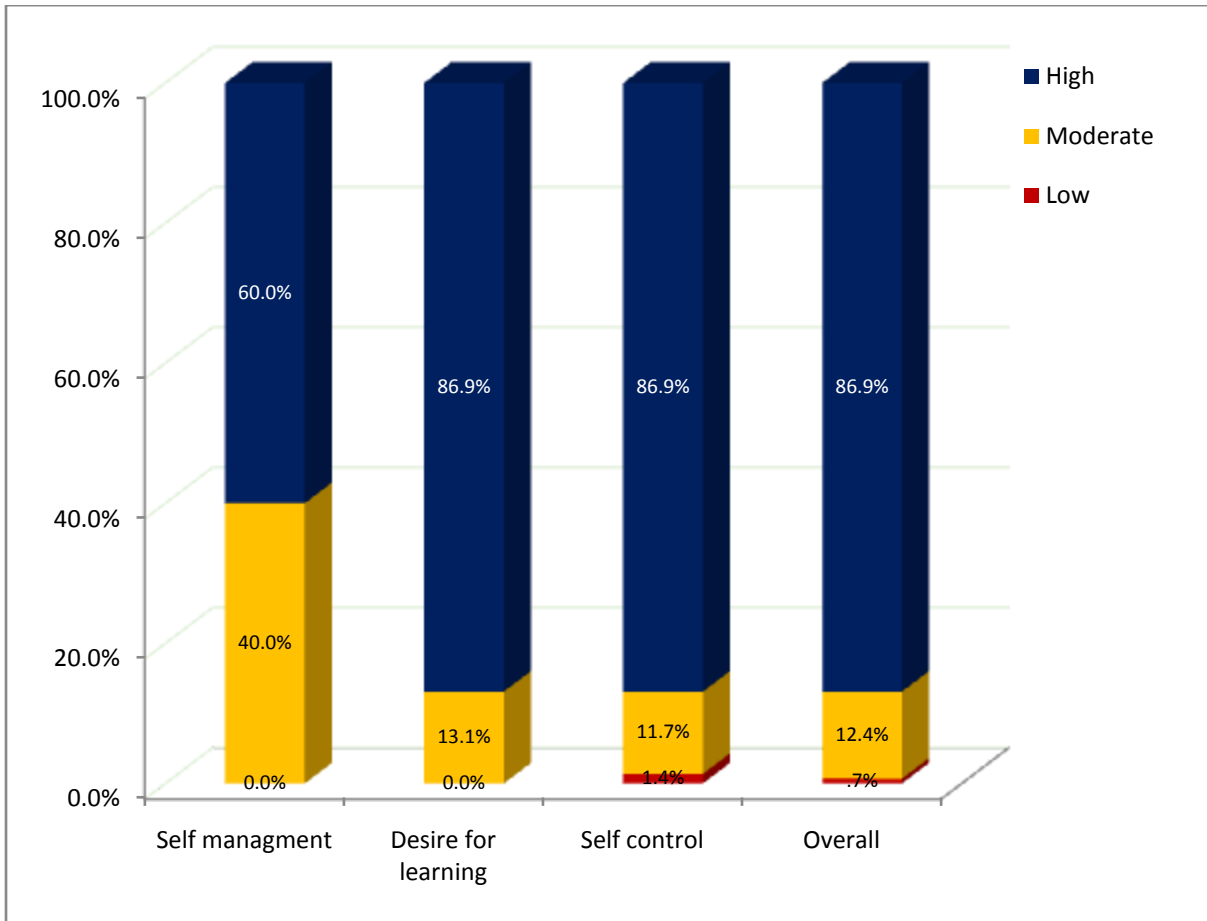


Figure 1: Nursing student's readiness of self-directed learning dimensions

Table 3 shows the relationship between overall nursing students' readiness of self-directed learning and their socio-demographic characteristics. There was no significant relationship between overall readiness of self-directed learning and each of socio demographic characteristics; age, marital status, number of children, residence, current undergraduates program, work experience or number of work experience years, hours for studying and preparing assignment per week.

Table 3 Distribution of overall nursing students' readiness of self-directed learning in relation to their Socio-demographic characteristics

Socio-demographic characteristics	Overall						MCP	
	Low		Moderate		High			
	No	%	No	%	No	%		
Age in years	<20 years	1	2.4%	7	17.1%	33	80.5%	0.377
	20-	0	0.0%	10	11.5%	77	88.5%	
	30-40	0	0.0%	1	5.9%	16	94.1%	
Marital status	Single	1	.8%	17	13.5%	108	85.7%	0.547
	Married	0	0.0%	1	5.3%	18	94.7%	
No of children	None	0	0.0%	0	0.0%	6	100.0%	0.131
	1	0	0.0%	0	0.0%	4	100.0%	
	2	0	0.0%	1	33.3%	2	66.7%	
Residence	3+	0	0.0%	0	0.0%	6	100.0%	0.741
	Campus	0	0.0%	0	0.0%	4	100.0%	
	Alone	0	0.0%	0	0.0%	8	100.0%	
Current undergraduate program	With family	1	.8%	18	13.5%	114	85.7%	0.237
	2-year bridging program	0	0.0%	3	6.4%	44	93.6%	

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	4-year undergraduate program	1	1.0%	15	15.3%	82	83.7%	
Have work experience	Yes	0	0.0%	4	9.5%	38	90.5%	0.640
	No	1	1.0%	14	13.6%	88	85.4%	
If yes, for how many years	1-4	0	0.0%	3	15.0%	17	85.0%	0.249
	5-9	0	0.0%	1	4.5%	21	95.5%	
Hours for studying / preparing assignment / week	< 5 hours	1	2.5%	5	12.5%	34	85.0%	0.596
	5-10	0	0.0%	9	11.7%	68	88.3%	
	> 10 hours	0	0.0%	4	14.3%	24	85.7%	

MCP: Mont Carlo exact probability

* P < 0.05 (significant)

Table 4 shows the relationship between nursing students' readiness of self-management dimension in relation to their demographic characteristics. There was no significant relationship between this dimension of readiness of self-directed learning and each of socio demographic characteristics such as, marital status, number of children, number of years of experience, hours for studying / preparing assignment / week. While, there was significant relationship between self-management dimension of self-directed learning readiness and each of socio demographic characteristics; age, residence, current undergraduates program, work experience.

However, when it comes to age, this table illustrates that, 82.4% of nursing students who had from 30 to 40 years old had high self-management skills compared with only 43.9% in the age group less than 20 years old. Regarding Residence, all students who live alone has high self-management in comparison with 57.1% of those who live with their families.

As regard current undergraduates program, more than three quarters (78.7%) of nursing student in 2-years bridging program compared to more than half of nursing students in fourth year nursing undergraduate program (51%) had high self-management score. In addition, 71.4% of students who have work experience had high self-management score in comparison with 55.3% who had no work experience.

Table 4 Distribution of nursing students' readiness of self-management dimension in relation to their Socio-demographic characteristics

Socio-demographic characteristics	Self-management				MCP	
	Moderate		High			
	No	%	No	%		
Age in years	<20 years	23	56.1%	18	43.9%	0.015*
	20-	32	36.8%	55	63.2%	
	30-40	3	17.6%	14	82.4%	
Marital status	Single	53	42.1%	73	57.9%	0.192
	Married	5	26.3%	14	73.7%	
No of children	None	2	33.3%	4	66.7%	0.317
	1	2	50.0%	2	50.0%	
	2	1	33.3%	2	66.7%	
	3+	0	0.0%	6	100.0%	
Residence	Campus	1	25.0%	3	75.0%	0.046*
	Alone	0	0.0%	8	100.0%	
	With family	57	42.9%	76	57.1%	
Current undergraduate program	2-year bridging program	10	21.3%	37	78.7%	0.048*
	4-year undergraduate program	48	49.0%	50	51.0%	
Have work experience	Yes	12	28.6%	30	71.4%	0.048*
	No	46	44.7%	57	55.3%	
If yes, for how many years	1-4	8	40.0%	12	60.0%	0.073
	5-9	4	18.2%	18	81.8%	
Hours for studying / preparing assignment / week	< 5 hours	21	52.5%	19	47.5%	0.145
	5-10	26	33.8%	51	66.2%	
	> 10 hours	11	39.3%	17	60.7%	

MCP: Mont Carlo exact probability* P < 0.05 (significant)

Table 5 shows the relationship between nursing students' readiness of desire for learning dimension in relation to their Socio demographic characteristics. There was no significant relationship between desire for learning dimension of self-directed learning readiness and each of socio demographic characteristics; age, marital status, number of children, residence, current undergraduates program, work experience, number of years of experience, hours for studying / preparing assignment / week.

Table 5: Distribution of nursing students' readiness of desire for learning dimension in relation to their Socio - demographic characteristics

Socio -demographic characteristics		Desire for learning				MCP
		Moderate		High		
		No	%	No	%	
Age in years	<20 years	6	14.6%	35	85.4%	0.638
	20-30-40	12	13.8%	75	86.2%	
		1	5.9%	16	94.1%	
Marital status	Single	18	14.3%	108	85.7%	0.277
	Married	1	5.3%	18	94.7%	
No of children	None	0	0.0%	6	100.0%	0.131
	1	0	0.0%	4	100.0%	
	2	1	33.3%	2	66.7%	
	3+	0	0.0%	6	100.0%	
Residence	Campus	0	0.0%	4	100.0%	0.373
	Alone	0	0.0%	8	100.0%	
	With family	19	14.3%	114	85.7%	
Current undergraduate program	2-year bridging program	3	6.4%	44	93.6%	0.097
	4-year undergraduate program	16	16.3%	82	83.7%	
Have work experience	Yes	3	7.1%	39	92.9%	0.174
	No	16	15.5%	87	84.5%	
If yes, for how many years	1-4	2	10.0%	18	90.0%	0.493
	5-9	1	4.5%	21	95.5%	
Hours for studying / preparing assignment / week	< 5 hours	8	20.0%	32	80.0%	0.247
	5-10	7	9.1%	70	90.9%	
	> 10 hours	4	14.3%	24	85.7%	

MCP: Mont Carlo exact probability

* P < 0.05 (significant)

Table 6: shows the relationship between nursing students' readiness of self-control dimension in relation to their socio-demographic characteristics. There was no significant relationship between self-control dimension of self-directed learning readiness and each of socio demographic characteristics; age, marital status, number of children, residence, current undergraduates program, work experience, number of years of experience, hours for studying / preparing assignment / week.

Table 6: Distribution of nursing students' readiness of self-control dimension in relation to their Socio - demographic characteristics

Socio -demographic characteristics		Self-control						MCP P value
		Low		Moderate		High		
		No	%	No	%	No	%	
Age in years	<20 years	1	2.4%	7	17.1%	33	80.5%	0.672
	20-30-40	1	1.1%	8	9.2%	78	89.7%	
		0	0.0%	2	11.8%	15	88.2%	
Marital status	Single	2	1.6%	14	11.1%	110	87.3%	0.731
	Married	0	0.0%	3	15.8%	16	84.2%	
No of children	None	0	0.0%	2	33.3%	4	66.7%	0.266
	1	0	0.0%	0	0.0%	4	100.0%	
	2	0	0.0%	1	33.3%	2	66.7%	
	3+	0	0.0%	0	0.0%	6	100.0%	
Residence	Campus	0	0.0%	1	25.0%	3	75.0%	0.744
	Alone	0	0.0%	0	0.0%	8	100.0%	
	With family	2	1.5%	16	12.0%	115	86.5%	
Current undergraduate program	2-year bridging program	0	0.0%	3	6.4%	44	93.6%	0.222

	4-year undergraduate program	2	2.0%	14	14.3%	82	83.7%	
Have work experience	Yes	1	2.4%	2	4.8%	39	92.9%	0.211
	No	1	1.0%	15	14.6%	87	84.5%	
If yes, for how many years	1-4	1	5.0%	1	5.0%	18	90.0%	0.566
	5-9	0	0.0%	1	4.5%	21	95.5%	
Hours for studying / preparing assignment / week	< 5 hours	2	5.0%	6	15.0%	32	80.0%	0.089
	5-10	0	0.0%	6	7.8%	71	92.2%	
	> 10 hours	0	0.0%	5	17.9%	23	82.1%	

MCP: Mont Carlo exact probability

IV. Discussion

Self-directed learning (SDL) has become a focus for nursing education in the past few decades due to the complexity and changes in nursing profession development. ⁽¹⁷⁾ Many nurse educators are attracted to the SDL approach because of its humanistic orientation and its association with professional autonomy. It has been proposed that a self-directed approach to learning not only increases nursing students' confidence in their own ability, but also their capacity to learn. ⁽¹⁸⁾ SDL is an essential vehicle for enabling nursing students to develop independent learning skills, and is a sense of accountability, responsibility and assertiveness that are essential attributes to the nurse's career. ⁽¹⁹⁾ Higher education in nursing should prepare graduates with the capability to take on the increasingly challenging roles required in the nursing profession. ⁽²⁰⁾ Knowledge and understanding of nursing students' self-directed learning abilities are critical for nurse educators. ⁽²¹⁾ Therefore, this study aimed to assess self-directed learning readiness (SDLR) among nursing student at king Abdulaziz university, Saudi Arabia.

In this study, the results indicated that nursing students in king Abdulaziz University, Saudi Arabia possess high overall readiness mean score for self-directed learning. One reason for this high mean scoring could be that Saudi policy for education emphasizes student centered learning approach, which supports teaching and learning process to promote self-directed learners. Furthermore, this result is in line with Klunklin et.al. (2010), Yuan et.al. (2012) and El-Gilany (2013) whom stated that nursing student have high level of overall self-directed learning mean score. ^(22, 23, 15)

The present study also revealed that the majority of nursing student had high level of self-directed learning readiness overall score. This result is in accordance with El-Gilany (2013) who stated that about 77% of Saudi nursing in Al Gouf University have high level of self-directed learning. ⁽¹⁵⁾ In the same line, Abu-Moghli et.al. (2005) and Safavi et.al. (2010) mentioned that the majority of Jordanian and Iranian nursing students had high level of SDLR. ^(24, 17) However, these results contradicted with the study of Yuan et.al. (2012) who founded that Among the Chinese baccalaureate-nursing student, only 60% reported high level of SDLR. ⁽²³⁾ Moreover, Lestari and Widjajakumamah (2009) in Indonesia indicated that only 50% of the students had low to moderate scores for self-directed learning readiness. ⁽²⁵⁾

Self-directed learning readiness in this study was assessed regarding three dimensions; self-control; desire for learning; and self-management. Regarding the result of three dimensions it was noticed that the highest mean score percentage of readiness were found on student response to self-control dimension followed by self-desire dimension while nursing student readiness to self-management dimension was the lowest. The high score for self-control dimension indicates great confidence and maturity of nursing student while the lowest score for the Self-Management Subscale indicates that students need support in self-management skills and there might be areas of improvement in the self-management domain. This could be potentially a sign that additional efforts and resources should be considered in the area of self-management as independent practice and education. This result is in congruent with Smedely (2007) who mentioned that nursing student in Australia scored least in self-management subscale, better on the desire for learning and the highest score on the self-control. ⁽²⁶⁾ Moreover, Soliman and al-shaikh (2015) found that the high score in King Saud University student was for self-control domain while the least score was for self-management domain. ⁽²⁷⁾ On the other hand, this result contradict with Williams et.al. (2013) who mentioned that the highest mean sore was in the desire for learning dimension while moderate score for each self-control and self-management dimension. ⁽²⁸⁾

The present study revealed that there was no statically significant difference between Socio -demographic characteristics with overall score of self-directed learning readiness. This agrees with Roberson and Merriam (2005) in USA, Chen et.al. (2006) in Taiwan and El-Gilany (2013) in king Saudi Arabia whom found that there was not statically difference between demographic data and overall self-directed learning readiness score. ^(29,30,15) However, McCollin (2000) in USA and Yuan et.al. (2012) in China reported Socio -demographic characteristics as gender, age,

and educational level effect on self-directed learning readiness score. ^(31,23) This variation indicates that the demographic factors may have different effect in diverse situations.

On the other hand, the present study result indicated that there was statically significant difference between ages, work experience, residence under graduate program with self-management dimension. Regarding age the present study revealed that nursing student aged from 30-40 had highest self-management skills compared to other age group. This result may be due to older learner have many life experience and responsibilities which, enable them to be with highly management skills. This result matched with Smedly (2007), Klunklin (2010) and Williams et.al. (2013) whom emphasized that the self-management subscale showed a trend that younger students produced lower mean scores compared with their older counterparts. ^(26, 22, 28)

Concerning student experience the present result revealed that student who had work experience got high self-management score. This result may be related to nursing student who acquire clinical practice experience in a variety of settings and became responsible for facilitating discussion on special clinical situations be able to learn how to learn, to share their own opinions, make their own decisions, and often work individually and independently. Also, increased emphasis on self-responsibility and relative independence in clinical practice, which, likely contributes to increased self-management scores and helps students to rehearse more adult roles and begin their nursing careers. Furthermore, this result is in line with Smedly (2007) who stated that nursing student with experience presented higher score in self-management than those without experience. ⁽²⁶⁾

Regarding residence the present study revealed that student who live alone had high self-management skills. This result may be due to student who living alone always independent and have high autonomy which enable them to implement their own learning goals, and effectively manage the learning resources available to them. Therefore, this student had high self-management skills.

In relation to type of undergraduated program, the result of the present study revealed that about three quarter of nursing students in 2-year bridging program had high self-management score compared to half of nursing students in 4- year undergraduate program. This may be due to nursing student in 2-year bridging program usually had experience in working rather than student in 4- year undergraduate program and as mentioned in this study work experience had significant relation with self-management score. This result matched with Cheng et.al. (2010) who mentioned that student in the 2-year program reported better readiness than those in 4-year program. ⁽¹¹⁾

Finally, the need for nurses to be self-directed critical thinkers and to pursue knowledge and skills is critical aspect in their role is important for maintaining up to date evidence based nursing practice. The result of assessing self-directed learning is useful for educators to select appropriate teaching and learning methods for their students. In addition, ensures nurses to be self-directed learner and assist in the growth of confidence and professionalism.

V. Conclusion

Based on the study findings, it could be concluded that the nursing students of KAU in Saudi Arabia had high level of self-directed readiness. Moreover, the present study revealed that there was no statically significant difference between demographic data with overall score of self-directed learning readiness. On the other hand, there was statically significant difference between ages, work experience, residence and undergraduate program with self-management dimension. In addition, students got lowest score for the Self-Management Subscale which indicates that students need support in self-management skills and there might be areas of improvement in the self-management diminsion.

VI. Recommendation

Based on the findings of this study the following recommendations are presented:

- Additional efforts to support students' managementskills and resources should be considered in the area of self-management for independent practice and education.
- Replicate this study using larger samples size and include more than one college and/or university in different regions of Saudi Arabia in order to generalize the findings.
- Encourage SDL to be included in nursing curricula.
- Encourages college policymakers to set policy for SDL and implement it.
- Assessment of SDLR in post graduate students & compared with undergraduate program.
- Assess factors affecting SDLR.
- Assess the relationship between learning style and readiness for self-directed learning among nursing students.
- Further research should follow the development of nursing students' SDL abilities over their academic years aswell as their lifelong careers.

Conflicts Of Interest Disclosure:

The authors declare that there is no conflict of interest.

References

- [1] Ironside PM. Covering content and teaching thinking: deconstructing the additive curriculum. *Journal of Nursing Education*. 2004; 43(1): 5-12.
- [2] Fisher M., King J., &Tague G. Development of a self-directed learning readiness Scale for Nursing Education Today. 2001; 21: 516-25. PMID:11559005 <http://dx.doi.org/10.1054/nedt.2001.0589>
- [3] Tabatabaei, O..The Effect of Self-Directed Learning on Critical Thinking of Iranian EFL Learners. *Journal of Educational and Social Research*.2012;2, 55-64.
- [4] Fisher, M.J., King, J.,. The self-directed learning readiness scale for nursing education revisited: a confirmatory factor analysis. *Nurse Education Today*. 2010; 30 (1), 44–48.
- [5] Stewart, R.A. Investigating the link between self-directed learning readiness and project-based learning outcomes. *European Journal of Engineering Education*.2007;32 (4), 453–465.
- [6] Candy BC. Reaffirming a proud tradition: Universities and lifelong learning. *Journal of Active Learning in Higher Education* 2000; 1(2): 101-25.
- [7] Ptterson, C., Crooks, D., &Lunky-Child, O. A new perspectives on competencies for self-directed learning. *Journal of Nursing Education*, 2002; 41(1), 25 -31.
- [8] Canipe, J.B., &Brochett, R. New perspectives on self-directed learning. *Adult learning*, 2003;14(4), 4.
- [9] Stewart, R. Investigating the link between self-directed learning readiness and project-based learning outcomes. *European Journal of Engineering Education*.2007; 32 (4), 453–465.
- [10] Gebru, A., Ghiyasvandian, S., Mohammadi, N., Kidane, M. A Self-Directed in Learning among Undergraduate Nursing Students'in School of Nursing and Midwifery, TUMS, Tehran, Iran. *Education Journal*. 2012; Vol. 4, No. 4, 2015; 158-165.Chen, Y.-L., Hsu, L.-L., Hsieh, S.-I.
- [11] Cheng, S., Kuo, C., Lin, K., Lee-Hsieh, J.,. Development and preliminary testing of a self-rating instrument to measure self-directed learning ability of nursing students. *International Journal of Nursing Studies*.2010; 47 (9), 1152–1158.
- [12] Wiley, K. Effects of a self-directed learning project and preference for structure on self -directed learning readiness. *Nursing Research*. 1983; 32(3), 181-185.
- [13] Karimi, R., Arendt, C.S., Cawley, P., Buhler, A.V., Elbarbry, F., Roberts, S.C. Learning bridge: curricular integration of didactic and experiential education. *American Journal of Pharmaceutical Education*,2010; 74 (3) Article 48.
- [14] Sukseemuang P. Self-directedness and academic success of students enrolling in hybrid and traditional courses. Published Doctoral Dissertation: Faculty of the Graduate College of the Oklahoma State University. Thialand 2009.
- [15] El-Gilany, A-H., Abusaad, F.E.S. self -directed learning readiness and learning style among Saudi undergraduate nursing students. *Nurse Education Today* 2013;33,1040–1044
- [16] Lunky-Child, O.I., Crooks, D., Ellis, P.J.,Ofosu,C., O'Mara,L., &Rideout,E.. Self-directed learning and student perceptions. *Journal of Nursing Education*, 2001;40(3), 116-123.
- [17] Safavi M, Schooshtari S, Mahmoodi M, Yarmohammadian M. Self-directed learning readiness and learning styles among nursing students of Isfahan University of Medical Sciences. *Iranian Journal of Medical Education*. 2010; 10 (1): 27–35.
- [18] Jones T. Self-directed learning: Implications and limitations for undergraduate nursing education. *Nurse Education Today*. 2005; 25: 363-8.
- [19] Bastable S. *Nurse as Educator: Principles of Teaching and Learning for Nursing Practice*. 3rd ed. Boston: Jones and Barlett Learning, LLC, 2008.
- [20] Billings D, Halstead J. *Teaching in Nursing: a Guide for Faculty*. 2nd ed. Elsevier Saunders: St Louis, 2005.
- [21] Li X, Deng S, Chen Y. Establishment of a new model for nursing talents training and a brand-new learning. *Chinese Nursing Research*. 2009; 23 (3B): 737– 8.
- [22] Klunklin A, Viseskul N, Sripusanapan A, Turale S. Readiness for self-directed learning among nursing students in Thailand. *Nursing and Health Sciences*. 2010; 12: 177-81.
- [23] Yuan H, Williams B, Fang J, Pang D. Chinese baccalaureate nursing students' readiness for self-directed learning. *Nurse Education Today*. 2012; 32 (4): 427–31.
- [24] Abu-Moghli F, Khalaf I, Halabi J, Wardam L. Jordanian baccalaureate nursing students' perception of their learning styles. *International Nursing Review*.2005; 52: 39–45.

- [25] Lestari E, Widjajakusumah D. Students' self-directed learning readiness, perception toward student-centered learning and predisposition towards student centered behavior. *South East Asian Journal of Medical Education*. 2009; 3 (1): 52–56.
- [26] Smedley A. The self-directed learning readiness of first year bachelor of nursing students. *Journal of Research in Nursing*. 2007; 12(4): 373-85.
- [27] Soliman M, al-shaikh G. Readiness for self –directed learning among first year Saudi medical students: a descriptive study. *Pak Medical Science Journal*. 2015; 31(4): 799-802.
- [28] Williams B, Boyle M, Winship C, Brightwell R, Devenish S, Munro G. Examination of self-directed learning readiness of paramedic undergraduates: A multi-institutional. *Study Journal of Nursing Education and Practice*. 2013; 3 (2): 103-11.
- [29] Roberson D, Merriam S. The self-directed learning process of older, rural adults. *Adult Education Quarterly*. 2005; 55 (4): 269– 87.
- [30] Chen Y, Wang C, Lin H. Explore the relationships among demography, personality traits and self-directed learning. *Journal of Human Resources and Adult Learning*. 2006: 141–150.
- [31] McCollin E. 2000. Faculty and student perceptions of teaching style: do teaching styles differ for traditional and nontraditional students? Presented at: Annual Conference of Mid-South Educational Research Association. Available from: <http://www.eric.ed.gov/PDFS/ED447139>.

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