

Patterns of Using Social Media Network in Pediatric Nursing Learning Experience

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Abstract

The increase in the use of social media network, evidently has become a common phenomenon in recent years. It was observed that nursing students spend much of their free time in online social networking sites, which represent a great opportunity for educators to co-operate their use for academic purposes. **The aim of the study** was to assess the patterns of using social media network in pediatric nursing learning experience. **Design:** Descriptive exploratory study. **Setting:** Technical Institute of Nursing affiliated to Al-Azhar University. **Study subjects:** A purposive sample of 60 pediatric nursing students involved in this study from the above-mentioned setting. **Data collection tools:** I. Structured Interviewing Questionnaire. II. The Summative sheet of students' evaluation scores. **Results:** More than three quarters of the studied students there age ranged between 18-19 years. The majority of studied students using Facebook and more than two fifths of them consumed one to less than three hours in using social media network, half of the them used social media network in studying pediatric nursing courses and more than three quarters of them act as an active member in participation in a designed home page for pediatric nursing learning. Also, half of the studied students had a good perception regarding the effect of social media network in pediatric nursing learning experience. **Conclusion:** All the studied students had access to social media network daily through smart phones and computer for studying of pediatric nursing experience. Furthermore, there was a statistically significant difference between the patterns of using social media network and the pediatric nursing learning experience. **Recommendations:** Emphasize on the integration of patterns of using social media network with learning of pediatric nursing experience under protective laws and regulations. Academic support for creation of common home pages directed for learning of pediatric nursing experience.

Key words: Social media network, students, pediatric nursing learning experience.

Introduction

Social media usage in nursing education is limited and the active use of various new developed learning environments are left behind. However, the use of social media has not been fully adopted because it has been criticized for wasting students' study time and have an effect on students' performance. Instructors have always faced the challenge of how to best communicate and reach the students in

their classes. The challenges of today's learning environment, requires that a teacher look at not just course material, but the technology involved and the ways in which they will communicate with their students (Leea, et al., 2015).

The educators have the responsibility of trying to create a learning environment that meets students' needs and characteristics.

Therefore, educators should be more creative and courageous to use different social media applications and incorporate these tools into their instruction that, build their confidence with employing technology (Green, et al., 2014).

Nursing students should be encouraged to be active participants in teaching and learning process. This can be attained through using smart phones, tablet computers, laptops and numerous other electronic devices every day. The student can access the information for class discussion, do a research for class topics and receive the class information. However, the students now are no longer simply taking notes from the blackboard and reading assigned texts, but instead searching for information in real time during class and accessing information via their electronic devices (Hollis & Houser, 2015).

Social media network is a platform that can assist educators to help students gain a greater understanding of what is being taught. It is considered as developing communication skills between the students and the faculty. Also, it enables group learning and develops social skills relevant to nursing, while nursing students communicate together not depending on the time and place. Thus, the students highlighted the strengths of social media, such as flexible learning and more self-determination (Veletsianos, et al., 2013).

The students' evaluation is not negatively affected by social media but instead it assist in boosting their academic performance. However, through social media students develop the ability to learn, produce personal knowledge and to collect data for conducting research (Peck, 2014).

Different social media applications require different skills from educators, both technological skills and educational skills, in order to utilize social media in teaching. It has been seen that the lack of familiarity with

technology has been a reason for the delay using social media applications in nursing schools. Therefore, the training of educators must include more training in social media usability. Which is considered essential to be utilized in nursing education (Kristen & Mcdonough, 2013).

Significance of the study:

There is no doubt that the social media network has gained wider acceptability, usability and becoming probably the most important communication tools among students. The rapid advancement of media technology is one of the most important factors that can influence educational performance of nursing students positively or adversely. Nursing students have greater access to technology that assist them to be successful and engage them in the learning process. Therefore, this study will help to show the patterns of using social media network in pediatric nursing learning experience.

Aim of the study

This study aimed to assess the patterns of using social in pediatric nursing learning experience.

Research questions:

Question 1: What are patterns of using social media network among the pediatric nursing students?

Question 2: What is the relation between the patterns of using social media network and the pediatric nursing learning experience among the studied students?

Subjects and Methods

Research design

Descriptive exploratory research design utilized to conduct this study.

Research Setting

The study was conducted at the Technical Institute of Nursing Al Azhar University.

Subjects

A purposive sample of 60 nursing students were involved in this study from the above-mentioned setting (Two students terminate their registration in the technical institute and seven students were excluded from the study sample who were included in the pilot study) with the following criteria:

Inclusion criteria:

Pediatric nursing students in the second year, have an access for using the social media network in pediatric nursing learning experience.

Exclusion criteria:

Students with previous academic failure in pediatric nursing learning experience.

Data Collection Tools

The data for this study was collected using two different types of tools:

I. Structured Interviewing Questionnaire (Appendix II):

It was designed by the researcher based on related literature. It was constructed in simple Arabic language including the following parts:

Part 1: Concerned with characteristics of the studied students such as students' age, residence and work beside academic study.

Part 2: This part concerned with patterns of using social media network among studied students:

It included data about:

- Student's patterns of access for using the internet and social media network namely:
 - Place of access for the internet.
 - Methods of access.
 - Daily time consumed in using social media network in hours daily.
- The preferred sites of social media network.
- Reasons for using the preferred sites of social media network.
- The students' patterns of participation in home page for learning of pediatric nursing such as:
 - Availability of home page for learning of pediatric nursing learning experience.
 - Home page members.
 - Type of participation for the members on this page.
 - Teaching staff encouragement to use pediatric nursing home page.
 - Students' encouragement for their colleagues to use this home page.
- The effectiveness of social media home page in pediatric nursing learning experience.
- Advantages, disadvantages of social media network.
- Obstacles mentioned by students during using social media network in pediatric nursing learning.

Part 3: Students' perception related to the effect of using social media network in pediatric nursing learning experience:

This part used to assess the following:

- 3.1 .Perception of students toward the effect of social media network in improving the communication and interaction between them in the classroom (7 items).
- 3.2. Perception of students toward the effect of social media network in acquiring

educational skills of pediatric nursing learning experience (11 items).

- 3.3. Positive effect of social media network on the students' academic performance (12 items).
- 3.4. Negative effect of social media network on the students' academic performance (10 items).

Scoring system

Regarding perception of students related to the effect of using social media network in pediatric nursing learning experience, this part consists of 40 statements (80 Degrees). The students' responses were ranged from 0 (disagree) to 2 (agree) and vice versa for the negative statement. According to their responses their total perception was categorized into three categories:

- (<50%) had a poor perception toward the effect of using social media network in pediatric nursing learning experience.
- (50 ≥75%) had an average perception toward the effect of using social media network in pediatric nursing learning experience.
- (>75%) had a good perception toward the effect of using social media network in pediatric nursing learning experience.

II. The Summative sheet of students' evaluation scores (Appendix III):

It assessed the final evaluation scores of the studied students in pediatric nursing learning experience at the end of the semester.

Scoring system for students' evaluation:

The students' evaluation scores in pediatric nursing learning experience were classified into excellent (≥85%), very good, (75-<85%), good (65<75%), pass (60<65%) and fail (<60%) as the policy of Technical

Institute of Nursing, Al-Azhar university, 2011.

Operational design

The operational design for this study consisted of three Phases, namely preparatory phase, pilot study and field work of the study.

Preparatory phase:

It included reviewing of the related literature, books, articles, magazines and the internet to be acquainted with the research problem and to design tool for data collection.

Validity and reliability:

Validity of the designed questionnaire was evaluated by (5) expertise in the pediatric nursing field for content, clarity and objectivity. Accordingly, minor modification was done in the form of rephrasing, organization and omission of some questions. The reliability coefficient for the study tool was calculated using the correlation coefficient Cronbach's alpha test and ranged between the values (0.82 to .099) that are statically accepted as a very high coefficient.

Pilot study

A pilot study was carried out on 10% (7) of the students under study to evaluate the applicability, clarity, efficiency and time required to fulfill the tools. It took about one month from the 1st of February 2017 to the 1st of March 2017. Subjects who shared in the pilot study were excluded from the study sample.

Field work

The actual filed work started from the 1st April 2017 up to the 1st of June 2017 for data collection. The researcher available 2 days/week from 9 Am to 2 Pm. The researcher started the data collection by introducing herself to the students and giving

them an explanation about the aim of the research and its expected outcome. Students were rotated in clinical area according to the plan of Technical Institute of Nursing. The students were divided into four groups, every group contains 15 students and each area take a period of two weeks. The researcher fulfilled the tool of the data collection during the students' break time on Monday and Thursday weekly from every group after finishing their clinical training. The questionnaire was filled in by each student within 15-25 minutes.

Administrative Design

A written official letter was issued from the Dean of Faculty of Nursing, Ain Shams University to the director of the Technical Institute of Nursing at Al Azhar University for obtaining the permission for data collection after explaining the purpose of the study and its expected outcome.

Ethical consideration:

Written approval was obtained from each student before their inclusion in the study with assuring for their anonymity and confidentiality. The researcher clarified the aim of the study to the students included in the study. Students had the right to withdraw from the study at any time without penalty.

Statistical Design

The collected data was organized, categorized and analyzed using a personal computer (SPSS, version 19) (Statistical Program for Social Science). Data were presented in the form of number, percentages, mean, and stander deviation (for quantitative data). Chi square test (χ^2) (for qualitative data), Pearson correlation and P value was used to estimate the statistical significant difference between the study variables (**P** = 0,05 will be accepted as significant).

Result

Table (1): Characteristics of the studied students. (n=60).

Characteristics of students	No	%
Age (in years):		
-<18	2	3.3
-18-19	48	80
->20	10	16.7
Mean \pm Stander Deviation	19.3 \pm .430	
Residence:		
Rural	51	85
Urban	9	15
Work beside study:		
No	54	90
Yes	6	10

Table (1): As regards the age of the studied students, it was found that, more than three quarters of them (80%) were ranged between 18-19 years with mean age 19.3 \pm .430. Regarding the residence, it was observed that, most of them (85%) were living in rural areas, while the rest of them (15%) were living in urban areas. Also the majority of the studied students (90%) were not working in hospitals beside their academic study.

Table (2): Distribution of the studied students according to their patterns of access for the internet and social media network (n=60).

Patterns of access	No	%
Place of access for the internet:*		
Home	57	95
Nursing Technical Institute	26	43.3
Cyber	38	63.3
Transportation	3	5
Methods of access:		
Smart Phones	3	5
Computer	23	38.3
Both of the above	34	56.7
Daily Time consumed in using social media network (in hours) < 1	8	13.3
1 < 3	27	45
3 ≤ 6	6	10
Almost all the day	19	31.7

*Number is not mutually exclusive.

Table (2): Regarding students’ patterns of access to the internet and social media network, this table illustrated that, 95% of the studied students using internet at home and more than half (56.7%) of them use the internet by both computer and smart phones. Also, it observed that, more than two fifths (45%) of the studied students consumed 1-<3hours in using social media network daily.

Figure (1):Distribution of the studied students according to their social media network sites preference (n=60).

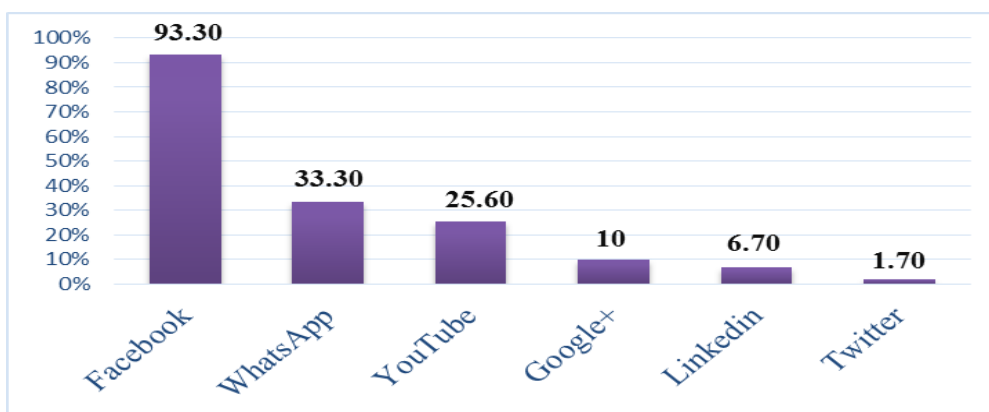


Figure (1): Regarding the studied students’ social media network sites preference, it was observed that, the majority of them (93.3%) using Facebook and 33.3 % of them using what’s App.

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Figure (2): Distribution of the studied students regarding their reasons for using the preferred social media network sites (n=60).

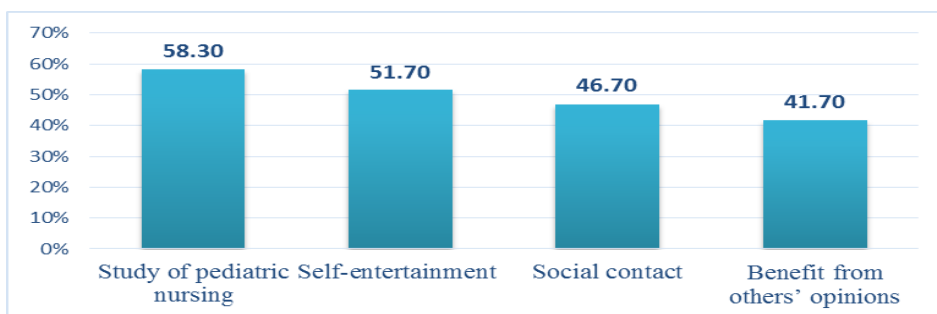


Figure (2): Regarding the studied students' reasons for using the preferred social media network sites, it found that, more than half (58.3%) of them were using social media for studying of pediatric nursing.

Figure (3): Distribution of the studied students according to the total perception for each category related to the using of social media network in pediatric nursing learning experience (n=60).

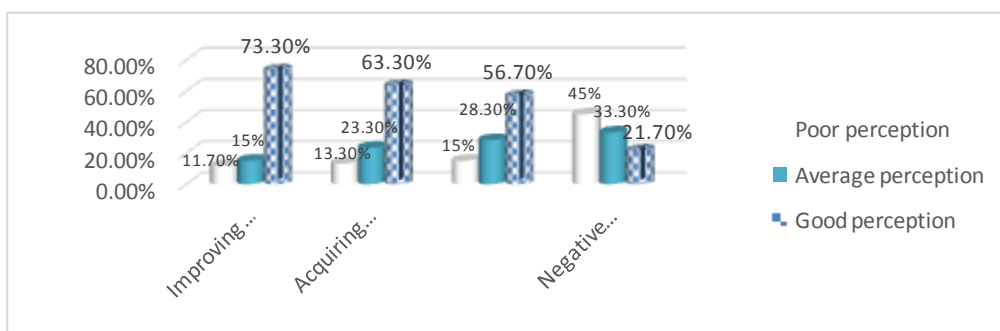


figure (3): Regarding the studied students' total perception for each category related to the using of social media network in pediatric nursing learning experience, illustrated that, 73.3% of them had a good perception with the effect of social media network in improving communication and interaction between them in the classroom and 63.3% of them had a good perception regarding the effect of social media in acquiring educational skills related to learning of pediatric nursing learning experience. However, more than half (56.7%) of the studied students had a good perception regarding the positive effect of social media network on academic performance. Also, it was found that, 45% of the studied students had a poor perception regarding the negative effect of social media network on their academic performance in pediatric nursing learning experience.

Figure (4):Total perception of the studied students regarding using of social media network in pediatric nursing learning experience (n=60).

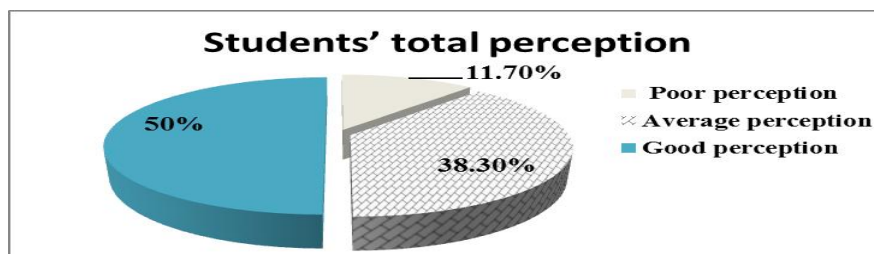


Figure (4): Regarding the total perception of the studied students toward using of social media network in pediatric nursing learning experience, it was illustrated that, half (50%) of the studied students had a good perception regarding the effect of social media network in pediatric nursing learning experience. While, only 11.7% had a poor perception.

Table (3): The relation between the studied students' evaluation scores in pediatric nursing learning experience and their time consumed in using social media daily (n=60).

Students' evaluation scores	Time consumed in using social media network daily/hours								Total		χ^2	p-value
	< 1		1 < 3		3 < 6		Almost all the day					
	No	%	No	%	No	%	No	%	No	%		
Fail	0	0	0	0	0	0	1	5.3	1	100	22.45	0.008**
Good	0	0	0	0	0	0	2	10.5	2	100		
Very Good	3	37.5	5	18.5	3	50	13	68.4	24	100		
Excellent	5	62.5	22	81.5	3	50	3	15.8	33	100		
Total	8	100	27	100	6	100	19	100	60	100		

Non sig. >0.05 Sig. <0.05* High sig. <0.001**

Table (3): Regarding the relation between the studied students' evaluation scores in pediatric nursing learning experience and their time consumed in using social media daily, it was observed that, there was a highly statistically significant difference (**p=0.008**). Where, the table revealed that, only 5.3% of the studied students who failed in their evaluation spend all day in social media network. Also, 61.5% and 81.5% of the studied students who got excellent scores consumed < 1hr and 1< 3hr respectively daily in using social media network.

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Table (4): The relation between the total perception of the studied students regarding using of social media network in pediatric nursing learning experience and their evaluation scores in pediatric nursing learning experience (n=60).

Students' evaluation scores	Total perception						Total		χ^2	p-value
	Poor		Average		Good		No	%		
	No	%	No	%	No	%				
Fail	1	14.3	0	0	0	0	1	100	27.934	0.000**
Good	2	28.6	0	50	0	0	2	100		
Very Good	2	28.6	13	56.5	9	30	24	100		
Excellent	2	28.6	10	43.5	21	70	33	100		
Total	7	100	23	100	30	100	60	100		

Non sig. >0.05 Sig. <0.05* High sig. <0.001**

Table (4): Regarding the relation between the total perception of the studied students toward using social media network in pediatric nursing learning experience and their evaluation scores in pediatric nursing learning experience, it indicated that, there was a highly statistically significant difference ($p=0.000$). Also, it was observed that, 70% of the studied students who had a good perception regarding the using of social media network in pediatric nursing learning experience get on excellent grades, compared to 14.3% of them who had a poor perception failed in their evaluation.

Discussion

Social media network had become one of the most important communication means in recent times. The rapid growth in technology especially the internet had a great impact on the users. To fulfill its role as a tool for improving academic performance, social media had been constantly used by nursing students to access educational information. This means that students use of social media to facilitate their research work, assignments and routine studies of pediatric nursing learning experience (Ainin, et al., 2015).

It was observed that social media network was used to transmit various contents and demonstrate completeness in the pediatric nursing learning experience. Furthermore, social media network promote collaboration and interaction between nursing students which contribute to improve their academic performance (Oghenetega, et al., 2014).

The current study is a descriptive study aimed to assess the patterns of using social

media network in pediatric nursing learning experience. The total number of the studied sample was 60 students regardless their characteristics.

In relation to characteristics of the studied students (table, 1), more than three quarters of them were ranged between 18-19 years. As found by Iorliam & Ode, (2014) in a study entitled "The Impact of Social Network Usage on University Students' Academic Performance" mentioned that, more than half of social network users are aged 18-20 years old and have a personal profile on multiple social media websites. From the researcher point of view, the finding was expected as the normal age of the students of this educational stage.

Regarding the studied students' patterns of access to the internet and social media network (table, 2), this table illustrated that, the majority of the studied students using internet at home and more than half of them use the internet by both computer and smart phones. These findings were consistent with the study conducted by Wang, et al., (2011) entitled "The Effect of Social Media on

College Students” who reported that, the majority of students using the internet through laptop, desktop computer and cell phone to check social media sites from their home.

Also, the finding of the present study supported by **Top, (2012)** who found in the study entitled “Blogging as a Social Medium in Undergraduate Course” that, most of college students reported logging into Facebook several times a day. While, the younger students tended to use Facebook more to keep in touch with friends from high school or from their hometown. From the research’s point of view, this may be due to that, all the students have smart phone and laptops. Also, they are familiar with the new technology.

As shown in the same table, more than two fifths of the studied students, their time consumed in using social media network was 1<3hours. This finding was in accordance with a study carried out by **Jeffrey& Musah, (2015)** about “Social Media Network Participation and Academic Performance in Senior High Schools” who mentioned that, the amount of time spent daily on social network sites varied greatly. However, an analysis of the data indicated that half of participants spent approximately 30 minutes to 3 hours a day on social media sites. This may be due to that, social media become a part of the students’ life which they used daily.

Regarding the studied students’ social media network sites preference (*figure, 1*), the current findings revealed that, the majority of the studied students using Facebook and one third of them using whats App. This finding was almost similar to the study of **Owusu & Gifty, (2015)** entitled “Use of Social Media and its Impact on Academic Performance of Tertiary Institution Students” who found that, all students had access to social media sites most of them were Facebook users. The researcher illustrated this result that, Facebook is the most favorite social media site accessed.

Where the students can know easily everything and about anything.

Regarding the studied students’ reasons for using the preferred social media network sites (*figure, 2*), it was observed that, more than half of the studied students using social media for study of pediatric nursing. This finding were agreed with study conduct by **Petrovic, et al. (2014)** entitled “Facebook versus Moodle in Practice Training” who reported that, the majority of students using social media network in their study as facebook to help them to increase their knowledge and skills.

On the other hand, finding of the current study is not in an accordance with the study reported by **Tuominen & Salminen, (2014)** about “Social Media in Nursing Education” which pointed out that, the majority of the students do not use the social media sites at all in their study. This may be due to availability of common pages which supported learning process in pediatric nursing experience.

Regarding the studied students’ total perception for each category related to the using of social media network in pediatric nursing learning experience (*figure, 3*).These findings were similar to study of **Arquero & Romero, (2013)** entitled “Using Social Network Sites in Higher Education” which argued that, social media supports different forms of student’s learning including, constructive learning, social learning, real life learning, collaborative learning, interactive learning and informal learning. This may be due to that, social media represent an attractive tool for interaction and socialization among nursing students and also, one of the best way for exchange nursing knowledge and information.

Regarding the total perception of the studied students toward using of social media network in pediatric nursing learning experience (*figure, 4*). This finding was agreed with **Iorliam & Ode, (2014)** who mentioned that, more than half of the studied students were agreed that, social media had

benefit in learning and most of them prefer learning through it than the traditional methods. This may be due to the effective role of social media network in facilitating pediatric nursing learning.

Regarding the relation between the studied students' evaluation scores in pediatric nursing courses and their time consumed in using social media daily (*table, 3*), it was observed that, there was a highly statistically significant difference ($p=0.008$). This finding was consistent with **Okereke & Lucky, (2014)** in the study entitled "The Impact of Social Media on the Academic Performance of University Students" and notified that, there was a strong positive relationship between academic performance and the time spent in using social media at a significance of 0.01 level.

In contrast, the findings were not similar to study of **Ahmed & Qazi, (2011)**, entitled "A look out for academic impacts of social networking sites (SNSs)" who mentioned that, there was no correlation between how much times is spent on social media network sites and the students' grades. This indicates that, more time spent on social media affects excellent academic performance. Therefore, spending much time on social media contributes to low academic performance.

Regarding the relation between the total perception of the studied students toward using social media network in pediatric nursing learning experience and their evaluation scores in pediatric nursing courses (*table, 4*), it indicated that, there was a highly statistically significant difference ($p=0.000$). This finding was compatible with **Sanchez, et al., (2014)** in the study entitled "Students' Perceptions of Facebook for Academic Purposes" which illustrated that, there was a positive association between students' perception for social medial sites and their academic performance. Students who had a good perception related to using internet and social media sites frequently, scored higher

on reading skills test and had higher grades as well.

Finding of the current study is not in accordance with the result of **Hargittai & Hsieh, (2014)**, in the study entitled "Predictors and Consequences of Differentiated Practices on Social Network Sites" which illustrated that, no correlation between social media and students' academic evaluation. This may be due to the effective interaction between pediatric nursing staff and their students in pediatric nursing home page which contribute to improve their evaluation.

Conclusion:

In the light of the study findings, it can be concluded that:

All the studied students had access to social media network daily through smart phones and computer for studying of pediatric nursing experience. Furthermore, there was a statistically significant difference between the patterns of using social media network and the pediatric nursing learning experience.

Recommendations:

Based on the study result, it could be recommended that:

- Emphasize on the integration of patterns of using social media network with learning of pediatric nursing experience under protective laws and regulations.
- Academic support for creation of common home pages directed for learning of pediatric nursing experience.
- Pediatric nursing staff should enhance students' skills with the use of social media to be able to cope with these emerging technological changes.
- Encourage nursing students to manage their time while using social media network in learning of pediatric nursing experience.

- Nursing faculties should be supported with a plan for pediatric department to promote the use of social media network in pediatric nursing learning experience.

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