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Using Smart Phones in Learning Among the University Students: Its Activities and its Importance

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Abstract

The aim of this study was to reveal the Smartphone activities that are using in learning and the study attends to investigate the importance of using Smartphone in supporting learning among undergraduate students at the Hashemite University, Jordan. A descriptive approach guided this investigation. A sample size of 310 undergraduate students who were randomly chosen at the college of educational sciences at the Hashemite University in the second semester of the academic year 2023- 2024. To collect data, two instruments were used. One survey list was used to gather the data for Smartphone activities and the second questionnaire was used to attain students' perception of the Smartphone importance for the learning purposes. The data was analyzed by descriptive statistics using SPSS v24 software. The findings of this study showed that the majority of students used smartphones for the following activities: Scanning the content of the course, Note taking, Whattsapp, and Internet and googling surfing. Also, findings indicated that the majority of students perceived the importance of using smartphones in learning.

Keywords: Smartphone, Learning, University Students

1. Introduction

Modern societies are facing a wide spreading of technology and social networking, especially Smartphones, which have become an important tool to communicate and interact with others.

Cell phones are essential part of our daily life in every activities (Arias, 2021). Computers, laptops and tabs are the most gadgets for the members of a family. Having a Smartphone is essential for everyone (Wang, Xiang & Fesenmaier, 2016). According to the statistical report which has issued by the Group Special Mobile Association (GSMA) 2015 report, 50% have a sphere addiction to smartphones. So, no one can ignore the fact that smartphones have prominent role in our daily lives.

Smartphones are considered as a fantastic invention, which has been developed from old device. These new devices have many features and functions, like internet browser, camera, music and video player, GPS navigator, mobile TV, and etc.

Using Smartphones allows students to get a high achievement and reach to the information that they need and entertainment easily, like video and audio calls, sending and receiving emails and easy access to the internet in seconds, which can help people specially students in their study; they are widely used as a teaching and learning tools in educational activities (Matimbwa & Anney, 2016).

Students feel more comfortable while learning when their tutors help them by using technology with their smartphones. In fact, smartphones have also made students' life easier and more efficient. Thus, educators noticed that using smartphone help them very much in teaching easily and quickly. (Ismail, Bokhare, Azizan, & Azman 2013). Additionally, according to Huang et al. (2020), using various smartphone applications not only can give the chance to students to learn the content conveniently, effectively and quickly, but also they enables them to interact with others collaboratively anytime and anywhere re.

Marta and Antoni (2016), in their study indicated that students spend third of their daily life using smartphone, they depend on them very much, such as using SMS, chatting, using social media and apps to interact through audio and video calls.

These days, educators and students use smartphones in their teaching and learning when needed. For example, students can access to their lectures' materials on their Smartphones easily. Specifically, using smartphones in learning has become a new trend in universities where students don't have to have computer or laptops to deal with electronic learning material (Darko- Adejei, 2019).

As a conclusion, it is important to point out that the smartphone has a vital role in every human daily activities; as it is a professional tool to carry out their activities perfectly. As a result, young people report that their phones are the most important source of news and facilitate learning either offline or online. Offline access enables them to store learning materials such as pdf, word, excel, etc. It also helps students to register course online, take a quiz, and have a group discussion digitally (Darko-Adjei, 2019; Garcia-Santillian & Espinos-Ramos,2021).

Zidan (2018) pointed out that the importance of using smartphone applications in learning, and indicated that 72% of university students have a positive attitudes towards their learning, and that learning by smartphone can help to improve the level of students' performance as well.

Also, many studies (Al-harbi, 2016; Branka et al., 2016; Zidan, 2018) have indicated that students have a great desire to use smartphone applications in education, such as: searching library indexes, doing homework, recording lectures and communicating with teachers.

Alzougool and Almansour (2017) in their study, concluded that university students usually use their smartphone to record lectures, take notes, and download learning material. Cochrane (2010) in his study revealed that the students use their smartphone in many educational activities, such as access course content, participate in course group discussion. Alfailakawi and Al-Anzi (2022) indicated that smartphone could be used in notes taking, playing educational games, scanning the content of the course. In another research, Vihavainen, Kuula, & Federley (2010) conducted a study, their study's results indicated that the university students use smartphone to discussion educational material, take notes, and interaction with others.

Regarding, the importance use of smartphones, Evans (2008), in his study indicated that the students were more interested in learning materials using smartphones than lectures notes or textbooks. In South Africa, Motiwilla (2007) indicated that the students have a strong desire to use smartphones effectively for learning purposes.

In Jordan, like other regions, the most university students have smartphones and use them for many purposes. Jordanian universities used to use face – to face learning. As a result of Covid- 19 pandemic, face- to face

learning has been stopped. Therefore, learning in Jordan has to be shifted to online learning via the use of Teams system and they have to join online lectures. Thus, smartphones have become very essential for every student.

Although the importance of using smartphone activities and mobile device in learning, their use among university students is still limited. Accordingly, I think that this study is the first study in Jordan. Hence, this study aims to investigate the smartphone activities that undergraduate students use in the classroom. Moreover, it aims to determine the most important benefits of smartphone use from the undergraduates' point of view at the Hashemite University. Particularly, it aims to answer the following questions:
1- What are the activities of Smartphone that the Hashemite university students use in their learning?
2- What are the students' perceptions of Smartphone importance in learning activities?

Finally, this study is considered very important for the members of colleges and universities to point out the importance of using smartphone applications in the learning process. Also, the result of this study may draw the students' attention to using smartphones in their classroom. in addition, this study may make a significant contribution to the body of previous research

2. Methods

2.1. Population ad sampling

The population of this study 3570 is the undergraduate university students at the college of educational sciences at the Hashemite University, Jordan in the second semester of the academic year 2023 2024. A random sample of 310 students from the total 3570 population size of students was chosen for the study.

2.2. Instruments

Two instruments were used in this study:

The Smartphone activities list: the activities of smartphone that the Hashemite university students use in classroom, consisted of seven items (Scanning the content of the course, Note taking, WhatsApp, Internet and googling surfing, downloading learning material, Calculator, and playing games). The items include classroom-related activities designed to elicit responses regarding daily time used in learning activities, participants recorded the type of activity they engaged during the classroom for two weeks.

The importance of using smartphones: A questionnaire for measuring the importance of smartphone using in learning was designed and developed after reviewing previous studies Wali & Omaid, 2020; Alfailakawi, 2022; Alkhunaizan, 2019). A Questionnaire comprised the participants' activities that used in their classroom, has 13 items related to the importance of using smartphone in learning, was designed on a five-point likert scale strongly agree: 5 to strongly disagree: 1. To check the validity of the questionnaire, it was reviewed by 9 members in the colleges of education and information technology in many universities in Jordan.

For reliability verification purpose, the final draft of the questionnaire was applied to a pilot sample of 30 students. The internal consistency of the questionnaire items has been calculated, where the Cronbach alpha value was0.88. In order to analyze the results, the mean scores were classified into three levels: low (1-2.33), moderate (2.34-3.67) and high (3.68-5).

2.3. Data analysis

To analyze the data which was obtained through a questionnaire using descriptive statistics, such as: the mean scores, standard deviation, frequencies, and percentages.

3. Results

Result of the first question: What are the activities of smartphone's that the Hashemite university students use in their learning?

To answer this question, frequency and percentage were calculated and are shown in table 1.

Table 1: Smartphone's activities that the Hashemite university students use in classroom.

Smartphone activities	Yes, I use it		No, I don't use	
	Frequency	Percent	Frequency	Percent
Scanning the content of the course	275	89	35	11
Note Taking	252	81	58	19
WhatsApp	198	64	112	36
Internet and goggling Surfing	195	63	115	37
Download Learning Material	132	43	178	57
Calculator	73	24	235	76
Playing game	15	5	295	95

It clear that from Table 1 that 275 (89%) of the students use smartphone in their classroom for" Scanning the content of the course, 252(81%) use it for " note taking",198 (64%) use it for" WhatsApp', 195(63%) use it for Internet and google Surfing, 132(43%) use it for Download Learning Material, 73(24%) use it for calculator, and 15(5%) use it for playing Games. The results point out that majority of the students use the smartphone for activities that considered related to the learning in the classroom such as scanning the content of the course, note taking, whatsAPP, and Internet and google surfing, on the other hand, small percentage of the students who use smartphone for purposes do unrelated to activities of classroom, such as calculator and playing games.

Result of the second question: What are the students' perceptions of Smartphone importance in learning activities?

To answer this question, the specific findings are as present in table 2.

Table 2: respondents' students perceived importance of Smartphone activities in their learning

No.	Importance of smartphone use in classroom	Mean	Std. Deviation
1	It helps me to study more efficiently	4.62	.96
2	It helps me to find updated information	4.57	.95
3.	It gives me the ability to foster my learning	4.45	.99
4.	It helps me to store all of my learning materials	4.34	.92
5.	It helps me in quick access to information online	4.21	.89
6.	It enables me to record lectures provided by my tutors	4.09	.90
7.	It helps me to do assignments on time	3.92	.87
8.	It permits to me to engage in online group discussion	3.88	.85
9.	It enables me to have various skills and activities outside the classroom	3.81	.88
10	It helps me to get feedback quickly	3.77	.86
11	It can interact with others no matter where they are	3.72	.85
12	It can be used as a mean of interaction with the teacher	3.70	.87

From table2, it could be clearly seen that the importance of smartphone use in classroom. All of items had the mean scores above 3.7with a high score. With a mathematical average of (3.70- 4.62); this means that majority of students agree with all the importance mentioned in the table above. Specifically, the item no.1 "i t is help me

to study more efficiently, has the high score 4.62, whereas the item no.12 has the least score" It is a medium of interaction with the teacher," has 3.70.

4. Discussion

The results indicated that these are four activities (Scanning the content of the course, note taking, WhatsApp, and Internet and google Surfing) are considered the most use by students: this means that the students engage in using smartphone in all its activities in their classrooms except for its use for playing and calculating. The researcher attributes this result to the most of them are familiar to them and allow mobile access to popular websites available on personnel computers. Also, these activities are considered a vital role in learning; so, students tend to use it frequency.

This finding is a suitable with results of the other research reporting that Alzougool and Almansour (2017) in their study asserted that university undergraduates usually use their smartphone to check the exams' schedule, class timetable, and grades and to login to the university portal, take notes, download class material. Also, this result is supported by Cochrane's study (2010) he, also asserted that the students use their Smartphones in many educational activities, such as access course content, take of notes, and participate in course group discussion.

On the other hand, the results indicated that students have strongly believed the importance of using Smartphone in their learning. The researcher attributes the result to the desire and motivation of students in the use of smartphone activities in learning and the use of internet in general and in the knowledge of all that is new in the field of specialization, and in the announcement of the university and in communicating with the college to inquire about some educational matters, but they don't reach the extent hoped.

Also, the researcher attributes this result that the successes of using smartphone in learning to the well-educated members of the university who are good at using technology in their teaching and encourage and help their students to use technology in their learning, such as using laptops, smartphone.

The findings of the present study are in the line with study (Garcia-Santillian & Espinos-Ramos, E (2021), he asserted that the Smartphone support learning either offline or online.

Also, this is supported by Zidan's study (2018), he believes that using Smartphone activities in learning is very effective, and that most of university students have a positive trend towards learning by using smartphones. Also, he indicated that smartphones help students to improve the rate of study achievement by 60%.

Finally, this study recommends that the decisions makers in higher education institutions should encourage students to use smartphones in classrooms.

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