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THE USE OF SMARTPHONE FOR LEARNING ACTIVITIES BY UNIVERSITY STUDENTS IN KUWAIT

Abstract:

There has been a shortage of relevant studies concerning Smartphone usage in Kuwait by people in general and students in particular. The aim of this study was therefore twofold: (i) to explore the use of Smartphone for learning purposes among universities' students in Kuwait and (ii) to identify if there are any socio-demographic differences in this usage among universities' students. A questionnaire with 376 students was conducted in order to achieve the study objectives. The results showed that generally students always used their Smartphones at their homes and they sometimes used these phones in recreation places and transportation, at university, and while walking. Also, they always used their Smartphones to do ten learning activities namely checking the exams schedule, checking class timetable, checking grades, login to the university portal, using blackboard (LMS), using it to participate in the class learning groups, downloading class material, registering courses, reading tutors' announcements, and payment of fees. Moreover, social networking, learning, privacy, and safety were important reasons for owning/using Smartphones by students. Furthermore, the study found that at least one learning activity that students did using their Smartphones varies according to at least one of seven socio-demographic variables (i.e., gender, major, nationality, brand of Smartphone, using it for the first time, age range and level of study). In contrast, one demographic variable has no effect on any of the learning activities (i.e., marital status). Several recommendations were suggested based on these findings that may improve the effectiveness of Smartphone usage among universities' students in Kuwait.

Keywords:

Smartphone Use
Learning
Kuwait

Literature Background

Smartphone currently becomes a cornerstone of people life. Smartphone is a mobile phone running a complete operating system in a manner similar to a traditional computer, which offer advanced computing abilities and connectivity options. These features enable new kinds of mobile services that in turn shape the usage habits of Smartphone users. Smartphone help users to do various activities such as sharing information, sending and receiving emails, chatting, opening and editing documents, paying for products, learning, browsing and shopping. As Smartphone provides many applications for an increasingly a wider range of usage situations, it has become an increasingly integrated part of people's everyday life.

Understanding Smartphone usage patterns and characterizing how users access their mobile devices during their everyday lives have been an active area of research. For example, Cui and Roto (2008) found that the main use of smartphones was task-oriented with goals of information seeking, communications, online transactions, and managing personal information. Falaki et al. (2010) studied the usage patterns of Mobile phones; they found that there were similarities in the fine-grained usage patterns of users (e.g., the session time distribution). Bohmer et al. (2011) found that users typically spent almost one hour per day on smartphones, and that the average session duration was less than one minute. Oulasvirta et al. (2012) found that the use of mobile devices might lead to the development of a checking habit that involves brief and frequent content consumption (e.g., checking emails and Facebook updates).

On the other hand, Smartphone is known to be very popular among university students, increasing their social inclusion and connectedness as well as providing a sense of security as they can contact others in times of distress or emergency (Balakrishnan & Raj, 2012). Although most of students own Smartphone not for learning purpose, but indirectly Smartphone can be directed to useful and beneficial purposes. Smartphone has a potential to transform a traditional classroom to a new area of classroom where it offers tutors and students access to the teaching and learning materials remotely at anywhere and anytime. For example, Mohtar et al. (2013) found that university students in Malaysia had adopted smartphones as a necessity for learning at higher learning institutions. Students used smartphones for sharing notes between classmates, recording lectures, as well as taking pictures of assignments for future reference and sharing exam results on a Facebook through their smartphones. Kim and Altmann (2013) also found that generally each student had 80 applications on his/her Smartphone, and 16% of the applications were used for some kind of learning. Moreover, Payne et al. (2012) explored the usage of smartphones among medical students in the United Kingdom and found a high level of Smartphone ownership and participants endorsed the development of more applications to support medical students. Furthermore, Uys et al. (2012) found that students spent an average five hours per day on their smartphones, interacting with others via social networking sites, and remain online for about 16 hours per day. In addition to the benefits of using a Smartphone, there can also be negative effects on

the users and environment such as disruption of social interactions, sleep deprivation and attention deficits (Murdock, 2013).

Smartphone enables users to use several applications that have a number of characteristics that make it a suitable option for students. These characteristics include but are not limited to (Cohen 2011, P1): (i) a wide range of content formats (e.g., text, image, video, etc.) and allow combining more than one content;(ii) allows communication to take place in real time and to cross one or more applications through social sharing, email and feeds; (iii) involve different levels of interactions by participants who can create and comment on social media networks; and (iv) offer one-to-one, one-to-many and many-to-many communications. Therefore, Smartphone enables students to interact and communicate with their family, friends, classmates, tutors…etc.

Although studies of patterns in Smartphone usage among people especially universities' students have been conducted in many countries, to the best of our knowledge very few studies were conducted in Kuwait, yet none of the studies focuses on trends in Smartphone usage among university students in general and AOU students (Kuwait Branch) in particular. Therefore, this study will endeavor to answer the following two questions:

1. How do university students use their smartphones?
    - Where do they use their Smartphones?
    - Do they use their smartphones for learning purposes? How?
    - Why do they use Smartphone? What is the importance of these reasons?
2. Are there any differences in Smartphone usage among university students relating to their demographic and social background variables?

This study therefore explores the everyday use and role of Smartphone among university students. The study specifically looks at the following themes of Smartphone use: (i) places of Smartphone usage, (ii) usage of Smartphone for learning purposes, (iii) reasons to use Smartphone and their importance, and (iv) demographic and social differences in Smartphone usage among university students. This research chose Arab Open University-Kuwait Branch (AOU) as a university to examine this phenomenon among universities students.

Method

To achieve the objectives, a quantitative descriptive approach (a questionnaire with at least 376 students) was conducted. The questionnaire is probably the best method available to collect original data describing a large population without observing directly. The questionnaire was used to obtain data from AOU students (Kuwait Branch) with regard to their usage of smartphones. The questionnaire was constructed by researchers of this study and questions were derived from previous literature. Multiples choice and multiple selection questions were employed. Specifically, the questionnaire contained questions about the:

- Personal information (i.e., gender, age, marital status, education, and a question whether the participant owns a Smartphone), and places of usage.
- Use of Smartphone for learning purposes (e.g., login to University portal, Downloading and/or reading class materials, Taking notes in a classroom, etc.).
- Reasons of using Smartphone it (e.g., socializing, safety, privacy, etc.).

The questionnaire was evaluated by a number of experts and distributed to students after making necessary alterations as appropriate.

The study population consisted of all students at AOU. The study sample consists of all undergraduate students currently enrolled at AOU (Kuwait Branch). A purposive sampling method was used. The questionnaire was distributed during regularly scheduled class sessions by the researchers with the help of other tutors**.** The participants were explained the purposes of the study and asked to complete the questionnaire. The instructions for completing the questionnaire were also given on the cover page to avoid any misunderstanding. Students were assured of anonymity and confidentiality, and participation was voluntary. The questionnaires were distributed over a period of two months starting on September 2016**.**

Data from the completed questionnaires was entered into a personal computer. Then, it was double-checked against the original questionnaires to ensure accurate data entry. The researchers also created a data codebook as a guide and reference point for later analysis. When data entry and checking was completed, statistical analysis was performed using SPSS 19.0 for Windows. Descriptive statistics (e.g., frequencies, percentages, means, etc.) was employed to describe the characteristics of students who participated in the study. A series of variance approaches (e.g., ANOVA and T-test) were also employed to analyze the relationships between the Smartphone usage and the students' socio-demographic variables.

Data analysis and findings

The participants were explained the purposes of the study and asked to complete the surveys. In all, 500 surveys were administered to students while only 376 surveys were returned and usable for this study. A summary of the demographic characteristics of the respondents is presented in Table 1. There were more females (62.9%) who participated in the study than males (37.1%). More than third of participants (39.1 %%) belong to the age range of 18 to 22 years, while more than quarter of them (27.3%) belong to the age range of 23 to 27 years. The mean age of the participants in the study was 26.28 years. The majority of the respondents were singles (74%) and business students (78.9%). Non-Kuwaiti students were more than half of the respondents (55.3%) and more than two thirds of the were enrolled in the 3rd year and above (67.9%).

Table 1: Demographic characteristics of participants

Demographic	Categories	No=376	%	Missing
Your Gender	Male	139	37.1	1
	Female	236	62.9	
Age Range	18-22 yrs	142	39.1	13
	23-27 yrs	99	27.3	
	28-32 yrs	56	15.4	
	33+ yrs	66	18.2	
Marital Status	Single	270	74%	11
	Married	84	23%	
	Other	11	3%	
Nationality	Kuwaiti	165	44.7	7
	Non-Kuwaiti	204	55.3	
Major	Business	296	78.9	1
	IT	24	6.4	
	English	55	14.7	
Year of Study	1st year	28	8.1	30
	2nd year	83	24.0	
	3rd year	121	35.0	
	4th year & above	114	32.9	

Source: Own adjustment based on the collected data

Table 2 contains answers to the descriptive questions that were used in the questionnaire. There were questions about whether or not students use Smartphone at all, the time participants first started using Smartphone, the SmartPhone brand, and how often do participants use their Smartphones in various places. The results show that 99.5% of students reported they own/use a Smartphone. Of those, 60.2% and 30.7% stated that they own/use IPhone and Samsung respectively and most of them (71%) started using their Smartphones for the first time before five years and more. The results also show that students always used their Smartphone at their homes (76.4%), while they sometimes used it at university (72.5%), in transportation (66.2%), recreation places (57.7%), and while walking (54.7%) and driving (48.5%).

Table 2: Descriptive results relating to the Smartphone usage by respondents

Descriptive questions	Categories	No=376	%	Missing
Do you own/use a SmartPhone?	No	2	0.5	0
	Yes	374	99.5	
The time you first started using SmartPhone	Less than one year	4	1.1%	3
	One to less than 2 years	7	1.9%	
	Two to less than 3 years	13	3.5%	
	Three to less than 4 years	25	6.7%	
	Four to less than 5 years	59	15.8%	
	Five years and more	265	71%	
The brand of your SmartPhone	IPhone	218	60.2	14
	Samsung	111	30.7	
	IPhone & Samsung	13	3.6	
	Other brands	20	5.5	

How often do you use your SmartPhone in the following places?	N	Never Freq (%)	Sometimes Freq (%)	Always Freq (%)
At home	373	2 (0.5%)	86 (23.1%)	285 (76.4%)
At university	371	34 (9.2%)	269 (72.5%)	68 (18.3%)
While driving	367	167 (45.5%)	178 (48.5%)	22 (6%)
In transportation	367	51 (13.9%)	243 (66.2%)	73 (19.9%)
Recreation places	366	51 (13.9%)	211 (57.7%)	104 (28.4%)
While walking	369	89 (24.2%)	202 (54.7%)	78 (21.1%)

Source: Own adjustment based on the collected data

On the other hand, basic descriptive statistics, such as frequency and percentage frequency distribution techniques were used to describe the use of Smartphone for learning activities. There were 18 learning activities listed in the questionnaire. Participants were asked to indicate how often they use their Smartphones to do these activities on a scale of one to three where one indicates never and three indicates always. The frequencies and percentages of the students who chose the points on the Likert scale were calculated. Table 3 shows these activities as per the viewpoint of students who responded to the questionnaire. As shown in Table 3, the results indicated that students always used their Smartphones to do ten learning activities namely: checking the exams schedule (75.7%), checking class timetable (74.3%), checking grades (72.4%), login to the university portal (60.5%), using blackboard (LMS) (54.3%), using it to participate in the class learning groups (52.1%), downloading class material (51.2%), registering courses (49.7%), reading tutors' announcements (46.9%), and payment of fees (41.1%); students sometimes used their Smartphones to do six learning activities namely: taking photos of a class presentation (57.3%), sending emails to tutors (46.6%), using SIS (45.6%), using e-library resources (42.7%), processing students relating services transactions (42.7%), and taking notes in a classroom (39.9%); while students never used their Smartphones to both record a class lecture (56.6%) and upload class assignments (35.3%).

Table 3: Frequencies and percentages of the students who used their Smartphones to do learning activities

How often do you use your SmartPhone to do the following learning activities?	N	Never Freq (%)	Sometimes Freq (%)	Always Freq (%)
Checking the exams schedule	370	10 (2.7%)	80 (21.6%)	280 (75.7%)
Checking class timetable	370	10 (2.7%)	85 (23%)	275 (74.3%)
Checking grades	370	18 (4.9%)	84 (22.7%)	268 (72.4%)
Login to the university portal	372	3 (0.8%)	144 (38.7%)	225 (60.5%)
Taking photos of a class presentation	370	68 (18.4%)	212 (57.3%)	90 (24.3%)
Recording a class lecture	369	209 (56.6%)	118 (32%)	42 (11.4%)
Using blackboard (LMS)	372	27 (7.3%)	143 (38.4%)	202 (54.3%)
Using it to participate in the class learning groups	370	48 (13%)	129 (34.9%)	193 (52.1%)
Downloading class material	369	51 (13.8%)	129 (35%)	189 (51.2%)
Registering courses	370	61 (16.5%)	125 (33.8%)	184 (49.7%)
Reading tutors' announcements	371	48 (12.9%)	149 (40.2%)	174 (46.9%)
Sending emails to tutors	371	83 (22.4%)	173 (46.6%)	115 (31%)
Using SIS	371	36 (9.7%)	169 (45.6%)	166 (44.7%)
Using e-library resources	370	150 (40.5%)	158 (42.7%)	62 (16.8%)
Processing students relating services transactions	370	71 (19.2%)	158 (42.7%)	141 (38.1%)
Payment of fees	367	106 (28.9%)	110 (30%)	151 (41.1%)
Taking notes in a classroom	371	135 (36.4%)	148 (39.9%)	88 (23.7%)
Uploading class assignments	371	131 (35.3%)	116 (31.3%)	124 (33.4%)

Source: Own adjustment based on the collected data

Moreover, participants were asked to indicate their reasons to own/use Smartphones on a scale of one to five where one indicates not important and five indicates very important. The frequencies and percentages of the students who chose the points on the Likert scale were calculated. Table 4 shows these reasons as per the viewpoint of students who responded to the questionnaire. As shown in Table 4, the results

indicated that social networking (85.5%), learning (80.6%), privacy (70.6%), safety (60%), freedom (42.1%) and social status symbol (39.2%) were the most important reasons for owning/using their Smartphones. On the other hand, loneliness (50.2%) and fashion (47.4%) were the least important reasons for own/using these phones.

Table 4: Frequencies and percentages of reasons to own/use Smartphones

How important are the following reasons for owning/using a SmartPhone?	N	Not Important Freq (%)	Slightly Important Freq (%)	Moderately Important Freq (%)	Important Freq (%)	Very Important Freq (%)
For Social networking	372	3 (0.7%)	11 (3%)	40 (10.8%)	94 (25.3%)	224 (60.2%)
For Learning	372	10 (2.7%)	10 (2.7%)	52 (14%)	109 (29.3%)	191 (51.3%)
For Privacy	371	21 (5.7%)	30 (8.2%)	58 (15.6%)	94 (25.3%)	168 (45.3%)
For Safety	372	30 (8.1%)	37 (9.9%)	82 (22%)	95 (25.5%)	128 (34.5%)
For Freedom	370	71 (19.2%)	52 (14.1%)	91 (24.6%)	75 (20.3%)	81 (21.8%)
For Social status symbol	370	70 (18.9%)	52 (14.1%)	103 (27.8%)	68 (18.4%)	77 (20.8%)
For Loneliness	370	127 (34.3%)	59 (15.9%)	92 (24.9%)	36 (9.7%)	56 (15.2%)
For Fashion	371	111 (29.9%)	65 (17.5%)	77 (20.8%)	53 (14.3%)	65 (17.5%)

Source: Own adjustment based on the collected data

Two parametric tests - Independent samples T-test (t-test) and ANOVA techniques - were used because the scores of the dependent variables in this study were reasonably normally distributed. T-test was conducted to look for significant differences in the use of Smartphone for learning activities in terms of six background variables (each of which has two distinct categories): gender; marital status, nationality; major, use for the first time, and brand of Smartphone. ANOVA between groups was also conducted to explore if there are significant differences in terms of two background variables (each of which has more than two distinct or continuous categories): age range and level of study. The following scale is used to facilitate reporting the results:

- The Smartphone was always used by students: Calculated mean (M ≥2.3).
- The Smartphone was sometimes used by students: Calculate mean (1.6 > M <2.3).
- The Smartphone was never used by students: Calculated mean (M ≤1.6).

The following sections present the results of t-test and ANOVA:

Table 5 illustrates the mean (M), standard deviation (SD), t-test and ANOVA of the use of Smartphone to do 18 learning activities by students. When the frequently reported learning activities were compared across the different categories of each of the eight socio-demographic variables, the followings were found:

- Using Smartphone to do nine learning activities varied according to students' gender. Female students used their Smartphones for registering courses (M=2.44, t= -3.791-, p=0.000), sending emails to tutors (M=2.15, t= -2.291-, p=0.023), using blackboard (LMS) (M=2.59, t= -4.905-, p=0.000), login to the university portal (M=2.65, t= -2.787-, p=0.006), downloading class material (M=2.47, t= -3.412-, p=0.001), recording a class lecture (M=1.63, t= -3.328-, p=0.001), using SIS (M=2.44, t= -3.554-, p=0.000), checking the exams schedule (M=2.77, t= -2.034-, p=0.043), and using it to participate in the class

learning groups (M=2.47, t= -2.034-, p=0.004) more than males. Using Smartphone to do other learning activities did not vary according to students' gender.

- Using Smartphone to do three learning activities varied according to students' major. Business students used their Smartphones for processing students relating services transactions (M=2.25, t= 2.925, p=0.004), registering courses (M=2.39, t= 2.719, p=0.007), and checking grades (M=2.73, t= 3.449, p=0.001) more than non-business students. Using Smartphone to do other learning activities did not vary according to students' major.
- Using Smartphone to do two learning activities varied according to students' nationality. Kuwaiti students used their Smartphones for processing students relating services transactions (M=2.28, t= 2.081, p=0.038) and payment of fees (M=2.24, t= 2.339, p=0.02) more than non-Kuwaiti students. Using Smartphone to do other learning activities did not vary according to students' nationality.
- Using Smartphone to do one learning activities varied according to the Smartphone brand. Students who had IPhones used these phones for taking photos of a class presentation (M=2.13, t= 2.436, p=0.015) more than students who had Samsung phones. Using Smartphone to do other learning activities did not vary according to the Smartphone brand.
- Using Smartphone to do four learning activities varied according to using the Smartphone for the first time. Students who had their Smartphones before five years and more used these phones for processing students relating services transactions (M=2.28, t= -3.720-, p=0.000), sending emails to tutors (M=2.14, t= -2.386-, p=0.018), using blackboard (LMS) (M=2.52, t= -2.312-, p=0.021), and using e-library resources (M=1.83, t= -2.815-, p=0.005) more than those who had their Smartphones before four years and less. Using Smartphone to do other learning activities did not vary according to using it for the first time.
- Using Smartphone to do two learning activities varied according to students' age range. Students who were 33 years old and above used their Smartphones for processing students relating services transactions (M=2.39, F= 3.549, p=0.015) and payment of fees (M=2.31, F= 2.704, p=0.045) more than those who were in other age groups. Using Smartphone to do other learning activities did not vary according to students' age range.
- Using Smartphone to do five learning activities varied according to students' study level. Students who were in 4th year and above used their Smartphones for login to the university portal (M=2.66, F= 2.812, p=0.039), using blackboard (LMS) (M=2.55, F= 3.701, p=0.012), and registering courses (M=2.43, F= 2.895, p=0.035) more than those in other years. However, students who were in 3rd year used their Smartphones for recording a class lecture (M=1.70, F= 3.599, p=0.014) more than those in other years, and students who were in 1st year used their Smartphones for taking notes in a classroom (M=2.04, F= 4.066, p=0.007) more than those in other years. Using Smartphone to do other learning activities did not vary according to students' study level.

Table 5: The mean (M), standard deviation (SD), t-test and ANOVA of the use of Smartphone to do learning activities by students

How often do you use your SmartPhone to do the following learning activities?	Background variables	N	Mean	SD	t	Sig. (2-tailed)
processing students relating services transactions	Kuwaiti	162	2.28	.700	2.081	**.038***
	Non-Kuwaiti	202	2.12	.753		
	Business	292	2.25	.714	2.925	**.004****
	Non-Business	77	1.97	.778		
	Four years and less	108	1.97	.716	-3.720-	**.000****
	Five years and more	261	2.28	.725		
registering courses	Male	135	2.14	.745	-3.791-	**.000****
	Female	234	2.44	.723		
	Business	292	2.39	.716	2.719	**.007****
	Non-Business	77	2.13	.817		
sending emails to tutors	Male	135	1.97	.680	-2.291-	**.023***
	Female	235	2.15	.745		
	Four years and less	108	1.94	.734	-2.386-	**.018***
	Five years and more	262	2.14	.716		
using blackboard (LMS)	Male	136	2.26	.680	-4.905-	**.000****
	Female	235	2.59	.566		
	Four years and less	108	2.35	.660	-2.312-	**.021***
	Five years and more	263	2.52	.611		
login to the university portal	Male	136	2.50	.531	-2.787-	**.006****
	Female	235	2.65	.487		
downloading class material	Male	135	2.21	.754	-3.412-	**.001****
	Female	233	2.47	.676		
recording a class lecture	Male	134	1.39	.600	-3.328-	**.001****
	Female	234	1.63	.719		
using SIS	Male	135	2.19	.675	-3.554-	**.000****
	Female	235	2.44	.620		
checking the exams schedule	Male	135	2.66	.575	-2.034-	**.043***
	Female	234	2.77	.452		
using it to participate in the class learning groups	Male	135	2.25	.720	-2.885-	**.004****
	Female	234	2.47	.688		
payment of fees	Kuwaiti	160	2.24	.791	2.339	**.020***
	Non-Kuwaiti	201	2.04	.848		
checking grades	Business	292	2.73	.531	3.449	**.001****
	Non-Business	77	2.48	.641		
using e-library resources	Four years and less	108	1.60	.669	-2.815-	**.005****
	Five years and more	261	1.83	.730		
taking photos of a class presentation	IPhone	214	2.13	.658	2.436	**.015***
	Samsung	111	1.95	.630		
					F	**Sig.**
processing students relating services transactions	18-22 years	139	2.06	.740	3.549	**.015***
	23-27 years	96	2.25	.725		
	28-32 years	56	2.16	.682		
	33+ years	66	2.39	.721		
payment of fees	18-22 years	138	1.98	.850	2.704	**.045***
	23-27 years	96	2.19	.812		
	28-32 years	55	2.07	.858		
	33+ years	65	2.31	.789		
login to the university portal	1st year	28	2.36	.559	2.812	**.039***
	2nd year	80	2.56	.524		
	3rd year	121	2.61	.506		
	4th year & above	114	2.66	.477		
using blackboard (LMS)	1st year	28	2.18	.723	3.701	**.012***
	2nd year	80	2.38	.663		
	3rd year	121	2.53	.593		
	4th year & above	114	2.55	.596		
taking notes in a classroom	1st year	28	2.04	.793	4.066	**.007****
	2nd year	79	1.65	.699		
	3rd year	121	1.87	.741		

	4th year & above	114	2.01	.793		
recording a class lecture	1st year	28	1.39	.629	3.599	**.014***
	2nd year	79	1.41	.631		
	3rd year	120	1.70	.729		
	4th year & above	113	1.57	.680		
registering courses	1st year	27	2.19	.786	2.895	**.035***
	2nd year	79	2.14	.780		
	3rd year	121	2.36	.742		
	4th year & above	114	2.43	.678		

Source: Own adjustment based on the collected data ***p<0.05 **p<0.01**

Discussion

The findings of this research demonstrate that almost all students own/use a Smartphone. Students mostly used IPhone and Samsung and the majority of them started using their Smartphones for the first time before five years and more. Also, students always used their Smartphones at their homes and they sometimes used these phones in several other places such as recreation places, university, transportation, and while walking; while they almost never used their Smartphones while driving. Moreover, students always used their Smartphones to do a number of learning activities such as checking the exams schedule, checking class timetable, checking grades, login to the university portal, using blackboard (LMS), using it to participate in the class learning groups, downloading class material, using SIS, reading tutors' announcements, and registering courses. They also sometimes used their Smartphones to do several learning activities such as processing students relating services transactions, payment of fees, sending emails to tutors, taking photos of a class presentation, uploading class assignments, taking notes in a classroom, and using e-library resources, while they never used their Smartphones to record a class lecture.

Furthermore, social networking, learning, privacy, and safety were important reasons for owning/using Smartphones by students; while freedom, social status symbol, fashion, and loneliness were moderately important reasons for owning/using Smartphones by students. In addition, the findings demonstrate that at least one learning activity that students did using their Smartphones varies according to at least one of seven socio-demographic variables (i.e., gender, major, nationality, brand of Smartphone, using it for the first time, age range and level of study). In contrast, one demographic variable has no effect on any of the learning activities (i.e., marital status).

- Female students used their Smartphones for registering courses, sending emails to tutors, using blackboard (LMS), login to the university portal, downloading class material, recording a class lecture, using SIS, checking the exams schedule, and using it to participate in the class learning groups more than males.
- Business students used their Smartphones for processing students relating services transactions, registering courses, and checking grades more than non-business students.

- Kuwaiti students used their Smartphones for processing students relating services transactions and payment of fees more than non-Kuwaiti students.
- Students who had IPhone used these phones for taking photos of a class presentation more than students who had Samsung phones.
- Students who had their Smartphones before five years and more used these phones for processing students relating services transactions, sending emails to tutors, using blackboard (LMS), and using e-library resources more than those who had their Smartphones before four years and less.
- Students who were 33 years old and above used their Smartphones for processing students relating services transactions and payment of fees more than those who were in other age groups.
- Students who were in 4th year and above used their Smartphones for login to the university portal, using blackboard (LMS), and registering courses more than those in other years. However, students who were in 3rd year used their Smartphones for recording a class lecture more than those in other years, and students who were in 1st year used their Smartphones for taking notes in a classroom more than those in other years.

However, the fact that data collected for this study was limited to AOU university students should be taken into consideration. Investigating only one university students might not wholly explain the use of Smartphones behavior, in general.

Conclusion and Implications

Smartphone has great potential to make ‘learning on the move’ ‘anytime, and anyplace’ a realization. The dilemma of this study is that there was a shortage of relevant studies concerning Smartphone usage in Kuwait by people in general and students in particular. The aim of this study was therefore twofold: (i) to explore the use of Smartphone for learning purposes among universities' students in Kuwait and (ii) to identify if there are any socio-demographic differences in this usage among universities' students. A questionnaire with 376 students was conducted in order to achieve the study objectives. The results showed that students always used their Smartphones at their homes and they sometimes used these phones in recreation places and transportation, at university, and while walking. Also, they always used their Smartphones to do ten learning activities such as checking the exams schedule, checking class timetable, and checking grades. Moreover, social networking, learning, privacy, and safety were important reasons for owning/using Smartphones by students. Furthermore, the study found that at least one learning activity that students did using their Smartphones varies according to at least one of seven socio-demographic variables (i.e., gender, major, nationality, brand of Smartphone, using it for the first time, age range and level of study). In contrast, one demographic variable has no effect on any of the learning activities (i.e., marital status).

The results of this research therefore provide information to better improve the experience of blended learning and how to integrate the smartphones in this environment. In this regard, understanding the students' Smartphone usage for

learning could help universities to develop and provide information that may meet the learning needs of the students. This also could provide information on how to implement learning environments that help each student learn best, and to make the LMS more portable to run on smartphones as well. Moreover, this could provide tutors with recommendations on how to communicate with and support students to optimally make use of the smartphones that they have at their disposal.

Furthermore, this could help universities to both communicate more effectively with students and develop regulations and policies that manage the behavioural related issues of using the mobiles in its premises.

On the other hand, the results could be useful for marketers, Smartphone developers, and researchers. The research findings could motivate marketers and Smartphone developers to continuously increase the Smartphone functionality to be more relevant to students. The research also provides a unique perspective of students' dependence on smartphones, which is not much covered in the literature in the Kuwait context.

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