

# **Mobile Phone Use for Academic and Social Purposes among Social Studies Students in the University System in Jordan**

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*This study aimed at identifying mobile phone use for academic and social purposes among social studies students at the Hashemite University in Jordan. The sample of the study composed of 117 students who responded to a 21-item survey. The findings revealed that students use the mobile phone primarily for social purposes. The findings also showed that there are financial obstacles facing students' use of mobile phones. The study recommended the importance of limiting access to social media sites inside the university campus as well as directing faculty members towards activating the use of mobile phones within the instructional process.*

## **INTRODUCTION**

This generation has witnessed the unprecedented technology development which is reflected on different life aspects, including the processes of learning and teaching. Once, there was that kind of closed teaching which is limited in time and place, then came that kind of open teaching that is not restricted to time or place, followed by the type of virtual teaching that could be done any time and at any place, regardless of holidays or certain dates. Here, learning is available all the time, and the learner practices it wherever he is, even while working or moving from one place to another (Ali, 2009).

Electronic devices played a significant role in this framework, like the digital television, the digital radio, or the mobile phone that reached a very large number of people of different classes or locations. For example, its spreading rate in Jordan was 94% (Hiyasat, 2009). So, it has become one of our life necessities, an indispensable gadget that life seems impossible without it (North, Johnston & Ophoff, 2014).

This mobile phone offers chances of expressing ideas and opinions while taking part in televised debates, social media communication, saving documents and messages (Al-Sab'awee, 2008). The teaching field, like other fields, was not far away from being affected by the potentials provided by the mobile phone, which has led to a great change in the teaching environment through using many of its applications, particularly during this time that is characterized by the huge growth in demand for higher education, accompanied by the big decline in the governmental financial support for teaching and learning (Rased, 2011).

Thus, there are the techniques supporting the visually-impaired persons in which text is transformed into sound, and others in which sound is transformed into text to support the persons with hearing

impairments. Also, the mobile phones could introduce topics in the form of audio-formulas for those who are unable to read or write. There are also 3D applications that facilitate learning, in addition to the possibility of adapting learning in accordance to the intended learners, introducing information through interactive atlases, for example, when the learner's style is visual, as well as introducing the same information through other means for other students who have other preferences (UNESCO, 2013).

Reinforcing learning inside the classroom could be done through learning outside the classroom. Connecting formal and informal education is one of the important goals intended by the educationalists for improving the process of teaching. This goal has been achieved by using the mobile phone, through offering students chances for being informed and studying supplementary materials that explain and illustrate ideas introduced by the teachers in the classrooms, thanks to many specific applications like learning a certain language, because these applications talk to students and listen to them. Previously, that required the teacher's presence. Moreover, students could communicate with native speakers when learning a certain language (UN Developmental Program, 2012).

In areas of conflicts and disasters, like the Middle East, mobile phones dramatically contribute to decreasing learning disruption because it is much easier to reform the basic structure related to using mobile phones and their sustainability than other basic structures like roads and schools. Also, teaching using these devices in these areas offer students chances for using instructional resources as well as being connected with their teachers and peers, or even when schools and universities are closed or unsafe (Othman, 2010).

The mobile phone also contributed to simplifying assessment processes and providing more powerful indicators for achieved progress. Instead of waiting for a long time for the learner to get the feedback regarding his understanding of content, the mobile phone, thanks to its interactive functions, offers immediate feedback where learners can identify the weaknesses they have, in addition to its many mathematical applications that enable learners find solutions step by step. They also enable teachers conduct short tests to identify the level of the learners' achievement (Valk et.al. 2010).

As a result, several initiatives for using mobile phones in education have spread all over the world. In South Africa, there is a program for teaching mathematics using the mobile phone called (Dr. Math), which uses immediate messaging. Those responsible for this program ascertain that nearly 100 teachers have used this program in teaching more than 12000 male and female students (Batgereit, 2007).

In Tanzania and Philippines, the Bridgelt project offers basic schools' teachers access to the content of digital video to be used in teaching mathematics, science, English language and life skills using the mobile phones. Also, in India, students use (m-vayo) through their mobile phones to see their scores in the tests they are exposed to (UN Developmental Program, 2012).

In literature, there are many studies that have addressed the use of mobile phones from different perspectives. Several studies referred to the obstacles hindering the use of mobile phones within the educational process, represented by the health damage caused by electrical panels during the use, as well as the possibility of using these gadgets for cheating. Some studies referred to the lack in secrecy for the information loaded on mobile phones sometimes (Charles, 2006) (Al-Sab'awee, 2006; Kiplinger, 2008).

On the other hand, other studies pointed out the increase in using mobile phones among students, represented by navigating the Internet, access to databases, access to information on personal computers, as well as the uses during social events for the purposes of communicating with relatives and friends, the uses for entertainment purposes like listening to music, playing games, photographing, and recording videos. There are also studies that referred to the lack of awareness and guidance related to using mobile phones (North & et.al, 2014; Peterson & Stephen, 2013; Rease, 2013).

Regarding the benefits of using mobile phones within the educational field, some studies assured that its use in this domain helped students promote their academic achievements for the big chances it offered like exchanging information, sharing with others, immediate access to databases, and navigating the Internet (Chen & Lever, 2004; Utulu & Alonge, 2012).

## **STATEMENT OF THE PROBLEM AND QUESTIONS**

In light of the huge technological development and the spread of using mobile phones among all society classes, several studies have addressed the topic of mobile phones uses. Given that these related studies conducted in the Middle East area in general and Jordan in particular were rare, since Jordan is taking serious steps for the purpose of getting access to technology era and using mobile phones in the educational field, and since university students form an important segment in the Jordanian society who use mobile phones, this study came up to identify the way students use this device and their benefit from that use, and as a result identifying the obstacles and difficulties they face when using them.

Therefore, this study tried to answer the following questions:

- Will exploratory factor analysis (EFA) of the questionnaire Mobile Use Survey (MUS) result in an interpretable factor structure of latent constructs?
- What are the areas of using mobile phones by students enrolled in the course of social studies at the Hashemite University, College of Educational Sciences?
- What are the obstacles facing students who use mobile phone?

## **IMPORTANCE OF THE STUDY**

Revealing the areas of using mobile phones among students and the obstacles that hinder this use would benefit those involved in this field, as follows:

- As for students: identifying the areas of using mobile phones help in reconsidering the way of using this device as well as directing that use towards educational purposes, to reduce time wasted in purposeless use.
- As for faculty members: that information helps enabling the faculty member in investing the use of mobile phones for educational process as well as developing it, like providing students with additional information and explanations related to the material which the teacher may not be aware of. Also, they can benefit from the use of mobile phones in providing students with tests dates and accidental changes that may happen, saving time and efforts for both students and teachers.
- As for parents: that information enables them to guide their kids and adjust their behaviors regarding the use of the mobile phone, as well as for the financial budget allocated for its use.
- As for university administrations: setting up strategies related to the way of using mobile phones inside the university campus while ensuring the maximum benefit of that use.

## **METHODOLOGY**

### **Population and Sample**

The study population was composed of students of the Educational Sciences College at the Hashemite University during the academic year 2014/015, with a total of 1100 students, whereas the sample contained 117 male and female students enrolled in the course of Social Studies, who were chosen purposively in order to achieve the study goals.

### **Data Collection Methods**

For achieving the study goals, a specific questionnaire was designed (Mobile Use Survey), distributed among the students during the lecture time, and they were asked to put an (X) in front of the item that matches their use of mobile phones. Also, students were exposed to an explanation about their responses as well as the study goals, and they were assured that information will be treated in secrecy, used only for the purposes of the research. They also drew students' attention to the importance of giving precise and subjective answers so as to be able to come up with true and authentic results.

## **Instrumentation**

For the purpose of achieving the study goals, related literature was reviewed regarding this field as well as the related studies (Rease, 2013), (North et.al, 2014), (Ali, 2009), (Madawi, 2013). As a result, the questionnaire was built in two parts as an initial version. The first part was related to the areas of using the mobile phones, consisting of 33 items, whereas the second part was related to the obstacles that hinder its use, consisting of 14 items. Likert scale was adopted, as follows: (1) little degree, (2) medium degree, (3) high degree. Means were estimated as follows: (1-1.66) referring to little degree, (1.67-2.33) are referring to medium degree, (2.34-3) referring to high degree.

### *Instrument Validity*

For ensuring the validity of the questionnaire, it was reviewed by eight referees, specialists in instruction technology, psychology and education, who were members of the faculty at Jordanian universities, so that they could be able to offer their views regarding the following aspects:

- How much do the questionnaire items cover the study purposes?
- How much do the questionnaire items suit the qualities of the sample participants?
- The language used and the form to be introduced to the study sample.

They offered their notes which focused on deleting some items which were inappropriate or using ambiguous or difficult terms. The items which were deleted or modified were the ones agreed upon by three or more referees, so that the final version of the questionnaire appeared having 28 items in the first part, and 9 items in the second. After conducting the factor analysis, the first part had only 20 items.

## **RESULTS**

### **Results Related to the First Research Question**

Research question one asks “Will exploratory factor analysis (EFA) of the spirituality in the workplace questionnaire (MUS) result in an interpretable factor structure of latent constructs?” Principle axis factoring was performed utilizing the oblique rotation method to uncover the underlying structure of the (MUS). Before conducting exploratory factor analysis, the data were screened in several ways to ensure their normality and appropriateness for factor analysis. With respect to normality, visual inspection of the histogram, mean, median, mode, skewness, and kurtosis for each item and for the whole data shows that the data were normally distributed.

With regard to the appropriateness of the data for factor analysis, two statistical tests (overall Measure of Sampling Adequacy (MSA) and the Bartlett Test of Sphericity) were conducted. MSA is an index used to determine the appropriateness of the data for factor analysis (Hair et al., 1998). The MSA assesses the degree of intercorrelations among variables and provides information about the appropriateness of the data for factor analysis. An MSA value above .90 is considered meritorious. On the other hand, the Bartlett Test of Sphericity measures the “overall significance of all correlations within a correlation matrix” (Hair et al., 1998, p. 88).

The null hypothesis states that there is no factor structure for the data at hand and then the goal is to reject the null hypothesis. A p-value below .05 indicates that there is a factor structure for the data and it is appropriate to run factor analysis. The results of the MSA (.77) and the Bartlett Test of Sphericity ( $p < .05$ ) indicated that the data were suitable for factor analysis. It is also desirable to have at least three items loading on each factor, which was satisfied in the present investigation

To justify the application of factor analysis, it is important to ensure that the correlations of the data matrix for the variables have a substantial number of correlations above .30 (Hair et al., 1998). Visual inspection of the data matrix revealed a substantial number of correlations greater than .30. Moreover, the anti-image correlation matrix (with negative partial correlations) indicated a low partial correlation between the variables. The anti-image correlation matrix is important to consider because it includes information about partial correlations. Low partial correlations suggest “true” underlying factors exist because the variables can be explained by the factor that loads on each variable.

Finally, there are certain assumptions associated with factor analysis. These assumptions are multivariate normality, homoscedasticity, and linearity. According to Hair et al. (1998), these assumptions are more conceptual than statistical. Only multivariate normality is necessary if a statistical test is applied to the significance of the factors. The Bartlett Test of Sphericity with  $p < .05$  confirmed this assumption.

Exploratory factor analysis procedures were completed for the purpose of identifying the latent constructs underlying the data. The criteria for determining how many factors to extract included the eigenvalue greater than one rule and a visual inspection of the scree plot (Ary et al., 1996). The initial analysis was run without specifying how many factors to retain. This procedure resulted in three factors explaining 33.56% of the common variance (see Table 1). These factors were described as follow:

1. Mobile and social use. The first factor included eight items with a reliability estimate of .76 and accounted for approximately 19% of the total variance in all items. Mobile and social use factor measures the extent to which student use the mobile for social purpose.
2. Academic self –use of the mobile. This factor included six items with a reliability estimate of .70 and accounted for almost 10% of the total variance. This factor measures the degree to which student use the mobile to achieve self – purposes.
3. Academic communicate with others. This factor included seven items with a reliability estimate of .77 and accounted for almost 4% of the total variance. This factor measures the degree to which student use the mobile to communicate with the other student of faculty members.

**TABLE 1**  
**FACTOR LOADINGS, EIGENVALUE, AND VARIANCE EXPLAINED**  
**FOR THE THREE FACTORS**

1 (social use) $\alpha = .758$		2 (Academic self-use) $\alpha = .702$		3 (academic communicate with others ) $\alpha = .774$	
Items	Loading	Items	Loading	Items	Loading
1	.520	1	.659	1	.736
2	.444	2	.622	2	.713
3	.427	3	.509	3	.666
4	.418	4	.505	4	.558
5	.413	5	.466	5	.544
6	.383	6	.414	6	.524
7	.373			7	.329
8	.352				
5.970		3.424		1.781	
19.168		10.058		4.339	

Items were retained on factors if they had a minimum factor loading of .30. Items with a multiple cross-loading of .20 and above on at least two factors were deleted from the factor. The .30 level is a generally accepted minimum factor loading because it indicates that approximately 10% of the variance for a corresponding variable has been explained by a factor (Tinsley & Tinsley, 1987).

The pattern matrix was chosen to examine the data instead of the structure matrix because in using the oblique rotation method we were interested in the unique variance accounted for by each factor. Also, because the pattern matrix yields partial weights, the values in this matrix are more appropriate to interpret (Hair et al., 1998). Using these criteria, 21 items were retained on the (MUS). In brief, the loading of items was characterized by an interpretable simple structure, meaning that they had high loadings on the major factor and low cross-loadings on the other factors. The three factors had acceptable

reliabilities as estimated by Cronbach's Alpha which ranged from .70 to .77, these reliabilities exceeded Nunnally and Bernstein's (1994) suggested minimum reliability of at least .70 for instruments in early stages of development.

### Results Related to the Second Question

What are the areas of using mobile phones by students enrolled in the course of social studies at the Hashemite University, College of Educational Sciences? To answer this question, means and standard deviations were calculated for the 3 factors mentioned in the tool of the study. Then, the degree of using mobile phones was categorized by students into 3 levels as follows:

- The mean ranging (1-1.66) refers to a little degree of using it.
- The mean ranging (1.67-2.33) refers to a medium degree of using it.
- The mean ranging from (2.34-3) refers to a high degree of usage.

Data displayed in table (2) show that the students who responded to the items related to the 3<sup>rd</sup> factor (using the mobile phone within the social aspect) scored a high degree compared with the 2<sup>nd</sup> factor (using the mobile phone within the self-academic aspect) and the 1<sup>st</sup> factor (using the mobile phone within the interactive academic aspect).

**TABLE 2  
MEANS & SDS FOR THE AREAS OF USING MOBILE PHONES**

No.	Factor	Mean	SD
3	Mobile phone and social use.	2.65	.38
2	Self-academic use of the mobile phone.	2.36	.42
1	Interactive-academic use of the mobile phone.	1.54	.43

Considering the statements of each factor, data shown in table (3) indicate that students responded to the item related to using the mobile phone for communicating with friends and relatives as the most use they have, with a mean that was (2.81) and a standard deviation that was (0.47), followed by the use of mobile phones for sending congratulation messages during celebrations and occasions, with a mean (2.73) and a SD (.56). On the other hand, the students' responses to the item related to using the mobile phone for communicating with the other gender indicated that this item has the least use, with a mean that was (2.35) and a SD (.73).

**TABLE 3  
MEANS & SDS FOR THE 3<sup>RD</sup> FACTOR ITEMS**

No.	Factor	Mean	SD
1	I use the mobile phone to communicate with friends and relatives.	2.81	.47
2	I use the mobile phone to send congratulation messages during celebrations and social occasions.	2.73	.56
3	I use the mobile phone to know the dates of meetings with friends.	2.70	.54
4	I use the mobile phone to assure my colleagues and relatives' health.	2.70	.54
5	I use the mobile phone to invite my friends and relatives to attend some social events.	2.59	.64
6	I use the mobile phone to communicate with the other gender.	2.35	.73

That result could be ascribed to the fact that the mobile phone has started to be an overall phenomenon and specific culture, as a mean for quick social communication, and a mean for exchanging opinions and points of view during social debates, because of lots of features they have like overcoming the difficulties of time and place while communicating; i.e. mobile phones could easily be used anytime for achieving social interaction, and that doesn't require the burden of travelling, moving, preparation or pre-planning (Diab, 2006).

On the other hand, many students find themselves having to communicate with their families more than once daily, especially in emergencies, since families feel uncertain about their children, so they need to call them.

Using the mobile phone within the social aspect is much easier than using it within the academic aspect given the possibility of having social communication through using short messages (SMS), using ready-to-use texts, or sending a message received earlier. All of that could not be used when using the mobile phone within the social aspect (Hina & Anna, 2012).

Moreover, some companies offer during social occasions and events some free services, and that could increase the use of mobile phones within this aspect. Those results were compatible with the studies of (North, Johnston & Ophoff, 2014) and (BalaKrishan & Raji, 2012).

That is ascertained when considering the items related to this factor where the items related to using the mobile phone for communicating with friends and relatives came first, whereas the use for sending congratulation messages during occasions and celebrations came second.

The last ranks within this domain of mobile phones use were occupied by the items (I use the mobile phone to invite my friends and relatives to attend some social events) and (I use the mobile phone to communicate with the other gender). That is ascribed to the scarcity in social events regarding the students themselves, and if they have any, they don't exceed just one single social occasion which is the student's birthday.

Regarding communicating with the other gender, it is often done inside the university, so they don't largely need to use the mobile phone, whereas at home, there is so many restrictions and monitor imposed by the society's values and traditions that in turn restrict their use of the mobile phone for this purpose. Regarding the use of the mobile phone in relation to the items of the second factor (academic domain or self use), data displayed in table (4) indicate that the students' responses on the items related to (using the mobile phone to know the dates of tests and lectures) make it the most use they have with a mean (2.51) and a SD (.70), followed by the use of the mobile phone (to know my scores in tests) with a mean of (2.47) and a SD (.61). on the other hand, the least use students recorded was for the item related to using the mobile phone for conducting mathematical calculations via the Calculator application) with a mean (2.13) and a SD (.71).

**TABLE 4**  
**MEANS & SDS FOR THE 4<sup>TH</sup> FACTOR ITEMS**

No.	Factor	Mean	SD
1	I use the mobile phone to know the dates/timing of lectures and tests.	2.51	.70
2	I use the mobile phone to know my scores in tests and exams.	2.47	.6
3	I use the mobile phone to get access to teaching materials that satisfy my needs via the Internet.	2.42	.68
4	I use the mobile phone to get access to databases in the library.	2.39	.75
5	I use the mobile phone to record lessons, save and recall them.	2.34	.74
6	I use the mobile phone as a diary for my academic assignments.	2.32	.70
7	I use the mobile phone to translate many ambiguous words while studying.	2.32	.72
8	I use the mobile phone to conduct mathematical calculations using calculator.	2.13	.71

Results related to the self and interactive academic domains could be ascribed to several issues, including the fact that students lack the needed skills and determination for using the mobile phone within the academic domain, with its 2 branches, as well as lack of desire for change and depending only on traditional learning styles (Ali, 2009).

On the other hand, many courses don't require the large use of the mobile phone, in addition to limited academic subjects within this domain.

When considering the items of the self-academic factor, we find that the use of the mobile phone for checking the timetables for tests and lectures, and for checking their scores in tests came first, and that is natural because these purposes are some of the priorities for any student and they are indispensable, while in the last ranks came the items of using the mobile phone for translating and for conducting calculations. That is ascribed to the nature of academic courses, where most of them that are related to the program of teachers of the first three grades are studies in Arabic, free of complex mathematical calculations. Consequently, not needing to use such applications helped in decreasing the percentage of mobile phone use within these items.

Regarding the use of the mobile phone within the items of the 1<sup>st</sup> factor (academic aspect, interactive use with others), data displayed in table (5) showed that the students' responses on the item related to (using the mobile phone for exchanging multi-media messages with the parties involved in the teaching process) indicated it is the most use with a mean (1.80) and a SD (.079), followed by the item related to using the mobile phone for exchanging SMS among the parties involved in the teaching process with a mean (1.65) and a SD (.076), whereas the students' responses for the item related to using the mobile phone for conducting direct visual and interactive calls, with sight and sound, with the parties involved made it appear as the least use with a mean (1.38) and a SD (.58).

**TABLE 5**  
**MEANS & SDS FOR THE 1<sup>ST</sup> FACTOR ITEMS**

No.	Factor	Mean	SD
1	I use the mobile phone to exchange multi-media messages with the parties involved in the teaching process.	1.80	.79
2	I use the mobile phone to exchange SMS with the teaching process parties.	1.65	.76
3	I use the mobile phone to exchange files and e-books via Bluetooth.	1.57	.66
4	I use the mobile phone to communicate with my professors regarding ht teaching process.	1.57	.66
5	I use the mobile phone to organize video conferencing among the teaching process parties.	1.39	.60
6	I use the mobile phone to conduct direct visual and interactive calls, sight and sound, with the parties involved in the teaching process.	1.38	.58

Regarding the other academic aspect, the interactive one with others, it occupied the last rank, and that could be ascribed to several reasons, like the inability to find the academically suitable partner who shares academic interests and tendencies, particularly that the Hashemite University applies the 4-term system during the academic year, and that doesn't offer students enough time to interact with others or find the suitable partner. It also seems that the courses' nature and their activities don't require such an interaction.

When considering the items related to this factor, we notice that the items related to using the mobile phone for exchanging multi-media messages, as well as for exchanging SMS came first, and that is because of the little cost of using the mobile phone within this domain on one hand, and its easy use on the other, since its use doesn't require high level skills nor more time. That agrees with the study of (Al-



Harithi, 2008) where the percentage of students' satisfaction and acceptance reached a very high level when dealing with these technologies, and this may be ascribed to another reason which is lack of students' assignments within the courses they are enrolled at, and which allow them use the mobile phone in cooperation with other colleagues.

On the other hand, the items that occupied the last ranks were the use of the mobile phone for organizing video conferences and conducting direct visual and interactive calls with sight and sound. This is ascribed to the need of having modern devices for achieving these uses, and that is not available for all students. That appeared also within the obstacles that hinder the mobile phone use as well as the high financial cost for conducting such type of communications, in addition to lack of desire among students, especially females, towards publishing their personal photos on the Internet, something they are usually afraid of because they think their photos would be misused. Also, using visual calls requires tremendous preparation in appearance and grooming, the thing most students don't like when having communications, so it is better to use only the traditional way of communicating.

### Results Related to the Third Question

What are the obstacles facing the students enrolled at the course of Social Studies at the Hashemite University? To answer this question, means and standard deviations were calculated for the items related to these obstacles, mentioned in the study tool. The obstacles facing students who use mobile phones were categorized into three levels as follows:

- The mean ranging (1-1.66) refers to a little degree obstacle.
- The mean ranging (1.67-2.33) refers to a medium degree obstacle.
- The mean ranging from (2.34-3) refers to a high degree obstacle.

Data displayed in table (6) show that the students' responses to the items related to the obstacles that hinder the mobile phone use indicate medium degree obstacles, where the mean was (2.23) and the standard deviation was (.31).

**TABLE 6**  
**OBSTACLES TO USE MOBILE PHONE**

	Mean	SD
Obstacles	2.23	.31

Data displayed in table (7) show that the students' responses to the items related to the financial cost for the mobile phone model indicate high degree obstacles, where the mean was (2.48) and the standard deviation was (.68).

When considering these obstacles or difficulties, we notice that they focused on the financial and technological aspects, which are closely related, indicating that, despite the wide use of mobile phones among students, still they suffer from some difficulties. However, the financial difficulty came at the front of all since the use of this phone within the instructional process requires a high financial cost, and that reduces the student's ability to buy a modern one, in addition to his ability to cope with the recent developments in this domain.

That agrees with what (Younis, 2013) pointed out regarding the students' weak purchasing power in general, and their inability to tolerate the financial burdens so as to cope with the technological advancements within this domain. That undoubtedly relates to poverty and low income in the Arabian region in general (Ali, 2009). Therefore, the item related to the small size screen in the second rank due to students' inability to buy a big-screen device which is usually very expensive. This study agrees with the study of (Dyson, Raban, Litchfiel & Lawrence, 2008).

**TABLE 7**  
**MEANS & SDS FOR THE ITEMS RELATED TO OBSTACLES**

No.	Item	Mean	SD
1	Financial cost determines the phone model and its use.	2.48	.68
2	The small size of the screen reduces the clarity of information and reading it.	2.48	.73
3	Unavailability of modern facilities (cameras or videos) in the phone.	2.46	.74
4	Using the mobile phone during the instructional process leads to distracting students' attention.	2.43	.76
5	High financial cost for mobile phones services limits their use.	2.24	.69
6	The small size of the screen reduces the amount of information displayed.	2.21	.74
7	Difficulty in information entry due to small size keypad.	1.95	.75
8	Rules and faculty members who refuse the use of mobile phones sometimes.	1.94	.75
9	I am unable to use the mobile phone because of being busy doing other assignments.	1.87	.61

## RECOMMENDATIONS

In light of the findings that this study came up with, the researcher recommends the following:

- Applying technical measures by the university departments for the purpose of standardizing students' access to social media sites while being inside the campus.
- Encouraging and directing the faculty members towards activating the use of mobile phones within the academic process plus some various tasks.
- Activating the use of university labs regarding visual communication for academic purposes, then students will be encouraged to use it via the mobile phone.
- Overcoming the financial difficulties of using the mobile phone through making university departments adopt initiatives that facilitate students' having modern phones that meet academic purposes, as well as enabling students use mobile phones inside the university campus for academic communication with low fees.
- Conducting similar studies on other samples having different scientific specialties so as to identify the way students of scientific colleges use their phones.
- Involving new variables while conducting similar studies like the economical status, gender, number of times they use the phone, and the length.

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