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## AN INVESTIGATION OF THE SELF-PERCEIVED USE OF MOBILE PHONES AND THEIR IMPACT ON EFL STUDENTS' ENGAGEMENT IN THE MIDDLE EASTERN CONTEXT

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### **ABSTRACT**

*The availability of mobile phones has provided opportunities for researchers to explore their impact on education. English language teaching is not an exception in this matter. The literature review indicates that mobile phones provide improved opportunities for portability, social interaction, contextualization of learning, and personalization. The study used a quasi-experimental research model to explore how students perceive the use of mobile phones and how this use impacts student' engagement and can facilitate the learning process at an English Language Institute (ELI) at a Saudi Arabian university. The data collected from Forty-four male students doing the Preparatory Year Program (PYP) shows that the use of mobile phones in the classrooms can enhance students' engagement. Based on the evidence from empirical research, it is concluded that the use of mobile phones in the teaching and learning process enhances students' engagement.*

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**KEYWORDS**

*Mobile Assisted Language Learning, engagement, language learning, teaching technology*

**INTRODUCTION**

There has been an emerging inclination of using mobile phones for educational commitments (Tembe, 2021) and teachers and students use these mobile devices for sharing information, looking for difficult words, and other academic purposes (Mohammadi *et al.*, 2020). Mobile phones are prevalent in the life of students as well as teachers living and teaching in the Middle East (Ahmed *et al.*, 2013). The accessibility and availability of mobile phones in the English as a Foreign Language (EFL) classroom in the Middle Eastern context further strengthen the researchers' perspective of m-learning through these devices anywhere and anytime. Though mobile phones were not originally designed for educational purposes, their ever-increasing features have made them useful devices for learning (Ahmad, 2020; Iqbal and Bhatti, 2020; Abidin and Tho, 2018; Matimbwa and Anney, 2016). Mobile phones can play a very effective role in increasing the motivation level of EFL learners to actively engage them in the learning process. Motivation refers to "a student's willingness, need, desire, and compulsion to participate in, and be successful in the learning process" (Bomia, *et al.*, 1997, p.1). To support this statement, Amer (2010, p.14) claims that "[h]ighly motivated learners tend to spend more time in their learning process, are attentive during a given learning task, and tend to be risk-takers in their learning, which enables them to use failure and success to their benefit in their learning process. Many researchers are of the view that technology-equipped classrooms enhance students' motivation because of the interactive and multimedia-enabled activities (Baharom, 2013; Hashemi *et al.*, 2011; Anderson and Speck, 2001). Gardner (1985) found that, about language learning, there is a strong relationship between motivation and success in language learning. Regarding the relationship between motivation and technology, Anderson, and Speck (2001) state that the use of technology in a language classroom not only motivates the learners but also engages them in speaking, reading, listening, and writing easier. Researchers such as Hashemi *et al.*, (2011) also state that the just-in-time aspect of mobile learning increases the learning performance of the learners.

**Conceptual Framework**

According to Siemens (2005, p.1), in the last two decades, the emergence and integration of technology in our learning contexts have "reorganized how we live, how we communicate, and how we learn". Defining learning in this newly established learning environment, Siemens (2005) asserts that we learn through communities of practice, personal networks, and by completing the tasks related to our work. Siemens

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(2005) believes that in many situations learning activities and work-related tasks are the same where learning is considered an ongoing process. By using mobile phones for learning, students have several information sources that can provide them with more opportunities to learn. One of the basic principles of connectivism is that it is important to have a diversity of opinions upon which learning and knowledge rest (Siemens, 2005). It implies that relying on one source of knowledge or learning is not sufficient. That is to say, textbooks are not enough; we need to provide extra support to our learners. And the use of mobile phones inside the classroom can play a vital role in providing more material support.

Learning is a process in which collaboration is needed to acknowledge the impact of new tools and the changing learning environments. In this digital era, learning is not the same as a few decades ago. Due to the rapid evolution of technology, knowledge grows rapidly, and our learners need the skills to acquire the ever-growing amount of information to meet the needs of this technological era. Siemens (2005) asserts that it is more important to learn about our needs for tomorrow than our current knowledge. This idea infers that the aim of learning is to prepare our learners for the future while utilizing mobile phones in teaching can provide greater opportunities for our learners inside and outside the classroom.

## **LITERATURE REVIEW**

Mobile phones have seamlessly integrated into our daily routines, extending their presence into the realm of education. This review of literature aims to delve into how EFL students in the Middle East perceive their mobile phone usage and the possible repercussions on their engagement levels. This research area assumes significance given the escalating role of technology in education and the distinctive features of the Middle Eastern educational milieu.

### **Mobile Learning Defined**

Mobile learning (m-learning) has been a debatable topic in education since the emergence of cell phones and wireless technologies. Lately, this interest has advanced rapidly due to further technological advances that are paving a simpler and more interesting way for mobile technology to be used to support learning (Masullo *et.al.*, 2021). Researchers in the field of mobile learning are of the similar opinion that there is no single definition to the term m-learning (Ahmed et al. 2013; Kukulska-Hulme, 2009; Sharples, 2006; Traxler, 2005). The literature on mobile learning is full of a techno-centric perspective (Sharples, 2006; Winters, 2006) and technical terms (Kukulska-Hulme, 2009). This techno-centric approach to m-learning has been criticized by many researchers such as Traxler (2005); Traxler (2009) and Kukulska-Hulme (2009). Their criticism is that mobile learning is only described by its computing hardware, technical attributes, and capabilities such as the portability,

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pervasiveness, and ubiquity of the devices while the pedagogical perspectives of mobile learning are ignored.

Some researchers, such as those mentioned above, associate m-learning with ubiquitous learning (u-learning) or even pervasive learning (p-learning). Associating m-learning with ubiquitous learning or pervasive learning means limiting the characteristics of m-learning to mobility and context awareness. As mentioned earlier there is not a single accepted definition of m-learning in the literature on which all the researchers agree upon. There are many different m-learning perspectives in the related literature on mobile learning. Each definition varies on different grounds, features, and aspects of mobile learning such as mobility of devices, mobility of learners, individualism, ubiquity, self-paced learning, instructor-led learning, or e-learning. M-learning has not been developed enough to have a solid or accepted definition. Almost all the scholars in the field agree that mobile learning needs to be further researched and explored to conclude. Hence, most of the scholars on mobile learning are of the opinion that pedagogy, technological devices, context, and social interactions are the fundamental constructs of m-learning. However, the definition of m-learning proposed for this study is highly contextualized and is relevant to the environment where the research is conducted. Therefore, it can be assumed that mobile learning is a learning method, which facilitates both face-to-face and distance learning without any time and place limitations through handy and portable connected devices.

### **Mobile Phone Usage in EFL Learning**

Mobile phones have evolved into formidable aids for language acquisition, affording EFL learners' easy access to a plethora of language learning tools, including apps, podcasts, and online resources. Research conducted by Warschauer and Healey (1998), as well as Stockwell (2008), has underscored the promise of mobile technology in language education, stressing its capacity to foster autonomy and learner-centric methodologies.

### **Impact on Engagement**

The manner in which EFL students perceive their mobile phone usage holds substantial sway over their engagement levels. Motivation, a pivotal determinant of engagement, can experience an upswing with the introduction of mobile language learning applications (Motteram et al., 2009). As proposed by Hamari et al. (2014), the incorporation of gamification elements within these applications has the potential to render language learning not only more captivating but also more pleasurable, thereby augmenting students' intrinsic motivation.

### **Challenges and Concerns**

Nonetheless, complications emerge due to the susceptibility to distractions and the

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risk of developing an addiction to social media and non-educational content (Junco & Cotten, 2012). An excessive reliance on and overuse of mobile phones can have adverse consequences on engagement levels within conventional classroom environments (Lepp et al., 2014). Furthermore, the presence of a digital divide within the Middle Eastern context has the potential to restrict equitable access to mobile technology, potentially worsening disparities in engagement.

Within the Middle Eastern context, where English as a Foreign Language (EFL) education holds immense significance, gaining insight into how students perceive their mobile phone usage and its effects on engagement becomes imperative. While mobile phones present substantial benefits for language acquisition, educators and policymakers should proactively tackle the associated challenges and apprehensions. It is essential for forthcoming research to investigate approaches that harness the potential of mobile technology while concurrently alleviating its adverse impacts, ultimately advancing the cause of effective EFL education in the region.

### **RESEARCH OBJECTIVES**

1. To find out the perceptions of university students about the use of mobile phones in general.
2. To find out the perceptions of the use of mobile phones in learning English as a foreign language at a Saudi university.
3. To explore the opportunities and challenges of using mobile phones as a learning tool in the classroom.
4. To explore the way in which mobile phones be used to engage and motivate students of English as a foreign language at a Saudi university.

### **RESEARCH QUESTIONS**

1. What are the perceptions of university students about the use of mobile phones in general?
2. How do students perceive the use of mobile phones in learning English as a foreign language at a Saudi university?
3. What are the challenges and opportunities of using mobile phones as a learning tool in the classroom?
4. How can mobile phones be used to engage and motivate students of English as a foreign language at a Saudi university?

### **RESEARCH METHODOLOGY**

For this study, the main research question focused on the influence of mobile phones on the motivation and engagement of EFL learners at a Saudi Arabian university. The mixed methods design was identified as the most appropriate method for this

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investigation. Preference was given to the mixed methods approach because of its unique attributes that Creswell and Plano Clark (2018) describe. Creswell and Plano Clark (2018) claim that combining quantitative and qualitative methods can expedite the collection of more reliable and valid data as compared to a single method.

### **Population and Sampling Procedure**

According to Bryman (2012, p.187), the population is "... the universe of units from which the sample is to be selected". Walliman (2006) asserts that a population of a study can consist of objects, people, or even events. In short, a population is a group of participants that a researcher uses for a research study. In this study, the population was the participants at the English Language Institute (ELI) at a Saudi Arabian university, who provided the information that helped to answer the main research question. Forty-four (44) Intermediate level (CEFR B1/level 104) male students comprising both (control and experimental) groups of Arab origin, between the ages of 18 and 26 doing the Preparatory Year Program (PYP) at the ELI were randomly selected to participate after obtaining their written consent. Different sections of level 104 students (CEFR B1) were invited to participate in this study. The researchers examined the sections with the most volunteers and chose one section as a control and one section as an experimental group. Those students who declined to participate in the chosen sections were requested to transfer their sections and move to other sections.

### **Data Collection**

For this study, an embedded sequential mixed methods design was preferred because of the nature of this study. In this quasi-experimental study, data was collected using various data tools to answer the main question. In this study, the researchers gathered supportive qualitative data along with quantitative data in three phases: before the intervention (use of the mobile phone), during the intervention, and after the intervention. Both methods (quantitative and qualitative) are embedded in combination throughout the entire process of data collection and analysis. The researchers embedded a supplemental quantitative strand within a larger qualitative design before and after the intervention phases. During the intervention phase, a supplemental qualitative data set was collected to get a deeper understanding of the intervention process and to follow up results of the experimental trial.

### **Phase I. Students' pre-intervention survey questionnaire**

The students' survey questionnaire was designed, processed, and analyzed using Google Forms. The questionnaire was used to gather participating students' biographic information, information about their use of mobile phones, their perceptions about and preferences regarding the academic use of mobile phones.

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**Phase II. Focus group discussions**

A focus group mode of inquiry was adopted to investigate the perceptions of the experimental group of students about the suggested activities done on paper and on mobile phones. There were two sessions of focus group discussions: one after the second week of teaching and the other at the end of the presentation of the module.

**Phase III. Students' post-intervention survey questionnaire**

At the end of the intervention stage in the study, a close-ended questionnaire consisting of 56 questions was given only to the experimental group students to gather data about the use of mobile phones in the classroom and to see if there is any change in the perceptions of the students regarding the use of mobile phones. Only experimental students were given this questionnaire as control group students did not take any part in the intervention stage.

**DATA ANALYSIS**

Data analysis is the stage where the researchers consider all data relevant to the study and disregards all irrelevant data. Mixing of the data is the most important component of analysis in mixed methods designs. The mixing of data can occur during the analysis or interpretation phases of the research and the data can be merged, embedded, or connected (Creswell and Plano Clark, 2018). In this study, the quantitative and qualitative data were collected and analyzed over three phases. In Phase I (pre-intervention stage), survey questionnaires were used to collect the combined datasets. In Phase II (interpretation stage), qualitative data were collected in the form of group discussions. In Phase III (post-intervention stage), the questionnaire offered quantitative data. The data gathered from all three phases were analyzed separately at each phase and merged at the interpretation stage to give a more holistic picture in answering the research question. The descriptive statistical analysis of quantitative data was done using Google Forms. The descriptive data were presented in a visual form that included graphs and charts. Thematic data analysis was applied to extract themes. Similar emerging themes were grouped into similar subcategories that created major themes/categories. These categories and subcategories are displayed in the form of charts.

**FINDINGS****Phase I (Before Intervention)**

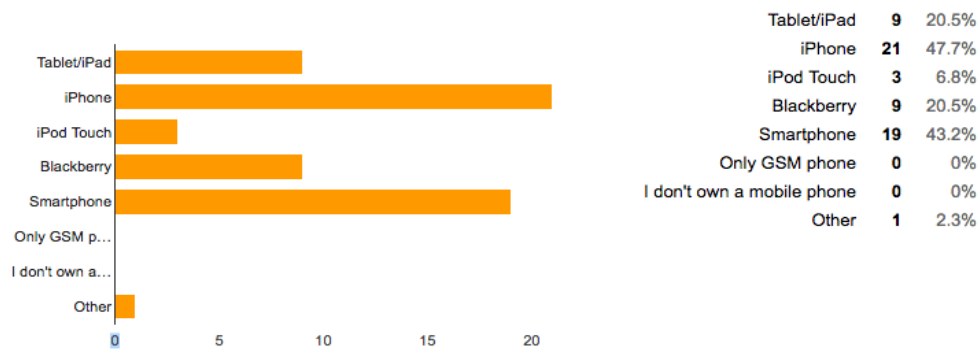
Before the intervention with mobile phone-based activities in the experimental group, the researchers wanted to determine the perceptions of the participating students of both experimental and control groups (N=44) about the use of mobile phones in their academic and personal life. The survey was divided into three main sections: students' use of mobile phones, the academic use of mobile phones at the ELI, and their preferences regarding mobile phone usage in academic settings. There were 44

students who agreed to be part of this study and all of them answered the questionnaire, which was distributed to them on the first day of their classes in module 4. At the beginning of the module, 47 students were enrolled for level 104 (CEFR B1) at the ELI in controlled and experimental classes, but the following week three students were unregistered by the management due to some unknown reasons.

**Question 1: Which of these devices do you own?**

The responses to this question showed that every student owned at least one mobile phone. Some of the students even owned more than one mobile device. The responses clearly indicated that the affordability of internet-enabled mobile devices in the classroom was not an issue at all. The following figure 1. illustrates the results.

**Which of these devices do you own?**

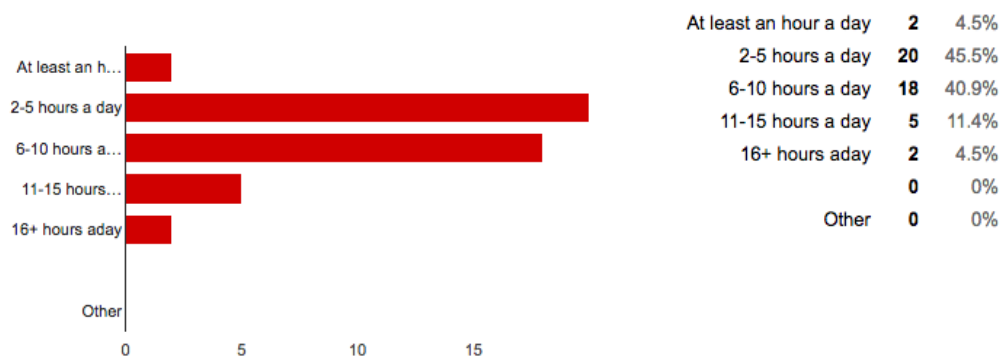


**Figure 1: Ownership of mobile devices**

**Question 2: How much time do you spend on using your mobile phone every day?**

Twenty students out of 44 (45.5%) mentioned that they spent at least 2-5 hours a day using their mobile phones and 18 students (40.9%) used mobile phones 6-10 hours a day. The results are shown in Figure 2.

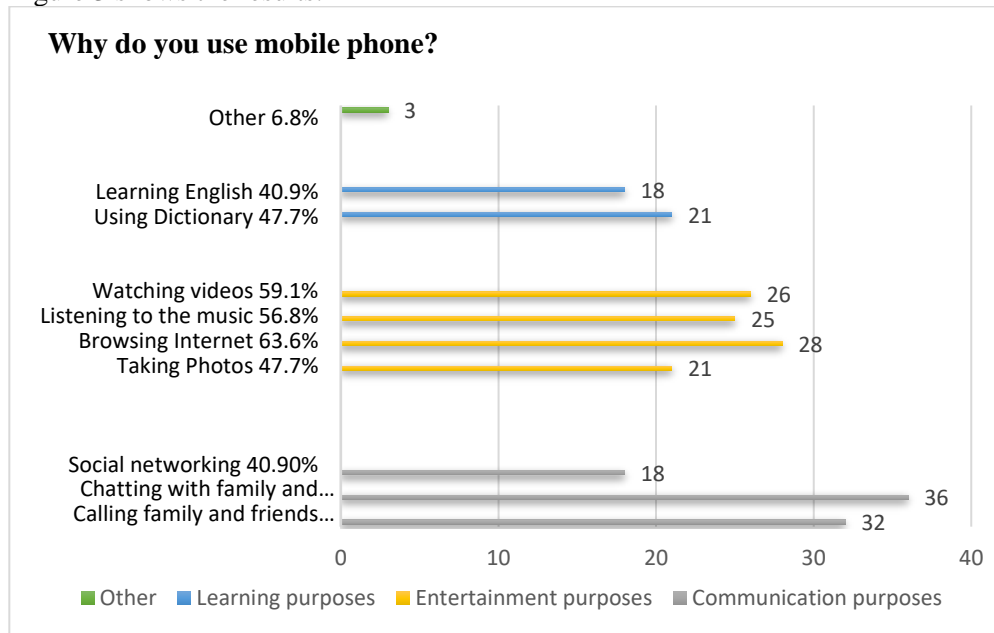
**How much time do you spend on using your mobile phone every day?**



**Figure 2: Time spent using a mobile phone.**

**Question 3: Why do you use a mobile phone?**

This question was further divided into three main categories: using the mobile phone for communication, entertainment, and learning. Communication included calling family and friends, chatting with family and friends and social networking. Taking photos, browsing the Internet, listening to music, and watching videos fall under the category of entertainment. Participants were given the opportunity to select more than one option. The questionnaire also made provision for other uses of the mobile phone. Figure 3 shows the results.



**Figure 3: Reasons for using a mobile phone**

It was clear, from the above chart, that students mostly used the dictionary feature on their mobile phones for learning purposes. Twenty-one out of 44 students (47.7%) mentioned that they used the dictionary feature on their mobile phones while 18 out of 44 (40.9%) students used their mobile phones for learning English.

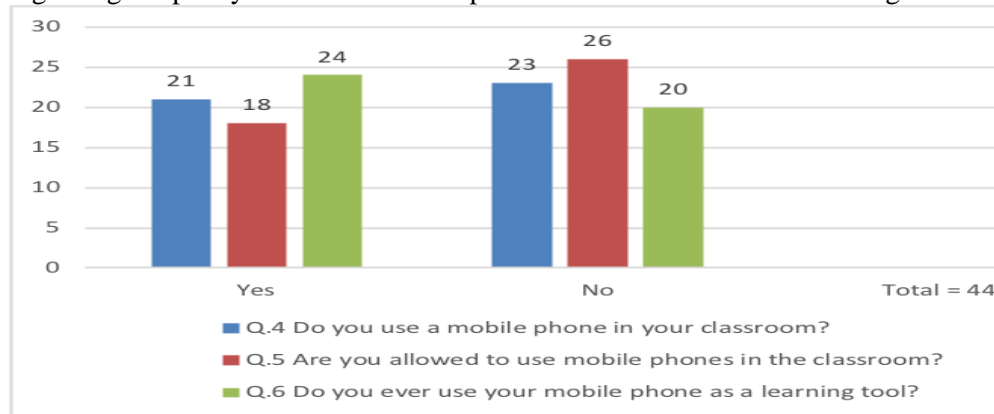
Indicating their use of mobile phones for entertainment, 28 out of 44 students (63.6%) browsed the Internet for different purposes, while 26 out of 44 (59.1%) students watched videos on their mobile phones. Twenty-five (25) out of 44 (56.8%) students listened to music on their mobile phones while only 21 out of 44 (47.7%) mentioned that they used their mobile phones for taking photos.

The above figure.3 clearly illustrates that students used mobile phones mostly for

communication purposes. Thirty-six (36) out of 44 (81.8%) students used their mobile phones for chatting with family and friends and 72.7% (32 out of 44) students used mobile phones for calling purposes.

**Question 4: Do you use your mobile phone in your classroom?**

With this Yes/No question, participants were also asked to define their answers qualitatively. The qualitative data provided in-depth information that paved the way for an enhanced or detailed understanding of the quantitative responses in the questionnaire. The reason behind this question was to get a deeper understanding of the use of mobile phones in a formal classroom setting at the ELI. Out of 44 students, 21 (47.7%) used their mobile phones inside the classroom while 23 (52.27%) responded negatively. Participants' qualitative responses also offered some explanation of the data and disclosed further insight into the highlighted areas in the discussion. The participants who did not use mobile phones in the classroom gave two reasons: i) they believed that mobile phones were not allowed in the classroom, and ii) they found using mobile phones in the classroom inappropriate. Those participants who used their mobile phones inside the classroom mentioned that they used mobile phone dictionaries to look for difficult words or some of them used their phones for chatting. It was obvious from this question that students had their own beliefs regarding the policy and use of mobile phones. The results are shown in Figure 4.



**Figure 4: Use of mobile phones in the classroom**

**Question 5: Are you allowed to use your mobile phone in your classroom?**

The question was a direct inquiry regarding the policy about mobile phone use at the ELI. Eighteen out of 44 (40.9%) students believed that they were allowed to use their mobile phones in the classroom, while the rest 26 (59.1%) of the participants were convinced that they were not allowed to use their mobile phones in the classroom. The reasons were similar to question 4. The results are shown in Figure 4 above.

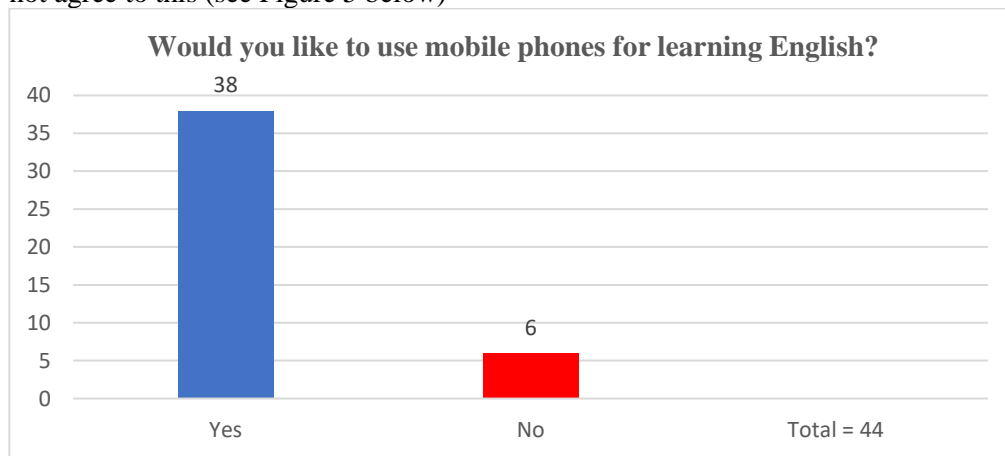
**Question 6: Do you ever use your mobile phone as a learning tool?**

Twenty-four out of 44 participants responded that they used their mobile phones as a learning tool (see Figure above). They reported that they used their mobile phones 4 to watch educational videos and searched for difficult words on Google translation or dictionary applications. Twenty out of 44 students (45.45%) did not use their mobile phones as a learning tool, and they had not mentioned any reasons for it except one respondent who considered mobile phone use as a distraction in the classroom. Almost half of the students believed that the institutional policy did not allow them to use mobile phones for any reason while the other half utilized their mobile phones mostly as a dictionary.

In the third section of this questionnaire, the researchers intended to find out about the preferences of the participants regarding the use of mobile phones for learning English at the ELI.

**Question 7: Would you like to use mobile phones for learning English?**

In response to this question, almost all respondents 86.4% (38 out of 44) favored the idea of using mobile phones for learning English, while only 13.6% (6 out of 44) did not agree to this (see Figure 5 below)



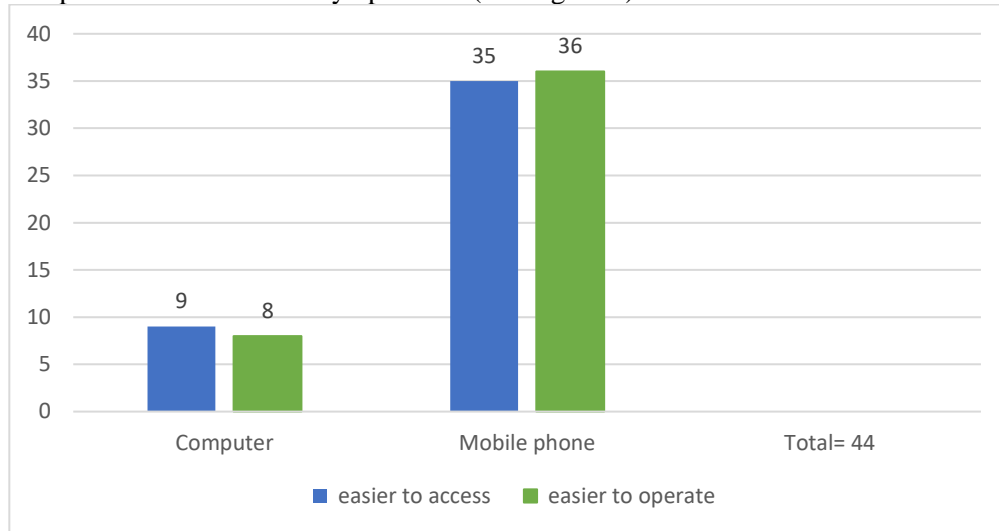
**Figure 5: Students' preferences about the use of mobile phones for learning English**

**Question 8: Which one do you think is easier to access? Computer or mobile phone?**

Almost 80% (35 out of 44) of the respondents preferred a mobile phone to a computer, however, approximately 20% (9 out of 44) of the respondents preferred a computer over a mobile phone because of the easy accessibility (see Figure .(below 6

**Question 9: Which one do you think is easier to operate? Computer or mobile phone?**

Almost 80% (35 and 36 out of 44) of respondents preferred a mobile phone to a computer because of its easy operation (see Figure 6)



**Figure 6: Preference Computer or Mobile phone**

**Question 10: Would you like your teacher to use a mobile phone as a teaching tool inside the classroom?**

Almost half of the respondents 47.7% (21 out of 44) liked the idea that teachers should use a mobile phone as a teaching tool inside the classroom, while 34.1% (15 out of 44) of respondents were not sure about the idea and 18.2% (8 out of 44) rejected this idea. The uncertainty or rejection among the respondents could be due to their ignorance about the use of mobile phones for learning purposes (see Figure 7 below)

**Question 11: Would you like to do your English activities on your mobile phone inside the classroom?**

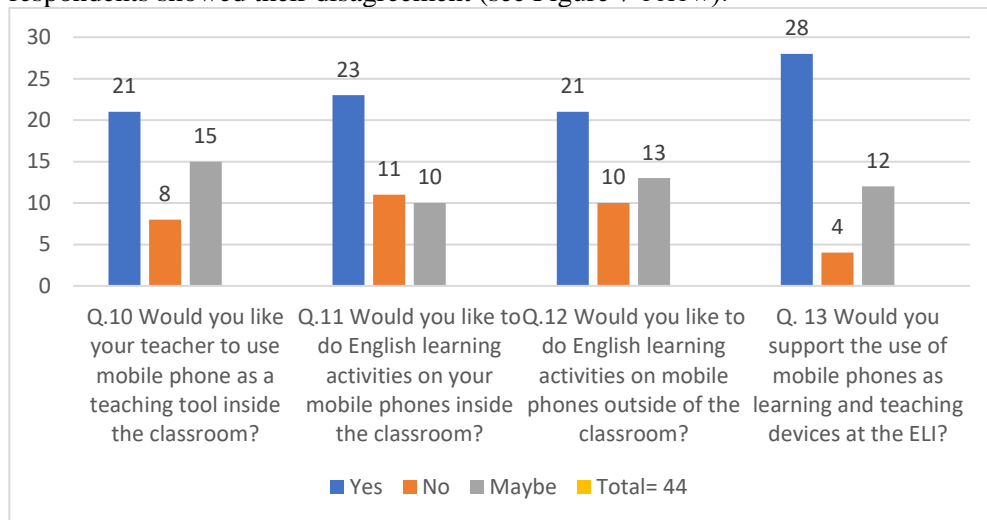
Twenty-three (23) out of 44 (52.3%) respondents preferred doing English activities on their mobile phones inside the classroom while 11 out of 44 (25%) respondents disagreed with it and the remaining 10 out of 44 (22.7%) showed their uncertainty. (see Figure 7 below).

**Question 12: Would you like to do your English activities on your mobile phone outside of the classroom?**

Twenty-one (21) out of 44 (47.7%) respondents showed their willingness while 29.5% were not so sure and the remaining did not agree with this idea. (see Figure 7 below)

**Question 13: Would you support the use of mobile phones as learning and teaching devices at the ELI?**

Most of the respondents, 27 out of 44 (61.4%) preferred that mobile phones should be used as learning and teaching tools at the ELI. On the other hand, 12 out of 44 (27.3%) respondents were not sure about it and interestingly only 5 out of 44 (11.4%) respondents showed their disagreement (see Figure 7 below).



**Figure 7: Students' preferences regarding the use of mobile phones in the classroom**

The overall results of the students' survey showed that all the students own at least one mobile phone, and most of them use their devices for learning purposes, especially to access a dictionary (refer to Figure 8). It is also revealed that 33% of the students believed that mobile phones are not allowed inside the classroom by university law (refer to Figure 8). Contrary to their belief regarding mobile phone usage policy, most of the students use their mobile phones inside the classroom for one or the other reasons mentioned above. Though their use of mobile phones was limited to finding difficult words online or on a dictionary application, most of the students preferred to use mobile phones for doing English activities and wished to see their teachers using mobile phones for teaching purposes. Moreover, this survey also brought up pertinent information that quite a large number of students were still in a state of uncertainty about whether mobile phones should be used for learning purposes or not. (see Figure 7 above)

**DISCUSSION**

**Group discussion session 1 (Week 2)**

The first group discussion session was held at the end of week 2 and the second at the

end of week 6 of the module. Qualitative data analysis was undertaken to confirm results and provide better insights into the findings. The data were transcribed and read several times to allow the researchers to become familiar with the opinions of the participants. The focus of the first group discussion session was on the use of mobile phones in an EFL classroom at the ELI. This discussion took place inside the experimental group classroom on the last day of week 2. There were 19 participants in the discussion. At that stage of the module, the experimental group of students used mobile phones in their classrooms for two weeks. The following questions were mainly posed to guide the discussion:

1. How different is your experience of using mobile phone-based activities from paper-based activities?
2. What kind of mobile phone-based activities have you done so far?
3. What are the challenges you have experienced using mobile phones in the classroom?

The first session of the discussion was about the use of their mobile phones, in general, to corroborate the responses most students gave in the student survey questionnaire on the first day of their module. During the discussion, the researchers asked the participants if everybody owned at least one mobile phone. All the respondents confirmed their possession of at least one mobile phone. When asked about the purpose of using their mobile phones, they responded that they mostly use their mobile phones for communication and entertainment purposes outside of the classroom, but they use mobile phones for learning inside the classroom.

**Response to question 1: How different is your experience of using mobile phone-based activities compared to paper-based activities?**

As the respondents had been using mobile-based activities as well as paper-based activities, the researchers asked them about their experience of using mobile phones instead of books and what their perceptions of both learning tools were. The responses informed that they found the use of mobile phones easy, quick, fun, and relaxing while they thought doing activities in books was time-consuming.

**Respondent A** “Because it is easy, normal. It is not hard. We are not using the pen. We are relaxed”.

**Respondent B** “Easy to type. Because when I write, sometimes writing is not good. But on phone we can type”.

**Respondent C** “On the mobile phone we write quickly and, on the book, slowly slowly”.

The participants also believed that learning through a mobile phone was like learning through a computer.

**Respondent D** “No it is a big difference because I can learn as I learn on a computer. As we can learn from the computer, we can learn from mobile phones. We learn

spelling”.

Some of the respondents believed that mobile phone-based activities made the responses from or to the teacher quicker but with the paper-based activities the teacher came to them to check their answers in their books.

**Respondent E** “Different because on the mobile phone, we use two hands and quickly send the answer. Teacher check the answer and replies quickly. On book, teacher comes to us and check the answer”.

Interestingly, when they were asked if they supported the use of mobile phones for learning, they stated that they sometimes used them. When they were asked the reason for saying something, it was reported that they wanted to use their books also as they sometimes got tired of mobile phone use for a longer time.

**Respondent F** “Because sometimes we don't need to use the phone. We want to use the book. We get tired if we use mobile phone for longer time.

### **Response to question 2: What kind of mobile phone-based activities have you done so far?**

The next question was asked about the kind of mobile phone-based activities they had used in the classroom during the two weeks and how they felt about using them. Participants responded that they used WhatsApp, Socratic and Rassam applications for doing different activities. WhatsApp was used for speaking activities where they recorded their conversations and sent them to the WhatsApp group. Socratic application was used for filling in the gaps and taking notes on activities on the mobile phones. Rassam application helped them draw lines in matching activities. The use of the dictionary on their phones was the most common use reported in the discussion. Respondents believed that they were more comfortable while using mobile phones instead of doing activities in the books. Due to the portability of the devices, the respondents believed that it was easier for them to do homework anywhere anytime. Respondent F “We want to use mobile phone because every place you can use mobile phone”.

**Respondent G** “Yes, we can do it anywhere. Not only at home as on book.”

Response to question 3: What are the challenges you have experienced using mobile phones in the classroom?

Regarding the question about the challenges, they experienced when using mobile phones in the classroom, the respondents related three main challenges that they normally faced: Internet connectivity, devices' compatibility issues, and screen size. The respondents complained about the speed of Internet connectivity as they sometimes got slower.

**Respondent H** “We sometimes had connectivity problems; number one, the internet was not good all the time, and number two, screen size matters a lot”.

They faced compatibility problems due to different kinds of phones.

**Respondent I** “And, thoroughly the most important thing is that some of the Android

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phones had that particular application and some others probably like Apple phones didn't have it. It was a compatibility problem”.

Not all students could find the same applications through their application providers, which caused some problems at the beginning. While doing a reading activity they noticed that the screens of some mobile phones were too small, making reading difficult.

In summary, the findings of this group discussion session could be divided into two major categories: availability and emotional engagement. Availability involves accessibility to connected mobile devices, portability, and convenience of resources. All the respondents agreed that they had their own internet-connected devices that they used inside the classroom for various mobile-based activities. They also found it easier to do their homework while in transit using their mobile phones. All the students considered slow Internet connection a problem. It was reported that they found the use of mobile phones relaxing, exciting and easy.

#### **Group discussion session 2 (Week 6)**

The focus of the second group discussion was to determine the experimental group students' overall experience of using mobile phones as learning tools in the classroom at the ELI. Through this discussion, the researchers intended to get a deeper insight into the experiences students had while using mobile-based activities during the entire module. By this time, compared to the first group discussion session, students would have had a better understanding and ideas about using paper-based and mobile-based activities. They would be in a better position to reflect on the use of mobile phones in the classroom as learning tools. Like the first group discussion session, the second group discussion session was also held inside the experimental group classroom on the last day of week 6 of module 4. There were 20 students participating in this discussion. This discussion was guided with the help of the following questions:

#### **Could you please share your views on the advantages of using mobile phones and books in your classrooms, if any?**

What kind of activities do you do on mobile phones that you cannot do in your books? Have you encountered any problems using mobile phones in the classes that you did not have with books during this level?

The second group discussion session began after the formal introduction and greetings. The researchers informed the participants about the purpose of having that group discussion session. Just to make sure whether participants used books as well as mobile-based activities in their classrooms, they were asked to verify the use of both. All the participants agreed that they had used their syllabus books as well as mobile phones to learn English in their classes for six weeks. The researchers asked participants if they could share their views on the advantages of using mobile phones

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and books in their classrooms. Using dictionaries and doing translations were the most common activities respondents were involved with.

**Respondent J** “We use mobile phones for translations and finding the meanings of difficult words”.

The respondents also mentioned that it was not easy to carry books everywhere but with mobile phones, they found it easier as it was portable.

**Respondent K** “But when you are using the dictionary, you can't carry it with you everywhere. Because it is heavy”.

They also believed that mobile phones were faster and less time-consuming compared to paper-based homework.

**Respondent L** “Like when you are using mobile, you are just searching the word. You just put the first letter then it comes automatically. But in the paper dictionary, you must find a word. On paper we spend more time than on mobile dictionary and it is easier to use”.

Some of the respondents believed that doing homework in their books was easier as mobile phones sometimes had battery problems; however, others contradicted that response by saying that doing homework was easier and faster on their mobile phones as they could do it anytime and anywhere.

**Respondent M** “To do the homework. We do homework on the book also, but it is easier and faster to do it on a mobile phone”.

**Respondent N** “Yes, a book is easier because sometimes mobile phones have problems using some applications. Applications need updates and if you don't do that, they stop working. But with the book, you only do it on paper”.

**Respondent O** “Like when you are writing on a paper, you have limited space. You cannot write much. And by using a mobile phone we get to practice for our exams as our exams are on computers”.

**Respondent P** “We can but they are not online or like our exams at the ELI. And when you use the internet on a mobile phone, you can practise on many websites and there are more resources online than books. This way we practice more online on different websites using our mobile phones”.

To get a sense of how they felt about mobile phone-based activities, the participants were asked to reflect upon their experiences. They reported that making videos on mobile phones was easy and interesting. They claimed that they did not only have fun, but they also learned to make sentences in English and added their voice and pictures in those videos. They stated that they felt proud and happy after making the videos.

**Respondent Q** “No, it was very easy. And it was our first time. Actually, it was very interesting to make a video as homework”.

**Respondent R** “It wasn't only fun. We made sentences in English. We also made the videos by adding pictures and our voice. After making videos, we were very happy, interested and proud”.

They also mentioned that the use of mobile phones supported their learning outside

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the classroom. If they had any question regarding grammar, they put it on their class WhatsApp group where either the teacher or the other classmates responded.

**Respondent R** “If we don't know something about the grammar, we put the question on WhatsApp group and get the responses from the students or from the teacher”.

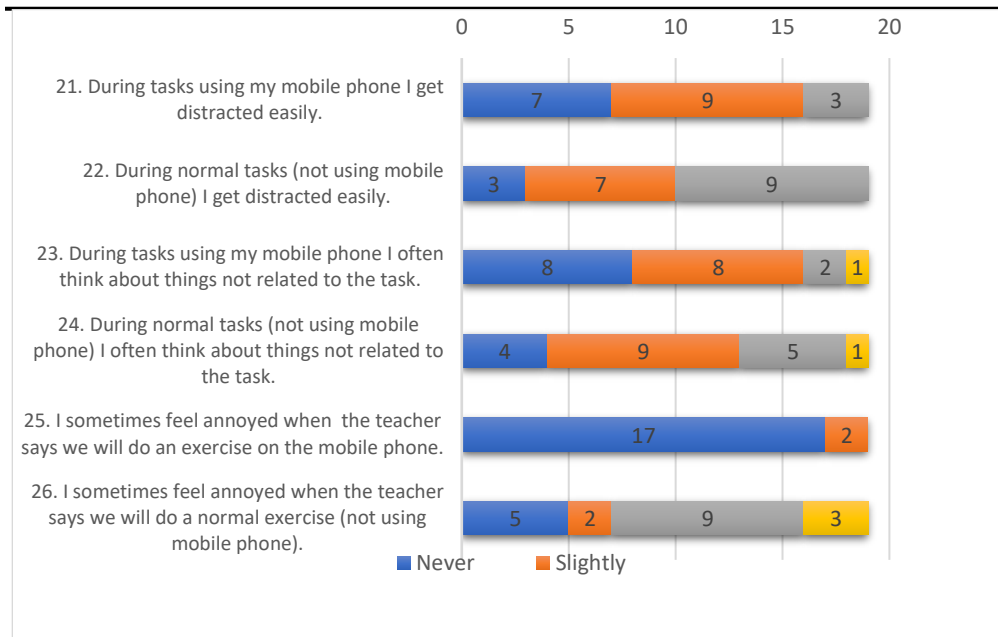
When the participants were asked if they encountered any problems using mobile phones in classes where they did not use their books, they cited battery problems as a hindrance. They also mentioned that they were able to solve these problems by bringing portable power banks to the classroom.

**Respondent S** “We sometimes faced battery problems. But if you have a power bank with you then you can avoid this problem. You can carry that charger with you. It is portable.

In sum, the findings of this group discussion session could be divided into two major categories: portability and emotional engagement. Portability involves the transportability of mobile devices and resources. Because of their portability, the respondents found the use of mobile devices easier. All the respondents believed that doing homework and finding resources was easier because of the use of mobile phones. Due to the mobility of the devices, they have learning support outside the classroom also in the form of a WhatsApp group. Emotional engagement included their feelings of being interested, proud, happy, and relaxed. All the respondents shared the same experience regarding the use of mobile-based activities in their classrooms.

An analysis of these two group discussion sessions suggests that all the respondents perceived the use of mobile phone-based activities as very important inside and outside of their classrooms. They reported that due to the accessibility, availability, portability, and convenience of resources on their mobile phones, their learning experiences were being made fun, exciting, interesting, and easier compared to the paper-based activities on the books. They also reported that they found the use of the book in their classrooms also quite important; however, integrating mobile phone-based activities in their syllabus provided more opportunities to learn quicker, faster, anywhere, and at any time.

The following figure 8 shows the effect of mobile phone-based activities on the experimental group students' engagement.



**Figure 8: Effects of mobile phone-based activities on students’ engagement**

Statements 21 to 24 are related to students’ behavioral engagement, while statements 25 and 26 were connected to students’ emotional engagement. Compared to tasks using mobile phones (statement 21) and normal tasks not using mobile phones (statement 22), seven (7) out of 19 students stated that they never got distracted during the tasks using mobile phones easily, while only 3 out of 19 were of the same view during tasks without using a mobile phone. However, almost half of the students (9) reported that they got slightly distracted easily during tasks using mobile phones, while almost half of the students informed that they got easily distracted a lot during tasks not using mobile phones. Responding to statement 23, eight (8) out of 19 students reported that they never thought about unrelated things, while the same number of students slightly got busy with unrelated thoughts during the tasks using mobile phones. On the other hand, responding to statement 24, only 4 students reported that they never thought about things not related to the task during a paper-based task. Conversely, it was also clear from Figure that during normal tasks (not using 15 ,mobile phones), almost half of the students (9) and some (5) students got busy slightly and a lot, respectively with thoughts unrelated to their tasks. Responding to statement 25, the majority of the students (17 out of 19) reported that they never felt annoyed when their teacher asked them to do an exercise on their mobile phone. On the contrary, responses to statement 26 showed that most of the students felt annoyed when their teacher asked them to do a normal exercise without using a mobile phone.

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Overall, the results of the post intervention questionnaire suggest that mobile phone-based activities facilitated learning inside and outside of the classroom as well as enhanced the experimental group students' interest. Furthermore, the use of mobile phones for learning English made their classes fun and more interesting. Most of the students felt comfortable using mobile phones for different activities, while a good number of students did not enjoy using mobile phones much for doing audio and video projects.

This study was limited to male participants due to the segregation of the different genders in the Kingdom of Saudi Arabia. The society in the Kingdom of Saudi Arabia is homogeneous in terms of religion, culture and even in education (Meijer, 2010). The findings of the current study may not be generalized, as the sampling was purposeful and non-probable. Making inferences beyond the population from which the sample was selected is therefore not advisable.

### **RECOMMENDATIONS**

In order to assess the engagement of the learners using mobile phone-based activities in an EFL classroom at a university, the researchers found it necessary to determine the self-perceptions, self-efficacy, preferences for challenges and enjoyment of learning of the experimental group learners. In the context of this study, motivation was viewed as the efforts and active engagement of the learners in the learning process inside the classroom.

Contrary to the generally accepted myth of the instructors that mobile phones were distractors, the experimental group learners stated that using mobile phone-based activities in the classrooms did not distract them, while doing paper-based activities they were distracted quite often.

The findings of this study indicated that participants were active in doing tasks on mobile phones. They participated actively and involved themselves in WhatsApp group chats. Overall, based on the experimental group learners' data, learners seemed to be behaviorally engaged in mobile phone-based activities inside and outside of the classroom.

The experimental group learners considered doing tasks anywhere and anytime, making videos, recording their voices in L2 and communicating with their instructor via WhatsApp application very enjoyable experiences that were not possible without using a mobile phone. This kind of learner behaviour showed that they were interested in and enthusiastic about using mobile phones for learning purposes. Emotional engagement is linked to one's positive emotions, excitement, interest, and entertainment while involved in a task (Lin, Hang and Huang, 2012). Enjoyment, ease,

engagement, and interests were the main features that participants related to doing mobile phone-based activities.

The researchers recommend that learners be introduced to the policy and procedures regarding the integration of mobile phones in the classrooms regularly. It is recommended that the management provide support for the integration of mobile phone technology in the academic process. Apart from the training to the teachers on the technical aspects of technology integration, teachers should be given training on pedagogical aspects of mobile phone use in teaching English in their classrooms.

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