Chapter one Introduction

1.0 Background of the study

The 21^s century witnessed an excessive use of mobile technologies regardless the time or the place. It has been claimed that mobile technologies are now "a familiar part of the lives of most teachers and students" (Facer, 2004:1). In this implementation, they are used for their basic functions, such as sending messages, making calls, sending emails, listening to music, watching videos and so on, but with potential benefits for the educational context. The possibility to make use of modern technologies to perform actions related to language teaching and learning stimulated the researcher to investigate the perspectives of such devices and their potential contribution to learning in general and language learning in particular.

A review of the use of mobile devices in language learning projects funded by the European Union (EU) since 2001 (Pecherzewsk & Knot, 2007) would confirm that mobile phones are the most frequently used devices out of all handheld equipment. Moreover, in recent years, with the rapid development in technology, smartphones and other devices which provide easy access to information at any time have led to a further increase in the use of mobile devices.

In the 2000s, an approach developed from these mobile technologies, whereby they began to be incorporated in language teaching and learning. and this became known as mobile-assisted language learning (MALL). This is generally interpreted as the use of mobile devices to learn a language. With MALL, the interest is more in individual learners than in the respective teaching institutions, because learners use their mobile devices to learn a language in either explicit or implicit ways. This may be observed when students text each other or listen to music. On the other hand, students use MALL more explicitly when they use their mobile devices to translate a word, read an article or use learning application.

1.1 Statement of the problem

In recent years, there has been a great deal of interest in the development of mobile devices and wireless technologies, and how these can be integrated into language learning and teaching. In this study, therefore, the focus would be specifically placed on mobile devices. According to Zhao (2005:447), modern mobile devices can be utilized as a "technology that holds the capacity for language learning". They include, for example, iPads, smart phones, laptops, etc. However, the widespread use of such devices has given rise to many debates about language learning and teaching. One of the current debates concerns the role of such technology in the field of second language learning, and whether its influence is always positive (Domine, 2009).

Thus, the present study investigated the perceptions of the Libyan students majoring in English towards the role played by mobile devices in enhancing English language learning where technology is likely to be used every day, both inside and outside the classroom. The concept of MALL is new in such a context and the experience of using mobile devices to learn a foreign language would be new for some, if not all Libyan students. Therefore, the findings of the present study would be significant for students majoring English in particular, and the way English is being learned and taught in general in the Libyan context.

1.2 Aims of the Study

The present study aimed to investigate significance of integrating mobile devices in the process of second language teaching and learning among Libyan university students. It also aimed to examine the students' attitudes to the effectiveness of MALL. More explicitly, this study aimed to examine the practices and perceptions of Libyan English learners through their different uses of mobile devices, and the extent to which they believe such uses facilitate their language learning.

1.3 The Research Questions

This study was mainly designed to answer the following research questions:

1- What are students-teachers' attitudes towards using mobile devices in learning a second language?

2- To what extent do students believe that using mobile devices enhances second language learning?

1.4 Significance of the study

Since there is a shortage of research on mobile learning amongst Libyan students, the findings of this study would be a cornerstone for further research investigating the use of mobile devices teaching and learning foreign languages. Furthermore, this study could provide useful suggestions that can be utilized by the Libyan Ministry of Education in providing a more suitable environment for teaching and learning processes. This study covered an area that has contributed to much debate and concerns; thus, teachers could gain more beneficial insights regarding these issues.

1.5 Methodology

To provide comprehensive answers to the research questions and fulfil the research aims; a mixed-method approach was employed. Being more explicit, a questionnaire and semi-structured interviews were utilized to investigate the students' opinions and attitudes towards using mobile devices in learning a second language. The questionnaire was distributed to forty university students followed by semi-structured interviews conducted with eight students. Two sampling techniques were used to select the research participants, namely a snow ball sampling technique and purposive sampling technique. Regarding the research data analysis, the Excel Microsoft Word (2019) was used to analyze the quantitative data, and the Thematic Analysis Method was employed to analyze qualitative data. For more information, see chapter three.

1.6. Outline of the Study

Chapter one provides a detailed background about the research followed statement of the problem and the research questions and aims. It also includes the significance of the study and the methodology adopted.

Chapter two discusses in detail the literature related. It outlines the history of MALL and how researchers first began exploring this field. This chapter also includes a discussion of second language learning theories that encouraged using such devices to enhance language learning. Furthermore, this chapter investigates the relation between the use of mobile phones and second language learning. The advantages and challenges of using mobile phones in language learning is also included. Finally, chapter two discuses a number of related previous studies.

Chapter three describes the methodology used in this study. It includes the research aims, followed by some methodological issues and considerations. It also describes the participants and explains the sampling procedures. The final section of Chapter 3, pertaining to the research instruments, looks at the questionnaire and interviews, as well as discussing the data collection steps.

Chapter four includes the process of data analysis and introduces the findings obtained,

Chapter five contains the discussion of the most interesting findings obtained.

Chapter six includes the conclusion and the implications of the study. The research limitations and recommendations further research are also included in this chapter.

Chapter Two

The literature Review

2.0 Introduction

This chapter provides an overview of the relevant literature and presents the theoretical framework of this study. It is therefore important to revisit the origins of technology use in language learning in order to gain an overview of how MALL initially developed. Previous studies showed that the role of modern technology in the field of education-especially in language teaching and learning is not a new phenomenon. It is in fact an area which has had an impact on language education ever since the development of the computer, in the form of computer-assisted language learning (CALL).

The CALL era actually began in the 1950s (Beatty, 2010). Leavy (1997:1) describes it as a field that covers " the study of applications of computer in language teaching and learning". It has inevitably passed through different stages, affected by the development of teaching approaches and learning theories (Warschauer and Healey, 1998). Furthermore, many studies have been conducted to investigate the effect of using computers in language learning, producing significant positive results in this field (Chapelle, 2001; Hegelheimer & Tower, 2004). However, with the flourishing and rapid evolution of technology and introduction of the next generation of Web tools (Web 2.0), such as blogs, wikis and social media, combined with the increasingly reduced size and convenience of mobile devices in relation to desktop personal computers (PCs), CALL has been affected by the growing interest in mobile learning. Technology that has the capacity to assist language learning now includes, "ipads. multimedia cellular phones, MP3 players and digital dictionaries" (Zhao,2005:447). On an everyday basis, this new technology, in the form of, for example, smart phones tablets, or Amazon's kindle, affords an easy access to all kinds of information for any user. Moreover, these devices are highly portable, leading to their widespread use and a shift towards MALL.

2.1 Mobile Assisted language learning (MALL)

2.1.1 What are mobile devices?

In recent years, there has been an increasing use of mobile devices to support language learning. Trifanova et al. (2004:3) define the term, 'mobile device' as "....any device that is small, autonomous and unobtrusive enough to accompany us in

every moment", such as MP3/MP4 players, PDDAS, ipads and laptops. An investigation of MALL literature would indeed reveal that the aforementioned devices have been covered by research in the relevant field (Kukulska-Hulme, 2013). According to Kukulska-Hulme (2013) and Shield (2008), the difference between MALL and CALL is this mobility. The use of such personal, portable devices ensures the continuity of the learning process in any context. Mobility can therefore be applied to both the learner and the learning process, as the appropriate technology will enable learners to undertake a variety of activities in different locations (Kukulska-Hulme, 2009).

2.1.2 Learning outside the classroom

Mobile devices provide learners with immediate access to the internet. This key feature results from the aforementioned portability of the devices, which is not offered by PCs. It is consequently what has led some researchers, such as Traxler (2007), to believe that learning through the use of mobile devices is becoming more personalized, situated and authentic. In terms of language learning, MALL permits learning and language practice outside the classroom. It is also a process which can take place at any time and from anywhere, which is significant for language learning, given the many different contexts it relates to and the need for regular practice, especially in situation (Kukulaska-Hulme & Shield, 2008).

2.1.3 Mobile devices and language learning

Since their inception, mobile devices have been the subject of research investigation due to their beneficial use in language learning. It has been observed that the devices studied were mobile phones (Andrews, 2003; Kiernan & Aizawa 2004; Nah et al., 2008), handheld devices (Samuels, 2003), tablets (Lan et al., 2007) MP3 players and ipads (Mcmarty, 2005; Stanrey, 2006; O'Bryan & Hegelheimer, 2007; Mhammed et al., 2009). Such investigations have addressed the question of whether or how well such devices lend themselves to explicit use in language teaching, with reference to specific tasks and activities in this domain. However, some other studies have conducted more on the learners' perspectives of mobile device use. Dashtestani (2003) surveyed the attitudes of 126 'English as a foreign language' (EFL) learners from Iran and 73 EFL teachers' perspectives on the use of electronic dictionaries. This study resulted in overall positive outcomes of the use of electronic dictionaries for EFL

learners, due to the 'anytime, anywhere' affordance of mobile devices, especially as these dictionaries were installed on the learners' mobile phones. However, the study encountered certain challenges, such as the un reliability of some electronic dictionaries and the distraction caused in the classroom by constant mobile phone (ibid).

A study conducted by Dias (2002 cited in Levy & Kennedy, 2005) investigated students using their mobile phones in learning English language, after receiving appropriate training. The research findings showed that 57.9% of the female learners and 47.4% of the male learners reported using mobile phones in language learning. Jarvis and Achilleos (2013) investigated 56 multinational participants studying English as a second language (ESL) by using mobile technologies. The findings obtained showed that 83.7% of the participants reported using mobile devices on a daily basis, including language learning, and 91.1% confirmed that the use of mobile devices helped them with their language learning. In addition, Jarvis (2014) demonstrated that 79% of Thai students used mobile devices daily and agreed that such devices were important to their language learning. The use of mobile devices has therefore gained a wide acceptance for learning English. In literature, many studies have revealed positive attitudes amongst students, although studies on attitudes could be considered scarce in MALL literature (Beatty,2010).

2.1.3.1 Mobile devices and learning English for academic purposes (EAP)

Nowadays, technology occupies a crucial position in society and its advancement has transformed the ways in which information is managed and how people communicate with each other. The growth of academic and professional communication across borders has thus given rise to new requirements amongst those learning English for academic purposes (EAP). The application of technology has emerged as especially appropriate in this area, given its focus on clearly defined learner needs, its facility for creating and adapting materials, and the methods it offers for drawing upon targeted activities and specific disciplines (Arno-Macia, 2012). An example of this is reported by Bowers (1995), who identified the significance of the Web in the tuition of learners seeking further language practice, or of learners with specific demands. Moreover, Shilhavy (1996) pointed to the benefits of multimedia packages for

integrating EAP skills, in terms of the potential for immediate feedback interaction, whereas, Vilmi (1995) refers to the importance of email on EAP courses.

Having highlighted the changes made by the internet to people's lives, a whole range of areas has inevitably been affected, such as language learning in general, and more specifically, EAP courses. Internet resources provide a wealth of authentic materials, as well as opportunities for engaging in meaningful communication with members of discourse communities, such as blogs (Arno-Macia, 2012). Today, with the rapid growth in the use of mobile devices and the development of technology, the learning process has become much easier and faster, whereby students can communicate with their tutors and obtain feedback by email, using their laptops, ipads or mobile phones. They no longer need to sit in front of desktop PC or computer lab. This means that information can be communicated and exchanged at anytime and anywhere.

2.1.3.2 Mobile-assisted language learning (MALL) in the specific research context (Libya)

As a strategy to convince educators with the potential of using mobile devices in language learning, the affordance of MALL must be cited. This is an established foundation, as researchers have proven the potential of mobile technologies for language learning in their empirical studies. However, it could also be argued that most of the studies on MALL have been conducted on a context where technology is already widely used in other fields. Thus, educators must be persuaded to the benefits of mobile device implementation for the purpose of learning and teaching around the world, where mobile technology and its associated infrastructure are at an advanced stage of growth and development. Therefore, as already mentioned in chapter one, this study aims to investigate the use of mobile devices in language learning amongst Libyan students, whose experience in this regard is still at an early stage of development, despite the fact that most Libyan students would refer to themselves as ' digital residents' these days; meaning that regardless of where or how they grew up, they are currently exposed to and live within an environment characterized by digital media.

As proposed by White and Le Cornu (2011:9), "a proposition of digital residents' lives is actually lived out online, where the distinction between online and offline is increasingly blurred". To clarify this, so called digital residents can avail themselves of multiple uses of mobile devices and the internet to share information and communicate. For example, there is a huge increase in the use of social media, especially Facebook and Instagram in Libya and within this use, it may be noted that there are some pages and groups designed to assist with and promote language learning. However, these are generally moderated by the learners themselves, with just a few being set up by teachers. Despite this, the integration of mobile devices into the language classroom is still relatively rare in the above mentioned context and in fact, there are many teachers who ban the use of mobile devices in the language classroom, even where students may wish to look up the meaning of difficult words or search for ideas and information on a topic they need to write about. Therefore, as MALL is still new to Libyan learners, it is necessary to investigate their attitudes to it. The results of this investigation may then encourage language teachers in Libya and similar societies to consider harnessing the benefits of using mobile devices for learning, with a view to integrating such usage into the teaching process. Moreover, educators in other parts of the world need to be convinced about the impact of MALL, helping them to gain a cross-cultural view of mobile devices use in language learning, which could be feasible and effective strategy for ensuring that educators reflect on their own context.

2.2 Advantages and challenges of mobile- assisted language learning (MALL)

The successful implementation of mobile device use implies looking at what such devices can offer for education and language learning, and the limitations that might obstruct any attempts to integrate them. Therefore, it is important to discuss some of the advantages and challenges of mobile devices, especially as the aim of this study is to encourage Libyan language learners and teachers to incorporate them in language learning journey.

2.2.1 The advantages of mobile-assisted language learning (MALL)

Mobile devices are characterized by specific attributes, which can contribute to learning in ways that more traditional modes of learning or even computer-assisted learning are unable to offer. The most advantageous of these features is that they are ubiquitous-thus facilitating learning at any time and in any location (Chen and Hsu, 2008). This is due to the portability of mobile devices and the fact that a connection to

a network can be maintained, through which learning application (apps) can be accessed and implemented. The advantages of portability and connectivity therefore render mobile devices invaluable as learning devices. In addition, they can be personalized to a high degree, thus enabling users to customize their learning interfaces, making the learning process easier and faster. In addition, the use of mobile devices is spontaneous, as it does not require any additional equipment or preparation other than a working connection, which is then available to use on the spot. Finally, learning through mobile devices is usually considered to be informal and puts the user at ease, while providing a high level of freedom and autonomy, as it does not require students to stay in one place or attend regular classes to learn.

The freedom accorded by mobile devices allows individuals to be engaged in other work or training courses to continue learning after normal working hours, without exerting much time pressure. Traditional classroom teaching is daunting for many prospective learners, who may already be pressed for time and unable to fit a fixed timetable for classes into their schedule. It can also provide an authentic environment for Libyan English language learners, as they are in a country where English is only likely to be used in the classroom, whereas by using mobile devices, second language learners will be able to communicate with native speakers via social media, as well as listen to lectures, access news or use various learning 'apps' and materials, such as TED^{1} , at any time. Other advantages of using mobile devices as learning media include their ability to connect and share other learners via SMS text messages, emails, or other messaging applications (Chen Hsu, 2008). Connectivity with other learners enables more efficient real-time collaboration in learning tasks and accelerated data and information exchange between individuals and groups, thus enhancing the quality of the overall learning environment. Another advantage of mobile devices is that they can be connected to other devices to increase and facilitate data store and exchange.

¹Technology, Entertainment, Design (TED) —a non-partisan, non-profit organization established in 1984; committed to disseminating ideas on all kinds of topics, generally through short lectures broadcast online in more than 110 languages, available at: https://www.ted.com/ 1984; committed to disseminating ideas on all kinds of topics, generally through short lectures broadcast online in more than 110 languages, available at: https://www.ted.com/

Additionally, mobile technology has penetrated even the most remote parts of the world, thus enabling mobile learning to be availed in very diverse locations. This independence from location, in contrast to classroom-based learning, makes it possible for learning content to be accessed and courses to be undertaken from anywhere in the world and enables a wide range of learners to participate in common learning programs. Moreover, the cost of mobile devices is constantly being reduced, making them more accessible for almost all sections of society, thus expending the scope of MALL.

2.2.2 Challenges of mobile- assisted language learning

One of the factors reported in literature regarding the impact of MALL consists of the physical attributes of some mobile devices, such as their actual size, weight and use interface, all of which have an impact on ease of use and smooth operation. The size of the screen and usability of the keyboard or touch screen and the quality of audio-visual output will all affect the quality of the learning process. Certain factors, such as poor quality mobile 'apps' and interfaces, or poor audio-visual quality can act as a deterrent and inhibit, rather than facilitate learning. Alongside these factors related to the mobile handset itself, there are also several factors associated with the learner who play a role in the overall effectiveness of MALL. These include the users' ability to employ the mobile devices for learning purposes, their proficiency with the user interface, and their attitude toward mobile learning (Thornton and Houser, 2005).

2.3 Mobile-assisted language learning (MALL) and second language theories

Nowadays, technology is used in a whole range of different fields and has become part of the daily life of much of the world. Learners consequently use their mobile devices on a regular on-going basis and in different ways, which gives rise to the question of how such devices can enhance language learning. In order to gain more ideas of how language learning can be enhanced through the use of mobile devices, this part of the dissertation is concerned with theories of second language acquisition (SLA).

One of the main challenges of SLA that the use of mobile devices can address is explained in Krashen's (1982:7) acquisition-language hypothesis. This entails second language learners having two independent means of developing knowledge of a second language, namely language acquisition' and language learning. Krashen defines acquisition as "a subconscious process" whereby "language acquirers are not usually aware of the fact that they are acquiring language but are only aware of the fact that they are using the language for communication. They have a "feel" for correctness, grammatical sentences "sound" right, and errors "feel" wrong, even if we do not consciously know what rule was violated... in nontechnical terms, acquisition is "picking up" the language" (Krashen, 1982). Furthermore, Krashen (1982:10) distinguishes between 'acquisition' and 'learning' by saying, "We use the word "learning henceforth to refer to the conscious knowledge of a second language" which means knowing the rules, being aware of them, and being able to talk about them. In nontechnical terms learning is "knowing about" a language". Therefore, when deploying mobile devices in language learning, the target language may be practiced on language learning websites and through the use of 'apps', whereby these may be considered as having a 'tutorial function', which can contribute to focused, conscious and explicit learning. This is undoubtedly of great value, although there are also those who argue that other uses of mobile devices will expose learners to the target language in ways that facilitate 'unconscious acquisition' and implicit learning.

A further SLA theory proposed by Krashen (1985) is the 'input hypothesis', which entails second languages being 'acquired' by understanding or by receiving comprehensible input. Comprehensible input' is defined as that bit of language that is heard/read and that is slightly ahead of a learner's current state of knowledge (i+1) (ibid:2). Through exposure to the language, for example, on academic websites-learners can access a range of relevant materials and make their choices. In this way, if learners do not understand something, they can select alternatives that are more comprehensible to them.

Another theory that can be supported by the use of mobile devices is sociocultural theory (Vygotsky, 1987). This theory is based on the assumption that learning is more social than individual. More to the point, Vygotsky's theory stresses the essential role of social interaction in the development of cognition. It thus presents the view that human learning cannot be studied in isolation from its social context. Language, for instance, develops as an outcome of social interaction (Mitchell, Myles & Marsden, 2013). There has been a subsequent integration of language learning into technology

in authentic social contexts, which has enabled learners to engage in collaborative learning with authentic audiences and to interact in ways which foster their comprehension and production. This can be seen as an on-going process in language learning and use (Gündüz, 2005).

Having mentioned the widespread use of mobile devices in Libya in recent years and the common use of social media, such as Facebook, Instagram and Twitter, learners are exposed to the English language through interaction with people from different countries, whether to talk about football, fashion and so on, or to play online games. Therefore, this study explores whether such social interaction and the aforementioned SLA theories are supported by learners in practice, and whether these different uses of mobile devices enhance language learning. However, it is rather a difficult task to measure the actual quantity of language acquired. This study aimed to explore whether or not the use of mobile devices enhances the process of language learning depending the perspectives of the learners themselves, and whether or not they believe that such use has benefits language learning and so, to what degree.

Overall, the appearance and rapid spread of digital technology over the past few decades have led to the emergence of the digital era, where learners "are used to receiving information really fast" and "like to parallel process and multi-task" (prensky, 2001: 2). The use of a range of mobile devices and programs, often at the same time, has become part of ordinary everyday life for many individuals, who may use a variety of mobile devices; simultaneously carrying out different tasks wherever they might be. In fact, this has become a natural feature of many people's daily routine. All of the above facts would suggest that the term, 'MALL', referring to the use of mobile devices to assist language learning, should be reconsidered. This is due to the fact that these days, in a language context, mobile devices are not just used for language learning. Jarvis and Achilleos (2013) suggest that the term 'mobile assisted language use' (MALU) is more appropriate. This refers to "non-native speakers using a variety of mobile devices in order to access and/or communicate information on anywhere/anytime basis and for a range of social and/or academic purposes in an L2 learning context" (Jarvis & Achilleos, 2013: 3). Such a definition encompasses all the features of MALL, but it also considers the social use of the target language, both in formal and informal situation (Jarvis & Achilleos, 2013).

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As mobile devices are now massively used and their uses are seemingly unlimited. Jarvis (2015: 5) proposes that: "Our mobile phones are no longer just telephones. They are stills cameras, videos and audio-recorders; maps and satellite navigators; internet browsers; dairies; calculators; newspapers; alarm clocks; music players; TV and radio players; note pads; games' social media outlets; places to buy and sell, and much more besides". Therefore, it is perhaps time or rethink our terms, with 'MALL' giving way to 'MALU', given that the use of mobile devices for second languages is no longer limited to learning, but extends to usage.

2.4 Previous studies

Though mobile devices have been proven to be successful for educational purposes, their deployment demands from researcher to investigate students' attitudes, whether they "can, will, and want to use them for education" (Pollara, 2011: 28). Pollara goes further saying that people have opposing opinions concerning mobile devices. Some consider them as personal tool, others perceive them as helping students to cheat on exams, and still other acknowledge their pedagogical affordances as a valuable tool for delivering learning content. Despite the importance of their attitude, students are a one end of the continuum. At the other extreme end of the continuum is the teacher.

The attitude of students is an important factor that can affect the successful implementation of technology in general and mobile devices in particular. Their perception of the potential of mobile devices as a learning tool determines to some extent their readiness either to support or hinder mobile-assisted language learning. Additionally, being familiar with mobile devices may not indicate their willingness to use mobile devices in their learning (Callum & Jeffrey, 2010). According to Tai and Ting, (2011), the attitude and cognizance of students in the process of transforming a mobile device into a teaching or learning tool is important in explaining their adoption of mobile technology.

Callum and Jeffrey (2010:143) pointed out that the factors that might justify teachers' ability to integrate mobile technology for learning purpose includes:

• Educators feel ill at ease when using technology in the classroom and would be less likely to adopt a new form of technology such as mobile technology.

- Educators may not feel enthusiastic about technology in general and therefore less likely to adopt mobile technology.
- Educators may not be using mobile technology to its potential as a cognitive tool due to teachers' lack of skill in using this technology or lack of awareness regarding its potential.

The positive attitudes of teachers towards mobile devices is critical in their deployment for learning. Callum and Jeffrey (2010) claims that teachers need to believe in their ability to implement this technology successfully. Teachers' past experience of using general ICT can determine educators as to hold positive or negative attitude towards new technologies and their implementation. More importantly, the factor that can determine mobile integration in teaching and learning is the users' perception to the need to this new technology. Consequently, educators need both a training on how to use these devices for learning and teaching, but before this, a need to convince them of the potential of mobile devices is the first step (Callum & Jeffrey, 2010).

As a strategy to convince educators of the potential of mobile devices for learning purpose is citing the affordances of MALL. This is an already established foundation as researchers have proven the potential of mobile technologies for language teaching and learning in their empirical studies. Still, educators need to be convinced about the acceptance of mobile learning in other parts of the world. Therefore, gaining a crosscultural view about mobile language learning may be a convincing strategy for educators to reflect on their contexts.

Dashtestani (2013) surveyed the perspective of 126 Iranian learning English as a foreign language and 73 EFL teachers' attitude on the use of electronic dictionaries. The results obtained showed an overall positive currency concerning electronic dictionaries for learning English as a foreign language. This is because of the anytime anywhere affordance of mobile devices since the electronic dictionaries are installed in students' mobile phones. Also, they encountered some obstacles as student use unreliable dictionaries, and distraction caused by their use inside classroom.

In their study, Levy and Kennedy (2005 cited in Dias, 2002) investigated if their participants practise English through using their cell phones, and if they trained to do so. According to their research findings, 57.9% of female students responded positively and 47.4% of male students replied in a favorable way. Broadly, mobile-assisted language learning have gained a wide acceptance, as many research findings revealed positive attitude amongst students and teachers. Thus, the understanding of MALL as a promising approach in teaching and learning foreign languages depends partly on attitudinal research.

2.5 Summary of the chapter

This chapter discussed a number of significant issues concerning the field of mobile assisted language learning. It included some definitions of mobile-assisted language learning. The chapter also briefly traced the history and theory of mobile learning. Moreover, this chapter discussed different mobile devices used in mobile learning and how such devices lend themselves to explicit use in language teaching. Finally, the advantages and challenges of using MALL in language learning were also discussed in this chapter.

Chapter Three Methodology

3.0 Introduction

This chapter presents the methodological framework of the research in hand. It describes the research design and the methods of data collection instruments, in addition to their validity and reliability. This chapter discusses the sampling steps adopted in this study. The procedures of data collection, pilot study and some ethical issues are considered in this chapter.

3.1 The Research Design

The research design is considered as the overall strategy that you choose to integrate different components of the study in a coherent and logical way (Cohen et al., 2007). Killam (2013:4) states that "research is rooted in philosophical beliefs about values, concepts, and the nature of knowledge". Therefore, in order to be able to appreciate such beliefs, various relevant terms should be defined as 'paradigm', 'ontology' and 'epistemology'. The term, 'paradigm' has been defined by Kuhn (1962) as "the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed". Moreover, Guba (1990: 7), states that a paradigm can be perceived through ontology, as in: 'What is reality?' and through epistemology, or "the nature of the relationship between the researcher and the knower". Killam (2013) argues that ontology dictates epistemology which dictates the methodology and the methods of the research. As it has been stated above, the paradigm can be recognized by the ontology which is "the form and nature of the reality" (Guba & Lincoln, 1994:108). In this study the reality is not a single truth, but multiple versions of realities that are socially constructed through the investigation of the learners' attitudes and perspectives of the use of mobile devices in language learning. These versions seem to be shaped as a result of what learners think about the use of mobile devices, therefore the ontology of this study can be relativist as the knowledge seems to be a social reality, full of values and it is only individuals who bring it to light through interpretation (Sukamolson, 2010). It is also important to indicate the epistemology which is "how we know what we know" (Creswell, 2014:103).

Killam (2013) argues that the epistemology means the relationship between the researcher and his/her research. The adoption of relativist approach will need from the researcher to have an inside view by interacting with learners, as participants, to know what the truth means for them. An interaction is needed to gain an in-depth understanding of what is going on. Regardless of the paradigm applied, however, it is essential to indicate which one is adopted in a study. In this instance, a pragmatic paradigm is applied, as Dörnyei (2007: 307) argues that "research is not a philosophical exercise but an attempt to find answers to questions". The present researcher therefore believes that the current research problem can be most effectively and adequately addressed in this way. Paltridge and Phakiti (2015: 17) define the pragmatic paradigm as "a pluralistic approach to research that stresses the importance of solving a problem over the adoption of a particular approach to research methods". It emphasizes the fact that the researcher is free to choose what works best in his or her inquiry (Teddlie & Tashakkori, 2009; Creswell, 2003; Dörnyei, 2007). Therefore, both quantitative and qualitative methods were utilized in the present study to fully answer the research questions and avoid any limitations which might occur in the application of a single method. The rationale for the methodology adopted was based on the precept that a fuller understanding of the research focus can be obtained if it is investigated and observed from different perspectives. The findings can be obtained from different types of data collection instruments (questionnaires and interviews) and analysis can be crosschecked to identify areas of similarity and, perhaps more productively, differences, anomalies and apparent contradictions in the findings (Cohen et al., 2007).

3.2 Data collection instruments

In order to obtain comprehensive answers to the research questions, a mixed-method approach was employed in this study. Johnson and Onwuegbuzie (2004:17) define a mixed-method approach as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study". It was also stated by the same authors that the "research methods should follow research questions in a way that offers the best chance to obtain useful answers" (p.17).

The main aim in utilizing a mixed-method approach was in fact to enhance the validity of the study and gain a deeper understanding of the topic being researched, as each method offered significant insights. Dörnyei (2007), Mackey & Gass (2005), Johnson & Onwuegbuzie (2004) and Creswell (2003) agreed that the rationale behind mixed methods of investigation is that they contribute to more meaningful and comprehensive results, as compared to quantitative and qualitative approaches used on their own. Therefore, mixed methods were applied to gain a comprehensive understanding of the practices and perceptions of mobile device use amongst English language learners and the extent to which they believe such use facilitates their language learning.

In the research in hand, the researcher employed a sequential explanatory design. In this respect, Creswell (2009:211) stated that this strategy "is characterized by the collection and analysis of quantitative data in a first phase of research followed by the collection and analysis of qualitative data in a second phase that builds on the results of the initial quantitative results". Therefore, a questionnaire was given to the targeted students by hand, in order to obtain an overview of their perspectives, beliefs and usage of mobile devices, as well as the extent to which they believed that these devices enhance their language learning. Follow-up semi-structured interviews were conducted with those participants who were willing to be interviewed, so that a deeper understanding of their attitudes could be gained. However, it was also anticipated that some unexpected results would be generated, as "there are always unexpected results" (Dörnyei, 2007:170), which cannot be statistically interpreted. Therefore, a qualitative method was added, in order to dig deeper and gain a more in-depth understanding, while at the same time remedying any limitations or dealing with unexpected data.

Another reason for adopting mixed methods was that such an approach could lead to a greater validity and reliability. One more advantage was the researcher could accommodate the limitations of one method by employing the other. Dornyei (2007:62) states that "the validity argument for mixed methods research can combine the validity evidence offered by qualitative and quantitative components separately". In such a case, the researcher can bring out the best of both methods. Dornyei (2007:62) suggests that "using a mixed methods inquiry offers a potentially more comprehensive means of legitimizing findings than do either qualitative or

quantitative methods alone by allowing investigators to assess information from both data types".

In fact, mixed methods can also be referred to as 'methodological triangulation'. Mackey and Gass (2005:181) refer to triangulation as "multiple research techniques and multiple sources of data in order to explore the issue from all feasible perspectives". The use of triangulation can enhance research validity. In fact, Dörnyei (2007:165) points out that "triangulation has been seen as an effective strategy to ensure research validity". Thus, the current study applied the following design: a questionnaire and a follow-up semi-structured interviews. In other words, a quantitative approach was adopted, to be followed by a qualitative approach (Dornyei, 2007). Such a use of mixed methods in this study was thought to be effective for investigating the impact of mobile device use on language learning, allowing researchers to include both numerical and psychological aspects.

3.2.1 The Questionnaire

In the first phase, this study employed a quantitative method, "characterized by the use of numbers to represent its data" (Perry, 2005:75). As previously mentioned, a questionnaire was employed to collect the quantitative data. Brown (2001:6) defines questionnaires as "any written instruments that present respondents with a series of questions or statements which they are to react to either by writing out their answers or by choosing from among existing answers". The questionnaire was distributed amongst approximately 40 students and was originally designed by the researcher herself, consisting of closed questions. Mackey and Gass (2005: 93) argued that "closed item questions typically involve a greater uniformity of measurement and therefore greater reliability... they also lead to answers that can be easily quantified and analyzed". Moreover, this questionnaire was intended to gather data about students' beliefs and attitudes concerning mobile devices and language learning. Dornyei (2007:102) pointed out that questionnaires are used to "find out what the respondents are doing or have done in the past, focusing on actions, life-style, habits, and personal history". Therefore, a questionnaire was designed and distributed to collect the data required.

The respective questionnaire (see appendix 1) was designed in three sections and the students were asked to answer the respective closed-ended questions, which were presented in the form of multiple-choice questions. The main sections (2,3) of this survey requested information on the students' use of mobile devices, the languages used and their beliefs concerning this usage for language learning. Such data were collected without any engagement of the researcher's own opinions or beliefs, as it is important to use instruments that can guarantee subjective data being elicited from the participants.

The most commonly used type of closed-ended questions is the Likert scale, as it "assesses attitudes towards a topic, by presenting a set of statements on that topic and asking respondents to indicate for each whether they strongly disagree, disagree, are undecided, agree, or strongly agree" (Ary, Jaoobs & Asghar, 2009: 209). The present researcher chose to use a Likert scale for the third section of the questionnaire survey, as it measures the extent of participants' agreement with each item. Moreover, some of the statements were paraphrased and reiterated, to ensure reliable and consistent results. Kumar (2008:108) argued that "the range of agreement-disagreement responses permitted with Likert items may make subjects more comfortable in indicating their position". It is also a scale which has proved to be more reliable than others.

However, it is important to refer to other advantages of using questionnaires, apart from the specific study rationale. For example, questionnaires are relatively easy to construct, and it could be argued that they are extremely versatile. Moreover, they can systematically gather a large amount of information in a short time, as well as having economic benefits, since they are generally cheaper to administer than other data tools. Nevertheless, it must also be acknowledged that questionnaires can be problematic in cases where the participants fail to return them. Perry (2005:171) noted that the response rate tends to be very low, compared to the number of people who receive questionnaires. Moreover, the responses provided for questionnaire items may be insufficient, superficial or inaccurate, with a need for further elaboration. Additionally, the researcher might not be sure whether they were the actual target participants who provided the responses, which is another challenge of online questionnaires. Thus, to avoid some of the aforementioned limitations, a qualitative instrument was additionally implemented to support the data collected from the questionnaires. Dörnyei (2007:171) suggested that "adding a subsequent qualitative component to the study can remedy this weakness".

3.2.2 Semi-structured Interviews

The second phase of the data collection involved a qualitative method. According to Dörnyei (2007:1240), this "is usually transformed into textual form". Semi-structured interviews, in which "the researcher uses a written list of questions as a guide, while still having the freedom to disagree and probe from the information" (Mackey & Gass, 2005:173), were employed in this instance, with those willing to take part in the respective qualitative phase. This was intended to gather more details on the perspectives and feelings of the subjects concerning the issues in question. The main aim of applying such a method was that the interview questions would allow the researcher to further investigate any phenomena that had yet to be clearly identified, or any new and unexpected results that emerged. Dörnyei (2007) notes that semi-structured interviews are most suitable when a researcher has a good overview of the phenomena and wants to develop broader or deeper questions about them.

Moreover, as such interviews are interactive, this can be very helpful for the researcher, because the aim was to give the interviewees a chance to elaborate on certain issues that may not be clear, or to complete their initial answers. Mackey and Gass (2005:173) stated that "researchers can elicit additional data if initial answers are vague, incomplete, off-topic or not specific enough". During the interviews, the participants were given the chance to say as much as they liked on the topic, with the role of the interviewer reduced to a minimum, so that there was less risk of the participants being led to give answers they thought were more acceptable. These semi-structured interviews took 20 to 25 minutes to conduct. The researcher asked their permission to audio-record the interviews, they were free to refuse. However, all the interviewes accepted to record the interviews, and in this way the researcher was able to listen to the dialogues again and analyze the data more effectively.

3.3 Sampling

This research is focused on adult English students. The participants were chosen using convenience sampling. Dörnyei (2007:99) defines this as an approach where, "members of the target population are selected for the purpose of the study if they

meet certain practical criteria, such as geographical proximity, availability at a certain time, easy accessibility, or the willingness to volunteer". The researcher therefore sought the participants by contacting students from Abu-Issa college. The researcher believed that this means of communicating with the research candidates would avoid sampling bias, in that only those subjects would be recruited who were already digital residents. In this study, a total of 50 questionnaires were handed over to the students. The students who were answered the questionnaires were chosen randomly. The total returned questionnaires were only 40.

In the second stage of the data collection, 8 students who indicated their willingness to voluntarily participate in the interview were contacted. The rationale for this convenience/purposeful sampling was the availability and accessibility of the participants, who possessed the main characteristics required for the purpose of the investigation. Therefore, eight semi-structured interviews were arranged to collect the qualitative data. The interviewees were asked to choose a suitable and convenient time and place, the interviews taking place at a college café selected by the interviewees. All the interviews took approximately 25 minutes each. A sample of the interview questions is included in appendix B.

3.4. Pilot Study

The pilot study can be defined as a small study to test the data collection instruments and the research techniques. Burns (2000) explained that the purpose of the pilot study is not only to acquire data, but also to learn how to acquire data properly and accurately. It helps researchers to discover weaknesses in their methodology. The questionnaire was piloted by obtaining seven experts' feedback on the questionnaire items; with the respective academic supervisor being asked to check the questionnaire and provide his feedback. This can be helpful for enhancing the quality of a questionnaire. In addition, the researcher piloted the questionnaire by testing it on a group of English learners from Abu-Issa College; asking them to fill in the questionnaire. This was a means of verifying whether the intended data were in fact gathered. Such piloting enhanced the internal validity and reliability of the questionnaire. In this regard, Dörnyei (2007) argued that piloting the research data collection instruments raises its quality in terms of validity and reliability.

Moreover, Lincoln and Guba (1985) stated that in order to apply the quality insurance appropriate for qualitative data collection methods, the interviews schedule should be checked by peers. Therefore, certain experts were asked, such as my dissertation supervisor, to check and review the interviews schedule, consequently giving feedback. This was very useful, because such checking can enhance credibility, which is "the qualitative counterpart for internal validity" and dependability, which is "the qualitative counterpart for reliability" in any research (Dörnyei, 2007:57). It is suggested that an effective interviewer try out the questions designed for an interview outside the interviewee pool (Grady, 1998). Therefore, the interview questions were answered from two of the learners, who completed the questionnaire as a pilot study before the actual research began. Such piloting generates feedback on whether the questions are reasonable or not and help to elicit useful information, as well. Furthermore, the pilot study gave the researcher the chance to practice her interviewing skills. Richards (2005) suggests this as an effective strategy for trying out techniques in advance.

3.5. Data Collection Procedures

The researcher used quantitative and qualitative methods in collecting data of this research, to gain deep information. All of the participants contacted face to face directly. After the pilot study, the researcher became more aware of the possible influence of the researcher's presence on the students' performance in class. The questionnaire was disrupted to fifty participants and returned only forty during the academic year 2019- 2020. Furthermore, only eight students were interviewed in this study. The interviews were conducted after the questionnaire. The interviews were carried out in Abu- Issa College at Zawia University. Semi-structured interviews were used as a tool of data collection because such questions as Seidman (1998: 9) clarifies, "aim at building and finding out how the participants see the phenomena of the study through their open responses". These questions were set up in specific order, using clear language and simple words. The questions were carefully designed to cover aspects of language teaching and learning. In order to gain useful data and to make it more manageable, the researcher interviewed students individually. Interviews lasted between thirty-five to thirty minutes. The length of the interviews was dependent on the interaction between the interviewer and interviewee. All the interviews were recorded and transcribed to be analyzed.

3.6 Ethical Issues

Since human beings are inevitably involved in educational research, this gives rise to ethical issues. Dörnyei (2007:67) notes that "the primary principle of research ethics is that no mental or physical harm should come to the respondents as a result of their participation in the investigation". On the other hand, Mackey and Gass (2005:25) argue that second language research "poses minimal to no risk and often provides added benefits, such as language production practice". However, it is still important to take ethical issues into consideration. As Dörnyei (2007:67) points out, there is increased likelihood of "ethically relevant moments" occurring in a qualitative and mixed-method approach, because such studies are more concerned with people's personal views and feelings. Therefore, as the current researcher is conducting mixed-method research, some ethical considerations need to be accommodated.

First of all, during the stage of data collection, the researcher took permission from the college administration, then obtained consent letters from the participants. Mackey and Gass (2005:27) explain that "informed consent requires that human subjects, to the degree that they are capable, should be provided with the opportunity to choose what shall or shall not happen to them". The researcher provided sufficient information about the study, such as its aims, timescale, procedures and potential risks. Moreover, the researcher informed the participants that they could withdraw from the study at any time, without any consequences. The researcher also assured the respondents of confidentiality by informing them that all the data gathered, including names and personal information, would not be disclosed. Having pointed to the importance of informed consent, the researcher in this instance ensured that the consent form was written in simple and clear language, to avoid any ambiguity.

The researcher asked the participants for their acceptance to participate and their permission to audio-record the interviews. Furthermore, the researcher explained the whole interview process beforehand in detail. The purpose and the duration has been discussed. The participants were allowed to choose times that are convenient for them to be interviewed. In addition, the participants were free to choose video-recorded or only audio-recorded to be conducted for the interviews; given that some female participants might not have wished to be video-recorded, for religious or cultural reasons. This avoided putting pressure on the participants, and encouraged them to act as naturally as possible.

3.7. Summary of the Chapter

In this chapter, the adopted methodology for this study was described. The first section outlined the philosophy behind the selection of the research approach adopted, discretion of the methodology employed, and the rational for choosing it. Subsequently, the research instruments used, sampling, were presented. The pilot study and their procedure were considered. Finally, the ethical considerations were included in this chapter.

Chapter Four Data Analysis and Results

4.1 Introduction

This chapter includes the process of data analysis and the integration of the two types of findings, namely the quantitative qualitative. Even though a mixed method technique was used, each type of data was analysed individually. Cohen et al., (2007) stated that each approach is appropriate for analysing certain data. The analysis is used "to help the account 'live' and communicate to the reader through the telling quotation or apt example" (Robson, 2002:456). The quantitative data was analysed statistically using Excel Microsoft office 2019 and the statements were grouped according to the research questions. The qualitative data were first transcribed, carefully checked, and then analysed. To provide comprehensible and organised answers to the research questions, the process of data analysis was carried out according to the following categories: the use of mobile devices, the language used and enhancing language learning. The findings were presented in figures, and quotes taken from the interviewees' participations were utilized to support the analysis process.

4.2.1 The use of mobile devices

The findings obtained revealed that all the participants used at least one of the following mobile devices for language learning: laptops, smart phones and ipads. Some of the participants reported using these devices in combination with each other for learning purposes. Looking closely at figure one shows that 10% of the participants use laptops and smart phones, while 7.5% use ipads and smart phones while 82.5 use only smart phones. These results show that all the participants use mobile devices. However, the use of laptops and mobile phones was significantly higher than the other devices. This could be related to the size of mobile phones, rendering them highly portable and thus promoting mobility, as indicated in the participants' reasons about the devices they were using. For example, student 'A'

stated, "I prefer my phone, because it is always with me, but I still need to work on my laptop to write homework and project work". Student 'B' argued, "I use my mobile phone most of the time, because it is always in my pocket and easy to carry". This reflects a strong connection between mobile devices as almost all of them reported using mobile phones constantly and they consider them very essential elements in learning process.

4.2.2 Various uses of mobile devices by learners in different languages

Analysing the data showed that contemporary students used mobile devices extensively in learning. The quantitative findings revealed that the participants reported using mobile devices for many purposes and in different languages. For example, mobile devices were used in searching for information, watching videos and listening to music. Moreover, they were also used in communicating with friends and families through emails, 'apps' and social networks. According to the participants' responses, mobile devices became a fundamental element in their daily life.



Figure 4.1: Mobile devices and language use

Figure 4.1 illustrates different issues, for example when using emails 20% of the students surveyed reported that they mainly use English with occasional use of their first language. On the other hand, 45% of the respondents stated that they use only English. These findings indicate that English was predominantly used during writing

emails, but their first language was occasionally used. The main reason to use English more frequently is that most of the emails were utilized by students as a mean of communication with their teachers. Another possible reason was that their emails were formal, or semi-formal modes of communication, which required impersonal subject-specific or task specific language that was better understood and more accessible to the participants in English. interestingly, the qualitative findings went in agreement with the quantitative ones. In this respect, student 'C' said, "*as you know when it is related to emails I use only English, because most of the emails I send are formal and usually they are related to my study*". Student 'D' also commented, "...whenever it is about emails, I use English as I sent most of the emails to my teachers and colleagues".

Regarding the use of online dictionaries, the findings revealed that they were favoured by the participants. Statistically, 20% of the students reported using English, along with occasional use of their first language, and 50% reported using only English. With regard to websites for practicing English, the participants' responses were mainly concentrated on English, with a percentage of 67.5% of the students claiming they exclusively use English on websites designed for English language practice. For example, student 'E' argued, "*I spend most of my time practicing my language on different websites and apps*".

Another interesting finding is concerned with social media sites, where the students' responses were more less evenly distributed. 10% of the participants stated that they used their first language when accessing such sites, and 25% affirmed that they mainly used their first language, with occasional English use. Meanwhile, 42.5% declared that they mainly used English for this purpose, but occasionally used their first language. Finally, 22.5% stated that they only used English on such sites. As a result, it was evident that learners tended to use their first language when accessing social media sites, and this could be because they were using them to talk to family members and friends. For instance, student 'F' said that "*I use Facebook to talk to my family and friends and also to serve the news in the Libyan news pages*".

Nevertheless, it cannot be ignored here that significant percentages of the participants declared they used English either sometimes or exclusively when accessing social media. Some of the participants reported using both second and first language when writing posts, because they wanted first practise their English and then help their

friends to be able to read their posts. In this respect, student 'E' stated, "... when I post something in social media I write in English and translate what I wrote so my friends can understand it". Interestingly, student 'I' reported that "I have a Twitter account which I use it only in English, because I interested to know everything new in my field and all of the professors speak English only".

Analysing the qualitative data indicated an extensive use of mobile devices among the participants. In this regard student 'D' stated, "I use my devices daily; I use them to check emails. I also use them for social media, especially Facebook to communicate with friends and family. I listen to music and news; I also watch YouTube videos". Student 'E' also argued, "I use my smart phone every day, I check dictionary, use Google, listen to music, communicate with friends and searching information that I need whether in my study or in my personal life". This implies that these students were highly motivated to use these types of technology.

The qualitative findings presented an evident that Libyan students access and use English to a great extent outside the classroom. Moreover, in so doing, they don't only use English purely for academic purposes, but also on a day-to-day level, as native speakers do. In other words, they use English to send SMS text messages, listen to English language music and news, and watch English language videos. In addition, they use English to communicate with others. For example, student 'G' said, "*I think I just used to use English as long as the person I'm talking to speaks English, I found myself speak English with my friends who speaks English, I like this way of using English as I improve my language outside the classroom*". This means that the students are aware of the importance of using such kinds of technology to improve the target language.

4.3 How the Use of Mobile Devices Enhances Language Learning

Analysing the data showed that almost the participants extensively used English for different activities and purposes in their everyday lives and were exposed to the target language by communicating with native and non-native speakers, listening to music, watching videos etc. In section 3, statement 10 of the questionnaire, the participants were asked to state whether they agreed or disagreed that using mobile devices made contribution to their language learning. 77.5% agreed that the use of mobile devices

helped them in this way. This breaks down as 35% strongly agreed and 42.5% agreed, while a small number with a percentage of 2.5% disagreed with this statement. Another number of responses were elicited by another statement, as 97.5% agreed that mobile devices offered them more opportunities to learn better, this also breaks down as 60% reported strongly agree and 37.5% reported agree with the statement.

Furthermore, the research participants confirmed using English for different activities and purposes in their everyday lives, and were exposed to the target language through communicating with native and non-native speakers. For example, student 'F' said, *"watching YouTube videos and some apps like TED helps me to learn the language, I* learn many new vocabularies and it also helped me to know the pronunciation of some words". Student 'E' justified their use to the target language by saying, "reading newspaper and online articles helped me to learn more vocabularies and helped me how to structure sentences correctly". Interestingly, the qualitative findings showed that although the participants reported using mobile devices to consult dictionaries or read articles, they talked more about their day-to-day, rather than academic use of mobile devices, such as learning 'apps' and websites. For example, student 'G' stated, "I spend some time practicing grammar on online apps, but I think the other uses helped me too, I would not improve my language if I did not use the language in chatting and comments with colleagues on Facebook, WhatsApp and Twitter". Moreover, student 'H' said, "I do try to improve my academic English by practicing the language in some learning apps and websites, but I believe that other uses of mobile devices, such as communicating with friends and sending messages where I should use English helped me to improve my language". Student 'A' also stated, "I read online articles and that helped me to improve my English as I learnt new vocabulary which sometimes were difficult to understand from the context. I always use the dictionary which I have already download in my device". This indicates the students were quite familiar with the use of modern technology for different purposes

4.4. Students Attitudes Towards Language Learning and Mobile Devices

This section of the questionnaire contained (22) statements and aimed to investigate the participants' attitudes towards language learning and mobile devices. To analyse the participants' responses, SPSS Software program was used. These items are analysed below.



1: I am very good at learning a second language through using mobile devices

The above graph shows whether students are very good at learning a second language through using mobile devices. With a percentage of 17.5% of the participants reported *'strongly agree'*, 65% reported *'agree'* 17.5% reported *'neutral'*, while none of the participants reported either *'strongly disagree'* or *'disagree'*.



2. Learning a foreign language assisted by mobile devices is not helpful

The above graph represents whether students learning a foreign language assisted by mobile devices is not helpful. None of the participants reported either 'strongly agree' or 'agree'. However, with a percentage of 15%% of the participants reported 'neutral', 25% said 'disagree', and 12, 30% reported 'strongly disagree'.



3. I am ready to use mobile devices for learning purposes.

The above figure illustrates whether students were ready to use mobile devices for learning purposes. With a percentage of 32.5%, the students reported '*strongly agree*', 45% reported '*agree*', 17.5% chose '*neutral*', while 1, 2.5% reported in equal balance 'disagree', and 'strongly disagree'.



4. I can afford the payment of internet access and SMS for learning purposes

The figure above shows whether students can afford the expenses for internet access and SMS for learning purposes. With a percentage of 5%, the students reported 'strongly agree', 52.5%) of them reported 'agree', 27.5% chose 'neutral', while 12.5% of the participants reported 'disagree', and 5% chose 'strongly disagree'.



5. I can't afford the payment of internet access and SMS for learning purposes

The above graph shows whether or not students are able to afford the expenses of internet access an SMS for learning purposes. In their responses, 12.5% reported 'strongly agree' reported 15% 'agree', 12.5% chose 'neutral', 42.5% reported 'disagree', while 17.5% reported 'strongly disagree'.



6. Mobile devices can enhance collaboration inside classroom

The above figure demonstrates whether students see that mobile devices can enhance collaboration inside classroom. 20% of the participants reported *'strongly agree'*, 37.5% chose *'agree'*, 27.5% went with *'neutral'*, 12.5% reported 'disagree', while 2.5%) chose 'strongly disagree'.



7. Using mobile devices in learning language make me more productive

The above figure demonstrates the percentage of those who believe that using mobile devices in learning language help them to be more productive. In their responses, 47.5%) reported 'strongly agree', 40% chose 'agree', 7.5% reported 'neutral', 5% reported 'disagree' while 0% chose 'strongly disagree'.





The above figure indicates if mobile devices did not help students in language learning. None of the students reported 'strongly agree', 'agree' or 'neutral', while 55% chose 'disagree', and 45% reported 'strongly disagree'.



9. Mobile devices should be adopted as a learning material

The above figure shows whether students find that mobile devices should be adopted as a learning material. In this respect, 37.5% of the students reported '*strongly agree*', 40% elected '*agree*', 20% chose '*neutral*', 2.5% reported 'disagree', while none reported 'strongly disagree'.



10. The use of mobile devices made a significant contribution to my language learning

The above figure shows if the use of mobile devices made a significant contribution to students' language learning. Regarding this, 35% reported 'strongly agree', 42.5%) chose 'agree', 20% reported 'neutral', 2.5% selected 'disagree', and none reported 'strongly disagree'.



11. Mobile devices are more suitable than printed material

The above figure shows if mobile devices were more suitable than printed material. Analysing the data indicates that 15%) of the students reported '*strongly agree*', 42.5%) chose '*agree*', 27.5% selected '*neutral*', 10% went with 'disagree', and 5%) reported 'strongly disagree'.



12. The use of mobile devices inside classroom is better than computer

The above figure shows whether students see the use of mobile devices inside classroom is better than computer. In this regard, 30% of the students chose 'strongly agree', 10, 25% reported 'agree', 32.5% selected 'neutral', 10% chose 'disagree', while 2.5% chose 'strongly disagree'.



13. Mobile devices are tools for distraction inside classroom

The above figure illustrates if students saw mobile devices as tools for distraction inside classroom. In their responses, 15% went with '*strongly agree*', 25% reported '*agree*', 17.5% chose '*neutral*', 37.5% preferred 'disagree', and 2, 5% reported 'strongly disagree'.

14. Mobile devices are good tools for listening, reading, speaking and writing activities



The above graph shows whether students found mobile devices good tools for performing listening, reading, speaking and writing activities. In this respect, 52.5% of the students chose 'strongly agree', 37.5% preferred 'agree', 7.5% selected 'neutral', 2.5% chose 'disagree', and none reported 'strongly disagree'.



15. Mobile devices provide opportunities for better learning

Looking carefully at the above figure indicates that mobile devices offer students opportunities to achieve better learning. In this respect, 60% reported '*strongly agree*', 37.5% selected '*agree*', none went with '*neutral*', and 'disagree', while 2.5% reported 'strongly disagree'.

16. I feel that mobile devices hinder my language learning



The above figure shows whether students feel that mobile devices hinder their language learning. 10% reported '*strongly agree*', 22.5% selected '*agree*', and '*neutral*', while 30% chose 'disagree', and 15% reported 'strongly disagree'.



17. Mobile devices are good tools to keep in touch with teachers outside classroom

The above graph shows if students saw mobile devices good tools to keep in touch with teachers after class. Regarding this, 55%) reported 'strongly agree', 27.5% selected 'agree', 5%) chose 'neutral', 10%) chose 'disagree', and 2.5% reported 'strongly disagree'.



18. I would appreciate to send my classmates learning materials to their mobile phones

The above figure shows whether students would prefer to send their classmates learning materials by mobile phones. According to the response obtained, 20% of the students chose 'strongly agree', 37.5%) of them reported 'agree', 27.5% went with 'neutral', 15% reported 'disagree', and none chose 'strongly disagree'.

19. I find the idea of using mobile devices to learn a language ineffective



The above figure shows whether students found the idea of using mobile devices to learn a language ineffective. 22.5% reported 'strongly agree', 20% preferred 'agree',

7.5% chose 'neutral', 22.5% selected 'disagree', while 27.5% reported 'strongly disagree'.



20. The use of mobile devices affected my attitudes towards language learning

The above figure shows if students found the use of mobile devices affected their attitudes towards language learning. In this respect, 17.5%) of the students reported 'strongly agree', 47.5% of them chose 'agree', 15% selected 'neutral', 12.5% chose 'disagree', and 5% reported 'strongly disagree'.



21. Mobile devices do not motivate me to learn a language

Looking carefully at the above figure indicates whether mobile devices did not motivate them to learn a language. In this respect, 5%) reported '*strongly agree*', 12.5% chose '*agree*', 15% selected '*neutral*', while 32.5%) chose 'disagree', and 35%) reported 'strongly disagree'.



22. I plan better for my learning with mobile devices than without it

Looking carefully at the above figure shows if mobile devices helped students to plan better for their learning. According to the responses obtained, 35% of the students chose 'strongly agree', 27.5% reported 'agree', 17.5%) went with 'neutral', 7.5% chose 'disagree', and finally 12.5% reported 'strongly disagree'.

4.5 Summary of the chapter

In this chapter, the data collected were analysed and presented. Interestingly, the findings obtained revealed positive attitudes towards using mobile devices to enhance language learning. The results were interpreted and discussed in detail under three categories, namely the use of mobile devices, the language use and enhancing language learning.

Chapter Five Discussion

5.0. Introduction

This chapter discusses the most interesting findings of the study. The focus of this chapter is to relate the findings obtained to the research questions and to the existing literature. Therefore, what analysed was the extent to which adult Libyan learners use mobile devices and use English on such devices, and the extent to which they perceive that these devices assist their language learning. The current discussion is based on the quantitative and qualitative findings gained, and these are cross-referenced and used in combination to support the issues presented in the study.

Moreover, this chapter is divided into two sections according to the aims of the study. The first section discusses the students-teachers' attitudes toward the use of mobile devices in learning English as a second language. The second section discusses to what extent do students believe that such uses of mobile devices enhance their language learning. A brief summary of the chapter is also provided.

5.1. Research Question One

1- What are students-teachers' attitudes towards using of mobile devices in learning a second language?

The findings obtained revealed that all the research participants confirmed using at least one of the following mobile devices for language learning: laptops, smart phones and ipads. These findings highlighted the pervasive nature of mobile devices and their usefulness for language learning in the given context. The research findings also indicated that all the students interviewed were digital residents and so it was possible to integrate mobile devices. This finding is in line with Traxler (2007), who stated that mobile phones are the promising future of language learning. Furthermore, mobile devices make language learning more personalized, authentic as well as situated. This is because it is the mobility of mobile devices, given their small size, that enables them to be used anywhere and anytime and has led to their increasingly wide spread use.

Moreover, the findings gained highlighted the fact that learners use mobile devices while practising English on websites and applications (apps). However, mobile devices are used more frequently for other purposes. This conclusion supports Jarvis and Achilleos' (2013) argument in which they propose that mobility and the diverse options for implementation are defining characteristics of what non-native English learners need for language practice. Moreover, English language is important for such users and this could lead to the conclusion that applications which have learning and teaching functions are just some of the many tools learners use. Hence, researchers in the field should consider that there is a wider picture to be taken into account.

The findings revealed that mobile devices are used for different purposes and assist with language learning in different ways, not only by focusing on specific uses, such as websites and learning 'apps'. As a result, more in-depth research should be undertaken to investigate how language learning is now assisted by various uses of technology and mobile devices. This conclusion is in agreement with Kukulska-Hulme's (2009) findings in which they argued that using mobile devices as learning tools has many potential benefits for language learning and takes learning out of the classroom walls, often beyond the reach of the teacher. Therefore, researchers cannot ignore how the use of technology is rapidly changing these days, and this has affected how technology can assist language learning.

Another interesting finding is that Libyan students access and use English to a great extent outside the classroom. English became the daily used language. According the participants' contributions, English was used when listening to English songs and news, watching videos, searching for information and using applications. All these activities automatically expose learners to authentic materials, and thus, have an active language input through the aforementioned uses of mobile devices. It can be concluded that the learners in the present study were exposed to English language in different kinds of ways on daily basis and the following section will discuss whether the application of SLA theories could help them enhance their language skills. Thus, it can be argued that such findings add significant value to this study, as it will encourage Libyan students to make use of their mobile devices to help them develop their English language skills, even if they cannot physically attend language classes.

5.2. Research Question Two

To what extent do students believe that using mobile devices enhances second language learning?

The second research question seeks to establish to what extent do students believe that such uses of mobile devices enhance their language learning. Analysing the data showed that the learners in the present study extensively used English for different activities and purposes in their everyday lives, and were exposed to the target language through communicating with native and non-native speakers, listening to songs, watching videos etc. In section 3, statement 10 of the questionnaire, the participants were asked to state 'agree' or 'disagree' that using mobile devices made an effective contribution to their language learning. 77.5% agreed that the use of mobile devices helped them in this way. This breaks down as 35% reported 'strongly agree' and 42.5% reported 'agree', while a small number with a percentage of 2.5% reported 'disagree'. Another number of responses were elicited by another statement, as 97.5% reported 'agree' that mobile devices offered opportunities for better learning. This percentage also can be broken down into 60% reported 'strongly agree' and 37.5% reported 'agree' with the statement. Therefore, it is essential to note that the aim of using English for some learners was not necessary because they were learning the language for its own sake, but is purely as a means to an end (Jarvis and Achilleos 2013). Moreover, as it has been proposed by Todd (2007), learning is not necessarily meant to be a goal in itself, but is rather a means to an end, for example, effective language use. The main goal for language learning is therefore to be able to comprehend language and thus receive information, or to be able to communicate effectively, so that messages can be sent and received. This counts as evidence that language is learnt and improved through such use.

Additionally, although the study did not directly investigate unconscious learning, the interview findings suggested that the various uses of mobile devices could unconsciously assist language learning. This is supported by Krashen's acquisition-learning hypothesis (1982), which argues that learners 'acquire' language subconsciously, but 'learn' it consciously. The qualitative findings also showed that some learners enhanced their language skills by using the respective language, which

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resulted in unconscious learning. In their research, Jarvis and Achilleos (2013) reported similar results in greater detail. However, it might be recommended to carry out other research through more in-depth studies on the use of mobile devices, and on conscious and unconscious learning.

Furthermore, learning a language through various uses of mobile devices could be supported by another theory, namely 'input hypotheses", proposed by Krashen (1985). The findings obtained showed that learners receive large amounts of input when they use their mobile devices. As previously mentioned in chapter two, with input hypothesis, a second language could be acquired by trying to understand messages and receive comprehensible input. When using mobile devices, learners could make choices over how they wish to learn a language, such as through reading or writing and while doing so, they could also ascertain how much they understand. In other words, learners could choose to read online articles, but if this proved to be too difficult, they could choose something easier.

The research findings showed that 42.5% of learners reported using at least some English whenever they interact with others on social media, while 22.5% confirmed using only English on such occasions. This finding implies that the extensive distribution of mobile devices and their use and the dramatic developments in technology over recent years have created an informal zone where learners can use English to interact with each other, even though English is not their native language. Interaction here might indicate posting information, writing comments, sending a 'Tweet' (this being a short written message via the Twitter social networking site), or chatting with others using various message services available on social media networks. Moreover, this conclusion goes in line with Bester & Brand's (2013) findings in which they stated that the use of technology has the potential not only to maintain attention but also to motivate learners to pay attention.

5.3. Summary of the Chapter

Discussing the qualitative and quantitative findings led us to a fascinating conclusion that students majoring English have similar attitudes towards the use of mobile devices to learn the target language. Almost all the students contributed in this study believe that such uses of mobile devices effectively enhance their language learning. A brief summary of the main conclusions is provided in chapter six.

Chapter Six Conclusion

6.0 Introduction

This chapter presents the summary of the whole study. It also displays the conclusions in the light of the study findings, and includes some pedagogical implications. Moreover, this chapter contains a number of recommendations that could be beneficial for teachers, students as well as syllabus designers in Libyan context. Limitations and further research in addition to a summary of the whole chapter are also provided.

6.1 Summary of the whole study

The research in hand employed a mixed methods sequential explanatory research design. The first method was concerned with quantitative data collection and analysis through making use of a questionnaire and SPSS Software program, and second method was concerned with qualitative data collection and analysis through utilizing semi-structured interviews and thematic analysis method. This aimed to investigate Libyan learners' attitudes towards using mobile devices in learning a second language. In the current study, the process of data analysis and identifying the findings obtained were organized according the sequence of the research questions.

The research findings affirmed that students use a variety of mobile devices every day. They access and communicate information in both their first language and English. Mobile devices are therefore used daily to practise English, access and communicate personal and academic information, and for the purpose of recreation and entertainment. The learners appeared to believe that the use of such devices with various applications provide an effective exposure to the target language, i.e. authentic opportunities to practise English language in practical situations.

Interestingly, the learners acknowledged the different uses of mobile devices, as these devices are not necessarily used for academic purposes or in formal learning, but are frequently implemented in everyday life for various purposes, since they can be conveniently used anytime and anywhere. Such findings lead to a different acronym from the original MALL, which referred purely to language learning, thus indicating

MALU, where the emphasis is on the practical use of mobile devices. Jarvis and Achelleo (2013:9) define this as "non-native speakers using a variety of mobile devices in order to access and/or communicate information on anywhere/anytime basis and for a range of social and/or academic purposes in L2". An example of MALU is when ESL learners play a favourite online video game with many players from different countries, competing, chatting and planning gameplay tactics through the medium of English; although they are not playing to learn the language, they acquire English through playing. That said, the main aim of this study was to investigate the uses of mobile devices and their effect on language learning. The results therefore showed that the term 'MALL' should be reconsidered and conceived in more sophisticated terms, whereby mobile devices are not merely seen as "a means to an end" (Jarvis, 2014). This 'end' is considered here to be language learning, but in more general terms, the end may be perceived as accessing and using information as globally networked citizens in both English as a second language (L2) and the respective learner's native language (L1).

6.2 Pedagogical Implications

Nowadays, with the rapid development of technology, it has become intertwined with all aspects of our lives and the field of TESOL is no exception. As the study showed, mobile devices are used daily; learners carry their smartphones with them at all times and students use them both inside and outside the classroom to access information and communicate, post items or chat, with the result that they become what is known as 'digital residents'. However, mobile devices and technology in general should not be separated from the curriculum design or the teacher's plan for teaching L2. The teachers should instead make use of mobile devices inside the classroom; for example, by asking students to perform tasks in groups using their smartphones, and outside the classroom, by encouraging them to post summaries of their lessons each day on Twitter or Facebook and comment on them or use applications with the teacher for learning. This kind of practice definitely promotes language learning.

The use of mobile devices will also expose learners to authentic materials. Jarvis (2014: 27) stated that much of the English used today is actually mediated through digital devices by participants who live out at least a part of their lives using English as an L2. Students who do not live in countries where English is the first language,

but they are nevertheless surrounded by the target language whenever they go outside the classroom; for example, ESL students in Libya are disadvantaged by a lack of authentic English language materials and a lack of opportunities to use English outside classrooms. As a result, students now could compensate this exposure by using mobile devices to practice English, as such devices offer them unprecedented access to make use of English as an L2. Therefore, TESOL researchers and TESOL management in general, as well as the Ministry of Education in Libya need to consider more extensive integration of mobile devices and technology into language teaching, by encouraging the incorporation of such devices into the teaching process. Moreover, there is a need to end the separation of language teaching in the classroom from language use in the real world. What is taught in the classroom could be enhanced through such use and exposure to real life, which would involve the inclusion of mobile devices in language teaching and learning.

As pointed out earlier, ESL learners are mainly digital residents and browse the Internet using English as a natural part of their daily lives. In fact, individual Internet use is rapidly increasing all over the world and with it, the use of the English language. According to Internet World State (2019) the number of Internet users in English language are 1,105,919,154 billion users. Learners are now living out part of their lives in an online environment, where they search information and make decisions about it, not only in their first language, but also in English. This is a new area of TESOL and language education which calls for further investigation. In short, it is time to think of learners as digital residents and establish how this can be beneficial to the field of language learning.

Having highlighted the significance of mobile devices for language learning and the rapid use of such devices, it cannot be denied that there is another side to be considered. This is the problem of engaging young learners in the various uses of mobile devices, as it is difficult for them to protect their personal information, especially when using social media. Moreover, not all webpages are reliable, and so learners should be careful when publishing their information online. As a result, there is a need to consider digital literacy skills which are defined by Dudeney, et al. (2013: 2) as "individual and social skills needed to effectively interpret, mange, share and create meaning in the growing range of digital communication channels". Teachers

will therefore not only need to teach grammar and vocabulary, but also digital literacy skills (Walker & White, 2013), for example, learners should know where to find reliable information. Here, the teacher's role is to encourage students towards a certain level of critical thinking. This can be assisted by informing them of some of the reliable resources available, such as academic journals and the Google Scholar search engine.

Finally, a further potential drawback to mobile device and general Internet use, which ought to be considered, especially with regard to education and language learning, is that mount time spent by learners using their devices. Aside from the social impact of this, given that it could mean less time spent with their families and friends on a face-to-face basis, there is also the possible effect on aspects of their learning, such as interpersonal skills, teamwork and other aspects of communication. For example, it has been known for learners to complain that they are unable to find native speakers to talk to and practice their English speaking skills with.

6.3 Recommendations

Based on the findings of the study, it is recommended that decision makers and language teachers adopt the following suggestions:

- Raise students' awareness about the effectiveness of mobile assisted language learning.
- Allow the use of mobile devices inside classrooms for learning purposes.
- Authorize internet access inside as well as outside classrooms.
- Make collaboration between higher education institutions and the local wireless technology.

6.4 Limitations of the study

Limitations are always expected in any research, and this case is not an exception. The main limitation of the current study is that it investigated learners who study at Abu-<u>Issa</u> College. The use of in situation observation in this study could have undoubtedly provided a better perspective of what mobile devices are actually used for, but gathering data in this way can be extremely time-consuming and financially expensive.

Another limitation was concerned with the number of participants in the quantitative phase of data collection. Only 40 participants took part in the study, and this cannot be seen as a large sample, capable of producing findings that could be generalized to a larger population. As a result, the external validity of the research was affected, with results that cannot be generalized. However, the study could be applied to a different context in future.

Additionally, the researcher concluded that the qualitative findings would have been more accurate if all the interviews had been conducted face-to-face with the participants, because this procedure could have helped the interviewees to be more relaxed and confident, thus resulting in a more meaningful and accurate data. More to the point, the researcher, as an interviewer would have had the opportunity to observe non-verbal cues more closely. The researcher believes that there was some risk in conducting on telephone interviews, i.e. the lack of physical presence might lead to less authentic communication and less information being conveyed; for example, with the participants merely telling the researcher what they think she wants to hear.

Despite all these limitations, this study still has significance, as the data were gathered and analysed by utilizing quantitative and qualitative data collection instruments. This technique was effective to provide comprehensive answers to the research questions and generate valuable results.

6.5 Suggestions for Further Research

As it has been noted earlier, a small number of studies have investigated how learning a second language can be enhanced through the daily use of mobile devices. The present study therefore, was aimed to bridge this gab in literature. However, one suggestion for further research would involve identifying how much language could be learned and acquired through the use of mobile devices, by employing empirical studies. There is, in fact, a lack of empirical studies and large test groups in the field of SLA that could provide concrete evidence on the language that is learned or acquired through the use of mobile devices. Moreover, the reliability of such research should be assured. Finally, it is recognized that a wide range of mobile devices are used outside the classroom and such technology is rapidly developing. Therefore, in order to ascertain how this will affect the use of such devices and in turn, language learning, further research is needed; covering broader use of mobile devices in less controlled contexts and identifying how language learning is thus enhanced.

This study has investigated the use of mobile devices by Libyan English language learners. Such devices are used for a whole range of different purposes, such as language learning, searching for information and communication. It was found that learners use mobile devices in their first language, as well as in the target language and they perceive this usage to be very useful in their language learning journey. Therefore, with the increasing use of mobile devices and the development of technology, it is implied that English can be practised and used every day at anytime and anywhere. English language practice opportunities are therefore not necessarily limited for learners in countries where English is not the native language, for example, Libya. In addition, as much of this exposure forms part of people's natural interests and activities, integrated into daily life, language learning can take place through acquisition outside formal learning environments. An outcome of this could be enhanced motivation to learn, inspired by a personal desire to communicate and access information in an international sphere, where English is often a common language. Moreover, the trends observed point to expansion and progress in this area, thus indicating an important and positive role for mobile devices in facilitating language learning worldwide.

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Appendices

Appendix A: Questionnaire

Appendix B: The interview Questions

Appendix A: The questionnaire

In this questionnaire, the researcher investigates the attitudes of English learners towards using mobile devices in language learning.

Please answer the following questions by following the instructions given in each section.

Section 1

Personal information

1-Gender

Male..... Female.....

2–Age

3-What mobile devices do you have, laptops, smart phones, ipads, or others, please

specify?

Section 2

Mobile devices and language use

Please reflect on the languages you use when implementing mobile devices, whether in classroom or elsewhere.

Next, please tick the box next to the statement which most applies to you.

A: Only my first language.

B: Mainly my first language and some English.

C: Mainly English and some of my first language.

D: Only English.

	А	В	C	D
•E-mails				
online dictionaries				
• contacts with families/friends				
	Α	В	С	D
websites for practicing English				
• Accessing social media sites (Facebook, Twitter, etc.)				
Communicating with class mates				
Communicating with tutors				
• Entertainment (games – YouTube ,etc.)				

Section 3

Students attitudes towards language learning and mobile devices

Please read each statement carefully, then indicate the extent to which you agree or disagree with the following. Please respond by ticking in the right hand column next to each statement, ranging from (strongly agree) to (strongly disagree).

Items	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1: I am very good at learning a language through					
mobile devices					
2:Learning a foreign language assisted by mobile devices is not helpful					
3:I am ready to use mobile devices for learning					
purposes.					
4:I can afford the payment of internet access and SMS for learning purposes					
5:I can't afford the payment of internet access and SMS for learning purposes					
6: Mobile devices can enhance collaboration inside classroom					
7: Using mobile devices in language learning makes me more productive					
8:Mobile devices did not help me in language learning					
9:Mobile devices should be adopted as a learning material					
10:The use of mobile devices made a significant contribution to my language learning					
11:Mobile devices are more suitable than printed material					
12:The use of mobile devices inside classroom is better than computer					
13:Mobile devices are tools for distraction inside					
reading, speaking and writing activities					
15:Mobile devices gives opportunities to learn better					
16:I feel that mobile devices hinder my language					
learning					
1/: vioble devices are good tools to keep in touch					

with teachers outside classroom			
18: I would appreciate to send my classmates			
learning materials to their mobile phones			
19:I find the idea of using mobile devices to learn a			
language ineffective			
20:The use of mobile devices affected my attitudes			
towards language learning			
21:Mobile devices do not motivate me to learn a			
langua ge			
22:I plan better for my learning with mobile devices			
than without it			

If you have any additional comments to inform this survey, please write them here

Thank you for your collaboration

Appendix A: Interview Questions

1-Do you have mobile devices, if yes, what are they?

2-Could you please tell me what mobile device /devices are you using?

3-Could you please tell me how you use mobile devices? For example, tell me about their use in a typical day?

4- Do you think your daily use of your mobile device help you in learning English?

5- How long do you use your mobile device, and when do you use it?

6- Do you use your mobile device in classroom?

7- Do mobile devices offer you the opportunity to learn better?

8- Do you use mobile device to improve your language skills? If, yes how?

9- How can the use of mobile devices affect your attitudes towards language learning?

10- Do you think the use of mobile devices enhances your language learning? If yes, how?