Abstract
The main purpose of this research was to provide a serious vision of students’ access and use of mobile phone and its peripherals for learning second language skills. The second purpose study was to investigate differences between boys and girls according to their access and usage of Mobile devices for learning English language skills from the Sharkord high school students. Statistical population was included all students in Sharkord high schools. Samples included 600 students that were selected by multi-stage clustering method. Data gathering instruments were included self-made questionnaire that was made according to theoretical background and literature of past research. After determining its validity and reliability it was used in schools. Findings indicated that a majority of students, more than 90% of them had access to some kinds of mobile devices, but less than 10% of them used it for educational purposes especially for learning English as a second language (ESL). Boys had more access to mobile devices than girls and were more knowledgeable about its usage. They were also more motivated and had self-efficacy in learning from mobile tools than girls. There were not any differences between boys and girls regarding to their attitudes toward using mobile devices for ESL. Results also indicated that there were relation between language learning skills and the possibilities of students’ Mobile cell phones and also their motivation and self-efficacies for using it. There was significant relation between the type of phone cell usage and language learning skills. According to the results, we conclude that mobile phones and its peripherals could facilitate and help students to learn more language skills. It depends to the student's motivation. Students who had more motivation in learning English language, they have installed more peripherals on their mobile.
Keywords: Mobile learning, Attitudes, Motivation, Gender, Self-efficacy

1. Introduction
New technologies have a wide range of applications. Gradually, we use technologies more and more in all aspects of our ordinary life directly or indirectly. Consequently, what is occurring in language learning is also affected by technologies. With the advent of multimedia, Internet, and mobile devices more and more students are using computers and other technological devices in their education especially for learning subjects that are not covered by formal settings such as English as a second language for countries that their native language is not English. Iran is one of these countries. This is particularly evident in today’s education, where students and teachers have greater access to computer and Internet and other new technologies (Warschauer, and Meskild 2000). The dominate language in order to use internet and other information and communication technologies components such as e-mail, digital cameras, cell phones and computers is English. So using the mentioned technologies needs fluency in English language. On the other hand, using these technologies increase the learners’ proficiency in English language. In addition to ordinary use of these technologies, they could be used as instructional tools for the people who want to learn more without contributing in routine classes without limits of time and restrictions of learning location. One of the exciting tools that will be used by many novice students to English learning is mobile devices. Using these instruments decreases gaps between rich and poor people. The first step for using mobile devices for teaching and learning especially in the field of learning as a second language (ESL) is to accept it as an educational tool. Many researchers have studied and proposed theories and models of technology acceptance in order to anticipate and explain user behavior with technology. Undoubtedly, rapid changes in both technologies and user’s environments are inevitable and making theories and models is a difficult task (Kripanont, 2007). Based on the results of the study of Saadé, Nebebe, and Mak (2014), Technology Acceptance Model (TAM) is a basic theoretical model that can be generalized to different multimedia and e-learning companies. The study provides a general perspective of the users’ potential behavior towards such systems. At the same time, studies of different modes of TAM have mainly focused on technology based tools to support education, assessing user satisfaction and to characterize the technology-based learning student (Griffiths, 2008; 2010; Saadé and Bahli, 2005; Rhee and Kim, 2004).

This study is based on (TAM) model proposed by Davis (1989) that has been generalized and applied to different information technologies, work environments, and end users. In the TAM model, Davis proposes that two individual beliefs of perceived ease of use (PEU) and perceived usefulness (PU) would influence technology acceptance and use. In the current Study, the degree to which an individual believes that using mobile devices for ESL would be free of cognitive effort refers to PEU. Similarly, PU is defined as the degree to which an individual believes that using mobile devices would optimize his or her performance in learning ESL. TAM
suggests that the actual use of the system is determined by the users’ behavioral intentions (INT) to use the
system, which is determined by the users’ attitudes towards using the system and their perceived usefulness of
the system (Davis, Bagozzi, and Warshaw, 1989; Dearnleya, Haighb, and fairballc, 2008).

Therefore, in the current study TAM model is used to study the extent to which mobile devices are
accepted and used by Iranian students as a component of learning English as a second language. The research
presented here is motivated and guided by two main questions. First, is there any significant difference between
genders regarding the use of mobile devices for ELS? Second, is there any significant difference in motivational,
attitudinal and self-efficacy of students in terms of using mobile devices for ESL? In the questionnaire of the
study some aspects of Davis model such as attitudinal beliefs that consists of perceived ease of use and perceived
usefulness are used as well as questions investigating other related obstacles to the use of mobile devices for
ESL such as lack of technical knowledge and English literacy that are studied under students’ self-efficacy in
ESL. Differently stated, using mobile devices for learning English language is considered as phenomenon with
three components of self-efficacy, motivational and attitudinal variables. In other words, this study examined
TAM in an academic setting, investigating the factors affecting students’ acceptance and use of mobile devices
as component of English learning language (Lee, Cheung, & Chen, 2005).

The technology acceptance model (TAM) was first proposed by Davis (1989), based on the Theory of
Reasoned Action (TRA) (Fishbein & Ajzen, 1975) in psychology research. Masrom (2007) found that “based on
TRA the individual behavior is driven by behavioral intention where behavioral intention itself is a function of
an individual’s attitude toward the behavior and subjective norms surrounding the performance of the behavior”.
In other words, he states that the individual’s behavior and his intention to behave is a function of the
individual’s attitude toward the behavior and his perceptions about the behavior. Therefore, behavior is the
function of both attitudes and beliefs. TRA is presented in Figure 2.1 below.

Figure 1: Theory of Reasoned Action


In the same vein, Masrom (2007) believe that “TAM proposes that perceived ease of use and perceived
usefulness of technology are predictors of user attitude towards using the technology, subsequent behavioral
intentions and actual use. Perceived ease of use was also considered to influence perceived usefulness of
technology”. Figure 2.2 presents original version of TAM (Davis, 1989).

Figure 2. The original Technology Acceptance Model


TAM has been applied in several studies testing user acceptance and use of information technology,
As an illustration, word processors(Davis et al., 1989), spreadsheet applications (Mathieson, 1991), e-mail
(Szajna, 1996), Web browser (Morris & Dillon, 1997), websites (Koufaris, 2002), e-collaboration (Dasgupta,
Granger & Mcearry, 2002), and blackboard (Landry, Griffeth & Hartman, 2006; Lee, Cheung, & Chen, 2005. In
this study, the mobile devices are considered as a tool for transferring English knowledge.

Masrom (2007) continued that “in TAM, ‘perceived usefulness’ defined as the extent to which the user believes the technology use will upgrade his or her work functions, while ‘perceived ease of use’ refers perceived easiness of technology use by the user”.

These two factors distinctly influence the user’s attitude towards technology use. Besides, perceived ease of use is considered to influence perceived usefulness and attitude towards using the technology. Finally, we conclude that students’ self-efficacy in using technology and their attitudes and motivations towards using the technology determine the behavioral intention to use that technology. The theory has been used as an underpinning theoretical framework of the present study.

Attitudes and motivations for certain social and personal activities emerge different use of mobile devices. If people have a positive attitude toward the new medium, they can easily adopt it. On the other hand, people with negative attitude toward the new medium potentially would adopt it less (Kim and Rhee, 2004).

Based on the above statements and references most of the non-English countries in the Asia are trying to develop and to promote English learning. Apart from negative impacts of globalization on cultural aspects of each society, all these countries have recognized the fundamental role of English in global economy. In order to be a part of dynamic and growing economy, countries need to have access to sources of knowledge to train skillful workforce. There may be thousands of programs and schemes for each country to reach an acceptable position in global economy. Consequently, many factors are involved. The First and foremost factor is using information and communication (ICT) facilities such as computers, Internet and new technologies such as mobile devices. Evaluating and describing the infrastructures of ICT and related problems and deficiencies are beyond the extent of this study. Consequently, a brief explanation on the relationship between mobile devices skills and capabilities of the user and the potential effects of mobile devices on learning English as a second language will be determined.

An Examination of the previous literature suggests that this research topic not previously considered separately by other investigators in the field. The purpose of this study is to investigate the role of mobile devices on learning English as a second language by students of Sharkord. At the same time, gender differences in factors affecting the acceptance of mobile devices will be explained.

2. Research Methodology

Participants: The population of this study included all the students of Sharkord high schools in academic year of 2013-2014 who graduated by the end of the academic year. 600 students were chosen randomly by using clustering stratifying methods. 564 students participated in this research by filling the questionnaires. 301 (53.4 %) of them were girls and 263(46.6%) were boys.

2.1. Instruments

In this study a self-made questionnaire with four different sections is used. The sections of questionnaire are: section 1 was related to the demographic questions such as participants’ age, gender, family income, parents’ education and students’ experiences working with mobiles. The second part of the questionnaire was related to the students’ knowledge and their self-efficacy in using mobile devices, and their attitudes toward using mobile devices for learning English language as a second language. For constructing the question of this section items of Technology acceptance model (TAM) proposed by Davis (1989) and the Masrom’s explanations (2007) that perceived ease of use and perceived usefulness of technology are predictors of user attitude towards using the technology, subsequent behavioral intentions and actual use. The responses quantified based on 5-point Likert scale. (5= I agree strongly, 4=I agree, 3=I have no idea,2=I disagree,1= I disagree strongly ). Furthermore, some of the questions were exceptional and marked reversely. Consequently, the responses quantified differently (1= I agree strongly, 2=I agree, 3= I have no idea,4=I disagree,5= I disagree strongly). Questions of the questionnaire were constructed based on the similar questionnaires and the ideas of experts. The primary questionnaire was distributed among some of the students of target population and they have been asked to mark the vague questions. In the same vein, the questionnaire has been modified based on the ideas of the experts of educational technologists and language faculties.

Section 3 included 15 questions related to motivational and contextual factor such as having mobile peripherals such as having audio and visual devices, multimedia facilities, films, Bluetooth, camera, music player and installed special software for learning language and their parents’ educational levels and family income.

Section 4, was related to using mobile facilities for learning different skills such as writing, speaking, listening and comprehension. Each skill had 5 questions.

2.2. The validity of the questionnaire

Content validity or face validity assesses the correspondence between the individual items and the under
investigation subject through ratings by expert judgments, and pilot tests or other means. The validity of the questionnaire was assessed by a review of the survey questionnaire by experts in language and educational technologists of Isfahan University. In addition to the reviews, the questionnaire was also reviewed and completed by a group of students from target population. Responses and feedbacks from all these reviews affirmed the validity of the questionnaire.

2.3. The reliability of the questionnaire
In order to estimate the reliability of the questionnaire as an indicator of internal consistency of the questionnaire, Cronbach’s alpha coefficient has been calculated. The total coefficient was calculated for the whole questionnaire. Moreover, in order to obtain more precise estimates of reliability, the Cronbach’s alpha coefficient was calculated for three subscales of the questionnaire (self-efficacy, motivational and contextual factors, and students’ attitude and learning language skills) separately. The reliability of the instrument for various sections of the questionnaire varied from 0.85 for the whole questionnaire and 0.81, 0.82, 83 and 91 for the, self-efficacy for using mobile devices, contextual factors and attitudes and learning language skills).

2.4. Data Analysis
In order to analyze the collected data, descriptive and inferential statistics have been used in SPSS environment version 19. Frequencies, percentages, means, and standard deviations have been calculated as measures of descriptive statistics. In the same vein, Levene’s Test, Analysis of Variance, t test have been calculated as measures of inferential statistics.

3. Results
93.4 percent of the research sample had access to mobile devices such as lab tops, cell phone, tablet, notebooks and other mobile devices. Among the students who had mobile devices, 375 of students had ordinary cell phone, 187 of them had access to intelligent cell phone, 25 of them had access to different kinds of Tablet and computer notebooks, 79 of them had access to multiplayer systems such as MP3/Mp4 Player iPod Recorder and 24 of them had access to PDA e-Book Reader. 123 of them had planned to buy an new smart cell phone in the near future and 89 of them are intended to buy one type of tablet in the new future and 29 of them are intended to by one of multimedia tools such as MP3/Mp4 Player iPod Recorder and 18 of them are trying to buy one other type of mobile tools such as PDA e-Book Reader.

In spite of accessibility to hard and software, their knowledge and self-efficacies about different applications of mobile devices are very important for their using for learning about English language. Other important parameter for using mobile devices is the users’ attitudes toward new technologies, and their motivation.

As chart 1 indicates, 93.4 percent of the research sample had access to mobile devices such as lab tops, cell phone, tablet, notebooks and other mobile devices. 250 students (43.3%) used mobile tools less than half hours, 159 of students used mobile tools less than one hour. 80 students used mobile tools less than 2 hours. 50 students (8.7%) of them used mobile devices more than 2 hours.

![Chart 1: distribution of students’ use of mobile technologies (hours)](image)

According to the data, 93.4 percent of students had access to mobile devices. 58 % of men had access to mobile technologies compared to 42 % of girls. Boys had more advanced cell phones compared to girls. Boys had used mobile devices in many different fields such as communicating with their friends and other people from Iran and other foreign countries, getting information about new technologies, cars and playing games individually or with their other friends through internet. Girls used mobile devices for doing personal affairs such as communicating with their parents and family members and less for communicating with other
people that do not have known.

Based on the first hypothesis of the study there is a significant difference between students with different genders in using mobile devices for learning English as a second language. The results related to this hypothesis are presented in table 1.

Table 1. *The results of the Levene’s test for equality of error variances.*

<table>
<thead>
<tr>
<th>Significance</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>.54</td>
<td>.36</td>
</tr>
</tbody>
</table>

*Note:* $F$ = $F$ coefficient of Levene’s test

As shown in table 1, the $F$ coefficient of Levene’s test is equal to .36 and it is not statistically significant at $p > 0.05$. Thus, error variance of dependent variable (mobile technologies use) is equal across groups and using independent samples test is permitted.

Table 2. *The Means and standard deviations of mobile devices usages for two genders*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>263</td>
<td>109.76</td>
<td>19.31</td>
</tr>
<tr>
<td>Female</td>
<td>203</td>
<td>95.05</td>
<td>22.24</td>
</tr>
</tbody>
</table>

Table 2 indicated that the mean of mobile devices use for male students is higher (109.76) in comparison to the mean for female students (95.05).

Table 3. *The results of t test to compare the means of the scores for different genders*

<table>
<thead>
<tr>
<th>Gender</th>
<th>M</th>
<th>Mean Differences</th>
<th>t</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>109.76</td>
<td>7.15</td>
<td>5.13</td>
<td>.000</td>
</tr>
<tr>
<td>Female</td>
<td>95.05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Shown in table 3, the mean of the mobile devices use for males is (109.76), and it is significantly larger than the mean for female students (95.05) at $p < 0.001$. Thus, the first hypothesis is confirmed and the rate of mobile devices use for learning about English language in male students is significantly higher in comparison with the rate for female students.

In response to the second hypothesis about the differences between two genders according to their self-efficacy, motivational and attitudinal factors regarding using mobile tools for learning English language, the results are presented in table 3.

Table 4. *The Means and standard deviations of the subscales’ scores for genders for self-efficacy, Motivational and attitudinal factors toward using mobile tools for learning English*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy in using mobile devices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>263</td>
<td>49.66</td>
<td>7.38</td>
</tr>
<tr>
<td>Female</td>
<td>203</td>
<td>28.51</td>
<td>7.48</td>
</tr>
<tr>
<td>Motivational factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>263</td>
<td>47.15</td>
<td>8.19</td>
</tr>
<tr>
<td>Female</td>
<td>203</td>
<td>35.57</td>
<td>8.34</td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>263</td>
<td>33.44</td>
<td>7.31</td>
</tr>
<tr>
<td>Female</td>
<td>203</td>
<td>31.25</td>
<td>6.97</td>
</tr>
</tbody>
</table>

According to table, in all the three subscales (Self-efficacy in using mobile devices, motivational and attitude) male students obtained higher scores. This table indicates that boys are more knowledgeable and have higher self-efficacy in using mobile devices than girls and they are motivated to learn about language skills than girls.
Figure 3. The means of the subscales’ scores for genders

<table>
<thead>
<tr>
<th>Groups</th>
<th>Self-efficacy</th>
<th>Motivation</th>
<th>Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>49.66</td>
<td>47.15</td>
<td>33.44</td>
</tr>
<tr>
<td>Female</td>
<td>28.51</td>
<td>35.57</td>
<td>31.25</td>
</tr>
</tbody>
</table>

Based on table 4 and 5, male students obtained larger scores in all three subscales related to factors affected the acceptance of mobile technologies for learning English as a second language. As shown in table 5 male and female students are significantly different from each other regarding self-efficacy subscale at \( p < .001 \), motivation at \( p < .01 \). But there is not any difference between their attitudes toward using mobile technologies for learning English language.

4. Conclusion

Using mobile devices for teaching and learning is a new field in Iranian educational system. Although, a great majority (94%) of Iranian high school students in Sharkord had access to mobile devices but most of them do not use them for instructional uses. Like other technologies application of mobile facilities obey socio cultural pattern of the native nation. As other new innovations, men have more access to them and are more knowledgeable than women. As the results indicated, men had more advanced cell phone than girls. They used these technologies in a variety of ways. Girls’ usage was limited to ordinary areas such as for communicating with their parents and their families. Comparing with boys, girls used cell phone for learning English less than boys. One of the reasons is students’ self-efficacies in using new technologies. Boys had higher self- efficacies than girls. One of the most important reason is that they learn from their friends, they seek help from different resources for asking their questions and getting help from them. In contrast, girls are more task oriented and they attempt to satisfy their parents and their teachers, so they will do everything that they are asked them to do. The results of this study is in line with other studies such as Zamani, 1997, 2010a, 2010b, Zamani and Azimi in 2011; Akman and Mishra, (2009), Eurosate (2010), Ono Zavadny, Limayem, Khalifa, and Frini (2000), R. Dholakia,
probable reasons is that in developed countries such as USA and Canada and some of the European countries buy more advanced peripherals such as multimedia, MP3 player, Educational films and more suitable software. People be more interested and motivated for using these tools in variety of situations. They will be persuaded to understand between different groups. With educating children about the opportunities that this new technologies provide for learning English as a second language. The results of this study are beneficial for decreasing the digital gap differences in adoption rates may exist so far as a result of the fact that men and women generally differ in socioeconomic status, which affect computer and the Internet access and use. Unsurprisingly, men tend to be more interested in computers than women. Thus, this contributes to gender differences in other new technologies use. In US and Canada, It seems that genders have equal proportions in the population of the Internet. In contrast, in other advanced economies such as Sweden and Japan, men are still dominant and constitute larger portion of the Internet using population. In some countries, women Internet users have increased dramatically. As an illustration, between 1999 and 2000 the proportion of women Internet users drastically increased from 33% to 42% in Mexico and from 25% to 43% in Brazil. Although women constitute nearly 50% of the labor force in Asia, and occupy more than one third of small and medium businesses in the region, in 2000, only 22% of Internet users on average were women. In Africa, women’s portion in The Internet use continues to be low, ranging from 12% in Senegal to 38% in Zambia (Taylor, Zhu, Dekkers, and Marshall (2003), According to Pierce, the gender gap is the largest in Mexico and Colombia. In Czech Republic, Portugal, Sweden, and the United States men have only slightly higher percentages than women as Internet users (Pierce, 2010). A study on gender differences in use of the Internet illustrates that the gender divide has narrowed considerably (Dholakia, 2006). However, DeBell and Chapman (2006) found that no difference was existed between genders regarding overall Internet use rate. It is hypothesized that there is no relationship between gender and people's Internet use. The obtained results indicated that the rate of English Web pages use by male students is significantly higher than the rate of English Web pages use by female student at \[ p < .0001 \]. The findings of the study are in line with the findings of Akman and Mishra, (2009), Eurosate (2010), Ono Zavodny, 2003; Limayem , Khalifa , and Frini (2000), R. Dholakia , N. Dholakia , and Kshetri (2003). In all the above mentioned studies males constitute larger portion of the Internet using population. Study findings contradict researches by), Debell and Chapman (2006), and Ortega Egea, Menendez, and Gonzalez, (2007). In the above mentioned studies, males and females constitute equal proportions of Internet user population. One of the probable reasons is that in developed countries such as USA and Canada and some of the European countries may be the result of the economical limitations. It should be noted that the results of the current study confirm the results obtained by Rehee and Kim (2004) in South Korea, Chen & Wellman (2004) in China, Germany, Korea, Italy, Japan, Mexico, UK, and USA, Digital Media Across Asia (2010) in Malaysia, Maureen (2009) in Uganda, and Arab, Blake, and Neuendorf (2003) in Iran. In all the stated studies males constitute larger population of Internet users? On the contrary, It is worth to mention that according to Siddiqui (2008) In Saudi Arabia females are more likely to adopt and use Internet services, this is mainly due to the nature of the Saudi Arabia society which can be described as conservative (In such a society a female tends and prefers to manage her needs via the Internet from her home). Having more knowledge about the application of new technologies such as mobile devices, causes people be more interested and motivated for using these tools in variety of situations. They will be persuaded to buy more advanced peripherals such as multimedia, MP3 player, Educational films and more suitable software. The results also indicated that both genders had positive attitudes toward using cellular phones for learning English as a second language. The results of this study are beneficial for decreasing the digital gap between different groups. With educating children about the opportunities that this new technologies provide for everyone, they will be motivated for using them in a good way and prevent from the bad effects of using these technologies such as addiction to computer and internet addictions.

5. Thanks
This article is taken from a research report ID 91000617 titled “The role of mobile communication technologies in learning of four linguistic skills in high schools' students: Structural model of relation between peripheral possibilities of mobile phone, constructs of TAM and academic achievement” that was supported by “Iran National Science Foundation, Deputy of Science and Technology, Presidential office”. I will be grateful to thank from their financial support that caused to do this research. I would like to thank from all Sharkord students in high schools who cooperate with us for filling the questionnaires. Special thanks to Dr. Yasamin Abedini, Dr. Nassim Hedayati and Dr. Ali Kheradmand, Iran Beheshimal and Nazila Azimi for their cooperation in doing this research.

6. References
http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VDC4Y52J1J1and_user=10and_coverDate=05/31/2010and_rdoc=1and_fm.


The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar