Discovering the Identity and Suitability of Electronic Learning Tools Students Use in English for Specific Purposes (ESP) Programs

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Abstract

To complete translation tasks in English for Specific Purposes (ESP) programs at Iranian medical universities, students use different online and offline e-learning tools whose identity and suitability remain unexplored. This study aimed to identify the offline and online tools paramedical students use in the programs and investigate the purposes for and the conditions in which the tools are employed. Data were collected by means of a questionnaire and semi-structured interviews. The findings showed that the students used Google Translate (GT) as the main online tool and utilized bilingual, bilingualised and monolingual dictionaries in the form of mobile applications as the main offline tools in order of priority. The results also indicated that the students used no technical field-specific online or offline tool. Moreover, it was discovered that the offline mobile applications were the students' first choice to find the meaning of general and technical terms, while the online tools were used only as a last resort for translating texts, finding the meaning of technical terms and learning language skills where free quality Internet was available. The investigation into the suitability of the most frequently used tools revealed that the offline bilingual (ised) tools lacked comprehensiveness and specificity in defining technical terms and GT could not make accurate English to Persian translations. The study recommends that students' awareness about the drawbacks of GT be raised, appropriate alternatives to the translation system be introduced and field-specific translation software supporting English and Persian be developed. The study suggests that field-specific offline bilingual (ised) dictionary applications be developed and used in the ESP programs at universities facing Internet problems.

Keywords: E-learning, ESP programs, offline tools, online tools, translation tasks

Introduction

The use of technological advances in education has been gaining in popularity and many institutions around the world are offering online educational programs. Different educational software and devices such as personal mobile technologies are also being employed to improve and support learning in and out of the classroom (Ciampa & Gallagher, 2013). Language teaching is one of the areas in which technological advances are being used in different forms such as computer-assisted language learning, machine translation systems, language learning software and offline and online language learning applications and tools. In this regard, Solak and Cakir (2015) maintain, "Many organizations and companies are initiating technology-supported language teaching programs through the Internet". Thomas, Reinders and Warschauer (2013) hold that technology can provide opportunities for language learners to use the target language, which can

promote language learning. Marco and Pueyo (2006) also note that the tools and facilities employed for the teaching and learning of English as a second language can be "applied to the teaching of" specialized English in ESP programs. They further point out that students in ESP programs can use the Internet "to learn a language both by focusing on content and by performing tasks related to their discipline". Research in the Iranian context, however, indicates that Internet problems have impeded the broad adoption of online learning and the use of online e-learning tools (Feyzi & Rahmani, 2003; Kamalian & Fazel, 2009; Mousavi, Mohammadzadeh, & Pezeshkiraad, 2011). Many students, therefore, turn to offline electronic learning tools for educational purposes. Greenhalgh (2001) underscores that offline e-learning can be used instead of online e-learning in places where there are geographical, financial, and temporal problems. Students at Iranian medical universities use different types of both online and offline electronic tools in the ESP programs. However, the identity and suitability of the online and offline electronic tools they use for educational purposes in the programs have remained unexplored.

Purpose of Study

Despite the abundance of research on the effects of electronic learning in the Iranian context (Dashtestani, 2013; Ebadi, 2016; Marandi & Seyyedrezaie, 2017, to name but a few), there exists a paucity of research on the nature of the online and offline e-learning tools used by Iranian students at medical universities. Therefore, the present study attempted to bridge the existing gap by shedding light on the identity and suitability of the offline and online electronic tools used by paramedical students in the ESP programs. The identification of the tools the students use in the ESP programs and the evaluation of their suitability for intended academic objectives provide educational policymakers, particularly the professors teaching the specialized English courses at medical universities, a real insight into whether the students use appropriate and reliable tools and applications to complete tasks and assignments in the programs. Moreover, the way Iranian students use different offline and online electronic tools for educational purposes has not been researched. Therefore, the present study set out to discover the purposes for and the conditions in which paramedical students use different offline and online e-learning tools in the ESP programs. Having knowledge about the purposes for and the conditions in which the students use offline and online tools can significantly contribute to the establishment and improvement of required infrastructure and the fulfillment of students' needs and satisfaction with the educational programs. Having these goals in mind, the researcher sought to answer the following questions:

1. What online and offline electronic learning tools do paramedical students in Iran use in the ESP programs?
2. For what purposes and in what conditions do paramedical students in Iran prefer to use offline and online electronic learning tools in the ESP programs?

Literature Review

ESP Tasks and role of e-learning in ESP programs

According to Eslami (2010), ESP programs were developed in Iran by Ministry of Science, Research and Technology in the form of specialized English courses and are offered as a two or

three-credit course at different education levels at the Iranian medical universities. The primary purpose of the program is to prepare medical students to use English language in the situations they will be during their studies and at their work in the future. In Iran, English is spoken as a foreign language and students usually find the ESP course challenging. Translation, reading, and writing are the three core activities emphasized in the course (Amiri, 2000; Khoramshahi, 2015; Shahini, 1988). In this regard, Saffarzadeh (1981) notes, "Developing translation knowledge is a must for ESP learners" (p. 3). Hayati (2008) stresses that reading and translation are the main objectives of ESP courses in the Iranian context, adding that in the ESP classes the teachers translate the texts and give their overall meaning in Persian and the students write down the translations offered by the teachers above or under the English words and phrases. In a like manner, Malekan and Hajimohammadi (2017) hold that translation of texts is a "problem to which Iranian … learners are frequently encountered." Underscoring the crucial role of translation in medical sciences, Abootalebi and Moeinzadeh (2017) point out, "Translating medical texts is a very risky and important task because these texts deal with human life and any mistake in their translation can be life-threatening." Therefore, it is necessary that students be equipped with suitable tools and materials to develop the competence to do correct translations. In the ESP programs at Iranian universities, students make frequent use of different resources to find the meaning of words and translate medical texts from Persian into English, and vice versa. Prassl (2010, p. 57) notes that for translation purposes, individuals need to receive both internal support from their memory and external support from "external resources, such as dictionaries and parallel texts." Translators have conventionally employed printed dictionaries and encyclopedias as external resources. Technological advances, however, have made the Internet one of the most frequently used sources of information in translation, as it makes quick access to a vast amount of information possible (Dickins, Hervey, & Higgins, 2002). Similarly, Živković (2016) notes, "The use of technologies in the ESP classroom enables students to be active and collaborative, which contributes to improving learning achievements and increasing learning outcomes.*"* E-learning and computer-assisted learning methods have been also used increasingly in medical and nursing education (Lahti, Hätönen, & Välimäki, 2014). Investigating the way students obtain information for translation purposes, Sales (2008) reports that both undergraduate and graduate students use Internet resources as their principal source of information. Likewise, Xu and Wang (2011) researched how translation students were introduced to, used, and evaluated online resources in Chinese to English translations, discovering that the students used more electronic resources than non-electronic ones and the online resources improved the students' translation skills. They also reported that the students preferred online resources to the offline ones for being convenient rather than accurate. In a study by Massey and Ehrensberger-Dow (2011) on the resources used by students and instructors in the process of translation, it was shown that the students mainly relied on online dictionaries, while the instructors preferred parallel texts and search engines for extra-linguistic problems and printed and electronic dictionaries or terminology databases for linguistic purposes. As can be understood from the above-mentioned studies, dictionaries are one of the resources that students commonly use to do translations. There are also different types of dictionaries in the market from which students can choose. Navidinia, Zare, and Hekmati (2016) point out, "Many students have dictionaries on their android systems, which can be helpful for finding the meaning(s) of the new words." Golonka, Bowles, Frank, Richardson, and Freynik (2014) argue that electronic dictionaries facilitate a quick search of words and aid learners in finding the meaning of target words. Dashtestani (2013) researched English teachers' and learners' views about using electronic dictionaries for language learning purposes, discovering that both

groups had positive attitudes towards the dictionaries and the majority of the learners used electronic dictionaries in the form of mobile applications. As the literature shows the majority of the studies conducted in the Iranian context and abroad have focused on the effects of electronic learning and technological advances on education in general and language learning in particular. Yet, the identity and suitability of the online and offline e-learning tools used by students have not been research. The present study set out to fill the existing gap.

Method

Setting

This study was conducted at Guilan University of Medical Sciences, School of Paramedical Sciences, Langeroud, Iran in the academic year of 2017. The school offers different undergraduate and postgraduate programs. The present study targeted the ESP courses offered in the undergraduate programs (Surgical Technology, Anesthesia, Medical Laboratory Sciences and Radiology) at the school. The students majoring in the programs have to pass a three-credit General English course followed by a two-credit ESP course. Students majoring in different fields of study at the school can take the same General English course; however, they are allowed to take only the ESP course designed for their field of study. The academic year at the Iranian universities is normally divided into two semesters: the first semester and the second semester. The General English course is offered in the first or second semester of the academic year the students enter the school and the ESP courses are offered in the first or second semester of the following year. Persian is the standard language spoken and English is taught as the foreign language at the school.

Participants

The participants in the study were 114 students taking the ESP courses at the school of Paramedical Sciences. They majored in Surgical Technology (52 participants), Anesthesia (31 participants) and Radiology (31 participants). They were both female (73) and male (41) and aged between 19 to 22 years. The students participated in the study voluntarily and were experiencing their third or fourth semester of education at the school. They had passed the General English course, which is a prerequisite for the ESP courses, had Android cellphones and could gain access to the Internet.

Instrumentation

A questionnaire and a semi-structured interview were the instruments used in the study. The questionnaire consisted of items on the students' demographic information and an open item asking students to name all online and offline electronic learning tools they used to complete tasks and assignments in the ESP courses.

After collecting the distributed questionnaires, a follow-up semi-structured interview was conducted with 35 students to delve into the purposes for and the conditions in which they used the online and offline tools in the ESP courses. Schoenberger (1991) argues that interviews can be used to amplify and complement data which are collected by other methods. According to Berg (2007, p. 96), interviews make it possible for interviewees to "speak in their own voice and express

their own thoughts and feelings." Moreover, Rubin and Rubin (2005, p. 88) hold that a semi-structured interview "allows depth to be achieved by providing the opportunity on the part of the interviewer to probe and expand the interviewee's responses." In the same vein, Schostak (2006) notes that interviews are conducted with the aim of gaining in-depth information about a certain topic.

Purposive sampling method was used to select the student interviewees and careful attention was paid to secure variation in the sampling process by selecting students from different fields of study, choosing both male and female students and targeting students with high and low grade point averages. In total, 22 face-to-face interviews (15 individual interviews and 7 group interviews with the participation of 2 to 3 students) were conducted. A voice recorder was used to record the students' answers. The students were informed that their voice was being recorded and informed consent was obtained from them. During the interview, the researcher did not make any remarks and did not ask any leading questions causing bias in the data collection. In addition to recording the interviews, the researcher took notes of the key points in the students' answers. The interviews lasted 5 to 10 minutes and were administered in Persian. According to Mackay and Gass (2005, p. 174), "Interviews can be conducted in the interviewee's L1, thus removing the concerns about the proficiency of the [interviewer] impacting quality and quantity of the data provided." The interviews started with some general questions about the students' experiences in the ESP courses. The two key questions which were asked in the interviews were on the purposes for which the students used the online and offline learning tools and on the conditions or situations in which they preferred to use the tools. Some probing questions like "What do you mean by saying…?" and "Can you give an example?" were also asked to collect more information from the students. The data collected from the interviewed students determined whether to continue the interviews with more participants or not. The process of conducting interviews with the students continued until no further relevant data were produced by them in the interviews, which marked the data saturation point. In the present study, the researcher reached the data saturation point after conducting an interview with 35 students.

Procedure

To begin the data collection phase, all students taking the ESP courses at the school were provided with a course plan outlining all translation tasks and assignments they needed to do in the courses. The translation tasks were assigned weekly and required the students to translate two medical texts of approximately 500 words from English into Persian. No printed, offline or online resources or tools were introduced to the students for completing the assignments. They were, however, informed that they could use any resources, including printed, offline or online tools and applications. After six weeks, the researcher distributed the questionnaire among the students. After collecting the questionnaires, the follow-up semi-structured interviews were conducted. Before carrying out the main interviews, the researcher conducted pilot interviews with seven students and removed the existing problems. Next, the researcher conducted an interview with 35 students. The interviews were then transcribed, analyzed and translated into English.

Data Analysis

After completing the data collection phase, descriptive statistics were used to calculate how frequently the students used different types of online and offline elearning tools. Next, the Framework Analysis Method, which is a kind of qualitative content analysis method, was used to analyze the students' responses in the interviews. According to Gale, Heath, Cameron, Rashid, and Redwood (2013), the Framework Analysis Method "is becoming an increasingly popular approach to the management and analysis of qualitative data" and "a flexible tool that can be adapted for use with many qualitative approaches that aim to generate themes." To analyze the qualitative data, first, the recorded voices were transcribed and then the content of the students' responses were carefully studied by two raters so that they could become fully familiar with the responses. In this phase, the raters thoroughly read and re-read the responses. Next, each of the two raters independently coded three of the responses by underlining key concepts in them and by describing the concepts with a label or code. Next, the raters met to discuss the labels or codes they had assigned to the key concepts in the responses. After discussing the differences, the two raters agreed on a set of codes and developed an initial framework for analyzing the students' responses. Using the initial analytical framework, the raters rated three more answers, taking care to note any new codes or concepts which did not fit the existing set of codes. They met again and following discussions, they revised the initial framework to incorporate the new ideas and codes. The process of refining the framework, applying the revisions and refining the framework was repeated until no new codes were generated. The framework was then applied to all of the responses provided by the students. Finally, the related codes were clustered together and merged into a comprehensive category.

Results

The primary goal of the study was to discover the online and offline learning tools the students used to complete assignments in the ESP programs. The findings are shown in Table 1 below.

Table 1
The online and offline e-learning tools used in the ESP programs

No	Name	Type		Percentage	
		Offline mobile	**Online**	**Offline mobile**	**Online**
1	GT		*		58.77
2	Fastdic	*		36.84	
3	Picodic	*	*	34.21	7.01
4	Tahlilgaran	*		28.07	
5	Studentdic	*		3.50	
6	Persiandic	*		3.42	
7	Sundic	*		7.89	
8	Babylon	*		3.42	
9	Mobidic	*		3.42	
10	Oxford dictionary	*		3.42	

| 11 | Sepantadic | * | | 0.87 | |
| 12 | Longman | * | | 3.42 | |

As can be seen in the table, the frequency of GT as an online e-learning tool is more than other tools. The frequency of the offline tools in toto, however, outnumbers the frequency of the online tools. The table also shows that none of the offline and online tools is technical or field-specific. The study also aimed to find out the purposes for and the conditions in which the students preferred to use different types of electronic resources. The analysis of the students' responses resulted in the discovery of two categories and seven codes. Table 2 below shows the results of the analysis of the students' responses about the purposes for and the conditions in which they used offline e-learning tools in the ESP programs.

Table 2
The emerging category and codes along with excerpts of the students' responses about using offline e-learning tools

Category	Codes	Excerpts of the students' responses
Offline elearning tools in the form of mobile applications	Accessibility	A: I can use my offline mobile dictionary apps *wherever I am or I go.* B: I use my mobile dictionary when I am *in the classroom or out of the classroom* and need to check the meaning of a word. C: I use my mobile dictionaries, in the same way as many of my friends do, when I do my homework collectively *in the dormitory or study room.* D: I use mobile dictionaries *whenever I* need them. For example, I use them *in the classroom* when the teacher is teaching and I cannot understand a word. E: As my cellphone *is always with me,* I use my mobile dictionary to find the meaning of words.
	First choice	A: My mobile dictionary is *the first resource* I use when I need to know the meaning of a word. B: When I face an unfamiliar word, I *promptly tap on the dictionary on my cellphone* and look it up. C: My mobile dictionary is *the first option* I use to find the meaning of words.
	Technical and general terms	A: My cellphone has enough space, so I have *different dictionary apps* for both *general and technical terms.* B: I have *three dictionaries on my cellphone*: two *general dictionaries and a technical one*. C: I have a dictionary on my cellphone; I use it to look up the meaning of *every unknown word*, *either technical or general.* D: In the ESP course, we face *many technical words in the texts*. I can find the meaning of *many*

		technical words as well as almost all general words using the dictionaries on my cellphone.

The second category emerging from the students' answers about the purposes for and the conditions in which they preferred to use the e-learning tools in the ESP courses was Internet-based applications and tools. Table 3 below shows the results.

Table 3
The emerging category and codes along with excerpts of the students' responses about using the online tools

Category:	Codes	Excerpts of the students' responses
Internet-based applications & tools	**Quality Internet**	A: When *free Internet* is available, I prefer to use the online version of my dictionary. B: It takes a lot of time to check the meaning of a word on the Internet because *the speed of the Internet* is low. If quality *Internet is accessible*, I will sure use it for educational purposes. C: I use the Internet for the ESP course, If I have access to *high quality Internet*.
	Last resort	A: When I need the meaning of a word or term and I *cannot find it in any dictionary or book*, I Google it and search for the meaning on the Internet. B: I use the Internet *when I cannot find a word in a paper or mobile dictionary.* C: When I am studying a specialized text in my field and I *do not have access to any source* to help me understand a technical concept, I *use the Internet and Google* the concept.
	Translation, technical words and language skills	A: I usually use Internet tools and applications for *translation purposes. I use Google Translate as a tool for translation purposes* or when I cannot find out *the meaning of a phrase*. B: I use the Internet when I need *to work on grammar and meaning of technical words.* C: In the ESP course, we usually *make sentences with technical terms*. When I need to check the accuracy of a sentence, I use the Internet. D: The *pronunciation* part of many offline dictionaries does not work; to *check the pronunciation of a word*, I usually connect to the Internet.

Discussion

The online and offline e-learning tools the students used in the ESP programs can be categorized as offline mobile dictionary apps, online dictionary apps and a machine translation system. The most frequently used online tool was GT. The results also showed that the offline apps of the bilingual dictionaries like Fastdic and Picodic, monolingual dictionaries of Longman Dictionary of Contemporary English and Oxford Learners' Dictionary and bilingualized dictionary of Tahlilgaran were the students' top priority after the online tool. In total, however, the frequency of the offline tools the students used in the ESP programs outnumbered the online tools.

It was also revealed that the purposes for which the students used the offline tools centered on looking up the meaning of general and technical terms. The students used the online tools primarily for doing translations, finding out the meaning of technical words and checking the accuracy of their sentences and correctness of their pronunciation of the words. The investigation into the conditions in which the students used the online tools showed that they were mainly employed as a last resort when the students could not find technical words and phrases in offline dictionaries and where quality Internet was available. They, however, used the offline tools as their first choice anywhere anytime.

The findings also showed that the students used GT as the primary online tool to complete their translation tasks in the ESP courses. The students' responses given in Table 2 also confirm the finding. According to Collins (2016), GT is used by learners to find out the meaning of words and to translate texts. However, many studies investigating the efficacy of GT in Persian to English and English to Persian translations have questioned its suitability. For example, Ghasemi and Hashemian (2016) analyzed Persian to English and English to Persian translations made by GT, reporting lexicosemantic, tense, preposition and word order errors in the translations. Bozorgian and Azadmanesh (2015) also compared the translations done by GT with those made by human translators, concluding that the online tool does not handle subject-verb agreement well in English to Persian translations. In addition, Hakiminejad and Alaedini (2016) investigated the efficacy of GT in English to Persian translations, discovering that the machine translation system was not able to translate verb tense from English to Persian and that there were errors in the translation of aspects, passives and compounds. Aiken and Balan (2011) also evaluated the translation quality of GT in 50 different languages, concluding that the translation system translates European language pairs much better than pairs involving Asian languages.

The reason for the students' reliance on GT, which has been shown to have many problems in translations involving Persian, can be various. The paramedical students might have been unaware of the problems with the machine translation system. If they had known the existing problems with the system, they might have chosen other translation systems, limited their use of the system or used it for other purposes than translations. Another reason could have been the lack of a much better alternative to the system. Komeili, Farughi and Rahimi (2011), for instance, compared English to Persian translations made by GT and those made by Padideh and Pars as two translation systems developed in Iran, noting that the three translation systems could translate only "fifty percent of the English sentences into Persian successfully." The results also showed that, despite being only partially successful, the two domestically developed systems performed better than GT in English to Persian translations with Padideh being the most successful one.

Most of the students also used offline electronic bilingual or bilingualized dictionaries like Fastdic, Picodic and Tahlilgaran in the form of mobile apps for finding the meaning of both technical and general words as their first choice anywhere anytime. A brief description of the most frequently used dictionaries is given below.

Fastdic is a bilingual English-to-Persian and Persian-to-English dictionary app developed in Iran and introduced to the market first in 2007. Users can enter target words in a box designed as the search engine of the application. For English entries, the dictionary app gives British and English pronunciations, part of speech and different meanings in Persian. The technical meanings of the entries in some fields, if any, are also given. For Persian entries, however, different forms and combinations of the entries in Persian are given from which the user can choose the closest one to the word in his/her mind. For each of the forms and combinations of the entry, one or more English equivalents are given. For some Persian entries, the dictionary app provides a Persian sentence and its translation in English.

Picodic is also a bilingual dictionary app produced in Iran in 2007. The dictionary app incorporates multiple dictionaries in different languages including Persian and English. It also offers a list of general and technical monolingual and bilingual dictionaries, which users can download and add to the list of the dictionaries it has by default. It has two tabs, namely word finder and text translation. For translation purposes, the user needs to connect to the Internet. It gives pronunciation, synonyms and antonyms of target words. For both Persian and English entries, it behaves almost the same way as Fastdic does. The only difference, however, is that it lists different technical fields and gives the conjugations and combinations of any entry together with their equivalents in the target language in the fields separately. It provides no sample sentence or translation for English and Persian entries.

Tahlilgaran, as a mobile app, was produced in Iran in 2001 and is different from Picodic and Fastdic in many ways, as it is not limited only to finding the meaning of words. Essentially, it is an application designed for learning English. As a dictionary app, for English entries, Tahlilgaran provides American and British pronunciations and Persian equivalents. It has a section labelled Technical dictionary for looking up the technical meanings of the target words. It also has a section labelled Synonyms where the synonyms of different meanings of any given entry are provided. It has a part labelled Longman where the entry of the target words in Longman Dictionary of Contemporary English is given completely. Collocations is another part of the dictionary where the way any target word is used in combination with other parts of speech is shown. The dictionary app has also a thesaurus section in which the synonyms of any target word, its related words, the idioms in which it is used and some sample sentences in which the word is used are given. For Persian entries, it provides the user with different forms and combinations of the entries, if any, and their equivalents in English. Users can tap the given English equivalents and use all information provided for the equivalents. Based on the features of the offline dictionary app, it can be said that it is a combination of both monolingual and bilingual dictionaries, that is a bilingualized dictionary.

The reason why the students mostly used bilingual dictionary apps in preference to bilingualized and monolingual ones could be any of the benefits of bilingual dictionaries in comparison with monolingual or bilingualized ones. The pros and cons of the dictionaries are discussed below.

Monolingual, bilingual and bilingualized dictionaries have been both criticized and praised in the literature on using dictionaries for language learning. Monolingual dictionaries have been praised for enhancing learners' skills for guessing the meaning of words (Thumb, 2004), improving learner' productions in the second language because of incorporating both lexical and grammatical inputs (Maghsodi, 2010), being more reliable and detailed (Chan, 2011) and maximizing second language learners' capacity through exposing them to the target language (Rundell, 1999). They have, however, been criticized for being time-consuming (Gu, 2003; Chan, 2004) and frustrating (Hunt & Beglar, 2005). Thomson (1987) describes providing exposure to the target language and facilitating the understanding of the definitions of words in the learners' mother tongue as the most overriding benefits of monolingual dictionaries.

Research has also shown that learners have a tendency to use bilingual dictionaries instead of monolingual ones (Thomson, 1987). The reason for such a tendency could be the additional benefits learners gain from bilingual dictionaries. Cook (2001), in this regard, holds that the knowledge learners have of their first language can facilitate the learning of the linguistic knowledge of other languages, as different language systems build a unitary language system in the human mind. Scholars in the field of English language teaching have also supported the application of bilingual dictionaries, saying that such dictionaries accelerate learning second language vocabulary (Nation, 2008) and that second language learners will have higher word retention rates if the meaning of the target words is given in their first language (Folse, 2004; Lotto & de Groot, 1998). Many others, on the other hand, have blamed bilingual dictionaries for their imprecise and arbitrary (White, 1997) and inflexible and outdated (Chan, 2004) translations of the target words. In this regard, Hayati and Fattahzadeh (2006) investigated the effect of monolingual and bilingual dictionaries on vocabulary recall and retention of EFL learners, reporting that the type of the dictionary has no significant effect on learners' vocabulary recall and retention. They, however, noted that using bilingual dictionaries "can facilitate the learning of vocabulary while EFL students are under time pressure" and monolingual dictionary can help learners "process the words deeply for retention purposes only when time is not limited."

Arguing for the suitability of bilingualized dictionaries as the resources containing "the monolingual information about a word and its translation into the learner's mother tongue", Laufer and Kimmel (1997) conclude that such dictionaries are very effective as they are "compatible with all types of individual preferences." Chan (2004) also points out that bilingualized dictionaries can help learners benefit from what both bilingual and monolingual dictionaries have. Pujol, Corrius, and Masnou (2006) also describe the use of bilingualised dictionaries as "a step forward in the field of pedagogical lexicography insofar as they" provide learners "with access to both monolingual and bilingual information", adding that learners mainly use only the bilingual information of such dictionaries. They further argue that to aid learners in benefiting from both the monolingual and bilingual information in the bilingualised dictionaries, the translation of the words in the learners' tongue should be deferred and dictionaries should direct the learners' attention towards the monolingual part. Other scholars in the field have also raised the same concern, stressing that when using bilingualized dictionaries many learners primarily focus on the meaning of the target words in their mother tongue (Fan, 2000; Thumb, 2004).

Laufer and Melamed (1994) examined the effect of using monolingual, bilingual and bilingualised dictionaries on learners' comprehension of unknown words and on the production of original

sentences with the words. The results of the study showed that the effects of the dictionaries on the comprehension and production of new words were significantly different. They concluded that bilingualized dictionaries were the most effective of all, as "the combination of the monolingual information which contains a definition and examples with a translation of the new word into the learner's mother tongue tends to produce the best results."

Another reason for the students' preference for bilingual offline dictionary apps can be the purposes for which they used the dictionaries. As mentioned, the students used the dictionary apps in the ESP courses primarily for translation purposes and looking up the meaning of words; they also wished to complete the ESP assignments as fast as possible. The use of monolingual dictionaries to find the meaning and translation of words could have taken their time and frustrated them. Moreover, the students might not have felt the need for the information in monolingual dictionary apps. Additionally, the interface, user-friendliness and features of the offline dictionary apps might have influenced the students' preference.

A problem with both the bilingual and bilingualized dictionary apps discovered in the study is that they scarcely cover the meaning of technical terms in the medical and paramedical fields. Furthermore, they hardly have a section for the meaning of target words in the fields of medicine and give priority to the meaning of the target words in other fields such as business, engineering and law.

It was also revealed in the study that no technical field-specific online or offline tool was among the students' choices, while the Android version of medical dictionaries is available. Dorland's Medical Dictionary, for example, is a medical dictionary available in the Iranian market in printed (bilingual and monolingual), offline app (bilingual and monolingual) and online app (monolingual) formats. The reason why the students did not use the field-specific dictionary could have been their unawareness about the availability of such a dictionary.

One of the findings of the study was that the students preferred the offline e-learning tools to the online ones. The findings also showed that the students used the offline electronic resources anywhere any time for looking up the meaning of both general and technical words. They, however, used the online resources, including the online version of the bilingual dictionaries, as a last resort for finding the meaning of technical terms, translation purposes and learning language skills where they could find "free high-quality" Internet. One of the reasons for the students preference for using the offline tools as apps on their cellphones can be the fact that the offline apps are mainly free, while for using the online tools the students should pay for the Internet. Moreover, to benefit from the online tools, the students need to connect to the Internet which cannot be accessed easily anywhere anytime in the Iranian context. The offline applications, on the other hand, can be used anywhere anytime without the need for the Internet. Along the same line of discussion, Rabiee, Nazarian, and Gharibshaeyan (2013) investigated obstacles in the way of using the Internet for educational purpose in the Iranian context, reporting lack of trust in using the Internet and the cost of the Internet as the main barriers to the adoption of online electronic learning in the country. The difficulty of gaining access to the Internet has also been reported as one of the impediments to using online learning in the Iranian context (Feyzi & Rahmani, 2003; Kamalian & Fazel, 2009; Mousavi, Mohammadzadeh, & Pezeshkiraad, 2011).

Conclusion

This study aimed to investigate the identity and suitability of online and offline elearning tools used by paramedical students in the ESP programs in Iran. It also intended to discover the purposes for and the conditions in which the students used the electronic tools. It was discovered that the students mainly used GT as an online tool for completing translation tasks in the ESP programs. There is, however, abundant research in the Iranian context questioning the quality of English to Persian translations made by GT, stressing that the translation system does not support Persian completely and the translations made by the online tool are flawed (Bozorgian & Azadmanesh, 2015; Ghasemi & Hashemian, 2016; Hakiminejad & Alaedini, 2016; Komeili, Farughi, & Rahimi, 2011; Saffari, Sajjadi, & Mohammadi, 2017). Therefore, the study concludes that educational policymakers, particularly professors teaching ESP courses, should raise students' awareness about the drawbacks of using GT, instruct them how to use the system appropriately and introduce more appropriate machine translation systems to the students. Experts in the fields of language teaching, translation, information technology and medical education can also examine the accuracy of translations made by existing translation systems and introduce the most suitable translation systems or applications to students. Moreover, given the problems with GT and students' burgeoning interest in using online learning tools, the present study suggests that experts in the fields of computer programming and information technology develop systems supporting translations from Persian into English, and vice versa. A more constructive measure in this regard can be the development of field-specific translation systems which are compatible with the systems of both the source and the target languages. Such field-specific translation systems can yield more accurate and reliable translations.

The scrutiny of the tools used in the ESP programs showed that due to the existing problems with the Internet, the students primarily preferred offline dictionary apps. Moreover, the students tended to use bilingual offline dictionary apps like Picodic and Fastdic and the bilingualized dictionary app of Thlilgaran rather than popular monolingual dictionary apps like Longman Contemporary Dictionary of English and Oxford Learners' Dictionary. The results also indicated that the offline electronic bilingual dictionary apps (Picodic and Fastdic) were given priority to the offline bilingualized dictionary app (Thlilgaran). From the arguments in the discussion section, it can be concluded that if used properly, bilingualized dictionary apps should be given priority to both monolingual and bilingual ones. Therefore, among the offline dictionary apps used in the ESP programs, Tahlilgaran should be given top priority, as it matches best to the features of a bilingualized dictionary. The results of the study also indicated that despite the availability of a medical dictionary (Dorland's Medical Dictionary) in different online and offline formats in the market, the students used bilingual and bilingualized dictionary apps that do not cover the meaning of target words in the medical fields. Therefore, it can be concluded that suitable offline dictionary apps available in the market should be introduced to the students and their awareness and knowledge about the merits and demerits of the offline electronic tools should be raised so that they use more suitable tools in the ESP courses. This can, in turn, aid the students in doing their assignments in the courses more accurately and easily. Moreover, given the benefits of the offline bilingualized and bilingual dictionary apps, it is suggested that information technologists, software

developers, material developers and publishers invest in producing field-specific offline electronic resources including bilingualized or bilingual dictionary apps and software.

The study also discovered that due to the problems with the Internet, the students preferred to use online e-learning tools as a last resort where free quality Internet was available. Because of the many benefits of online learning, the study suggests that universities lay the ground for the broad adoption of online learning by improving the infrastructure for the adoption of e-learning, providing free quality Internet for students, organizing training courses on how to use available online resources and introducing appropriate online resources.

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