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Familiarity of Iranian M.A. Translation Students with ICT Tools

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Abstract

Familiarity with information and communication technology (ICT) is of great importance to the translation students because it allows the students to make use of a wide range of ICT tools. The present study investigated the degree of students' familiarity with ICT tools employed to support ICT related activities included in the translator's workstation. To do this, a questionnaire encompassing 24 questions was designed on the basis of translation activities proposed by Fulford and Granell-Zafar (2005), including information search and retrieval, communications, and marketing and work procurement. The results indicated the high familiarity of the M.A. translation students with general-purpose software application, namely online dictionaries and internet search engines, and the lower than the average familiarity of them with specific-purpose software, such as FTP and MUDs. Furthermore, chi-square test (X^2) was run to see whether there is a significant relationship between each type of ICT tools and the participants. The results illustrated that the relationships between the M.A. translation students and some ICT applications, including internet search engines, web browsers, online dictionaries and encyclopedia, IRC, and MUDs, were significant; whereas, it was not significant between the other types of ICT software and students. This includes online translation marketplaces, internet forums, email, instant messaging, video chat, discussion mailing lists, talkers, and FTP.

1. INTRODUCTION

The positive impact of technology on all aspects of our lives is clearly visible the extent to which it has brought modernity into the world we live in. In other words, technology has made it easy for human beings to progress in any field. Translation, as a new discipline, is also influenced by technology. Translation theories, one dimension of translation, provides the opportunity for translation students to become familiar with technological tools, such as Information and communication technology (ICT) and computer-assisted translation (CAT) tools; whereas, translation practices, another dimension of translation, deal with the appropriate use of such tools. Thus, the knowledge and use of technological tools, in this case ICT tools, are a need for students to find employment in the society (Infante-Moro et al. 2019).

ICT refers to a wide range of web-based tools employed to support translators in their translation activities. Hence, acquiring the knowledge of ICT is of the utmost importance to translation students because the proper use of these tools requires familiarity with them. ICT has become a significant part of the university students' learning process both outside and inside the classroom environment (Basri et al. 2018). Many studies report that misunderstanding of the scope of an ICT resource leads to incorrect uses of that resource in the curriculum (Cox et al. 2004). Its rather to say, an extensive knowledge of ICT resources is required to have the in-depth use of ICT in educational programs. This causes students, first,

to become familiar with ICT tools and then to use them in their translations appropriately to produce good-quality translations in ever short time.

Contextualising the Problem

Unfortunately, the curriculum of Iranian translation universities at both undergraduate and postgraduate degrees are dated and there is no sign of ICT courses in them to this date, except a few courses offered for Ph.D. translation students. This leads expert teachers in the field, who are in the full knowledge of ICT and have experience of teaching such translation technology, not to be hired to impart the knowledge of ICT to translation students. Furthermore, seminars and workshops held by experts do not meet the needs of translation students due to the limited duration and a few numbers of them.

Many different models are presented about the translator's workstation, but none of them encompass ICT related translation activities (see for example, Locke 2005; Austermühl 2001) "because such models have been limited to translators' linguistic activities" (Granell as cited in Abdi 2019b: 4). Fulford and Granell-Zafar (2005) presented a translation workstation model that was different from the previous ones in that their model includes six translation activities, namely information search and retrieval, communications, marketing and work procurement, document production, and business management, of which the first three cover ICT activities and the last three support CAT activities.

Research Question

To achieve the objective of the present study, the following question is raised:

1. What is the level of familiarity of the M.A. translation students with ICT tools?

2. LITERATURE REVIEW

As the name implies, ICT consists of three terms, information, communication, and technology. Information is defined as "the result of processing data" (Davis 2000: 71). For a pragmatist, this is a context that defines information. In a wider sense, information is obtained from the context defined by "a specific culture, a particular domain/subject-matter, or the conventions that guide the practice of some professions" (Granell 2015: 7). Communication is to impart information to someone or share information with others. Communication, as Granell discusses, happens when a speaker transfers pieces of information to a receiver. This is a process in which "information is represented within a context, coded in a message and transmitted through a channel by the sender" (Granell: 8). Technology points to "methods, systems, and devices which are the result of scientific knowledge being used for practical purposes" (Collins online English dictionary 2020).

Ivanova (2016: 131) defines ICT as a set of hardware and software employed "to collect, process, store, retrieve and transmit data in various forms." In other words, ICT, as she implies, refers to the systems used to search information, such as encyclopedias and databases systems, as well as tools employed to communicate, namely, web communication services and discussion forums. She explains that new literacies are required to employ ICT tools, for example, a combination of technical-procedural skills.

For Jiménez (2011), ICT includes both general and specific tools available to translators. ICT covers "a group of information and communication technological applications, both general and specific, traditional or advanced" that are beneficial to the professional translator (Jiménez: 6). Effective use of ICT, as Jiménez implies, is heavily dependent on the translator's decision. That is to say, the translator, as he implies, should determine the type of ICT for each level of translation process in order to improve his/her professional performance.

When it comes to technology, the main role the Internet plays needs to be stressed, especially in the case of ICT tools that will be ineffective in the absence of the Internet. Thus, the Internet must be included in any definition of ICT. According to the above discussions, ICT can be defined as a scientific knowledge used to design *internet-based tools* to smooth the storage, retrieval, transference, and exchange of information.

With regards to a few numbers of empirical studies in the field, the researcher found no study covering familiarity of translators with ICT tools to this date, except parts of the studies conducted by Fulford and Granell-Zafra (2005), and by Abdi (2019a) as research projects. Studies in the field either have been focused on the employment of ICT tools or on a narrow subset of translation tools, such as machine translations (MTs) and translation memories (TMs). Sabet et al. 2016). For example, Abdi's (2019b) study has focused on the Iranian freelance translators and the degree of their employment of ICT tools in their translation. Based on the results, general-purpose applications were mostly and specific-purpose software were rarely employed by the Iranian freelancers.

Taleghani et al. (2019) evaluated the quality of Machine Translation Evaluation Metrics (MTEMs) from Lexical Similarity set on machine translated Persian texts to find out that whether MTEMs are valid enough to assess translated Persian texts, and whether there is a significant correlation between human evaluation and automatic evaluation metrics in the assessment of translations from English into Persian. As the findings indicated, the correlation of MTEMs with human evaluation on Persian language was significant and the GTM metric was more reliable than other types of metrics, such as BLUE and NIST, to evaluate Persian translations. Sabet et al. (2016) gave an interesting presentation on TMop which was the first open-source tool for automatic Translation Memory (TM) cleaning. To evaluate the function of TMop, a test consisting of 1,000 translation units (TUs) from the English-Italian version of MyMemory was prepared. The results of their study reported the effectiveness of TMop to remove automatically *bad* TUs, with comparable performance to a modern and supervised method (76.3 vs. 77.7 balanced accuracy).

All studies in the field attempted to fill the existing gaps in the research that were successful in doing this to a great degree, but there are still gaps that need to be addressed. This study differs significantly from the previous ones because it deals with the problems M.A. translation students will face due to lack of ICT familiarity that leads to inability of them to employ such tools in their translations by examining the degree of familiarity of Iranian M.A. translation students.

Theoretical Perspectives

Fulford and Granell-Zafar (2005: 5) clarify that information search and retrieval activities used to locate background and reference materials, client company information, and definition of terms as well as to identify terminology. To support such activities, various ICT tools can be employed, such as internet search engines, online dictionary, major web browsers, and online encyclopedia. According to them, communication related activities required to exchange information with clients and network with colleagues. Instant messaging, email, discussion mailing lists are examples of ICT tools used to support communication activities. Marketing and work procurement activities, as they state, cover many different sub-activities, for instance, promoting translation services and searching for clients. Online translation marketplaces and internet forums are effective ICT tools to support these activities.

Using this classification of ICT activities, the present study attempted to explore the extent of familiarity of Iranian M.A. translation students with ICT tools. In a sense, it made every effort to help make fundamental changes in the curriculum of translation universities by clarifying the importance of ICT knowledge for translation students in the use of ICT tools. The results of the study should be beneficial to those responsible for the development

of educational programs at Iranian translation universities, to those responsible for training translators, and to both translation students and trainee translators.

3. METHODOLOGY

Instrumentation

A questionnaire consisting of 24 questions was designed for data collection from the participants who were selected conveniently from Iranian M.A. translation students. It should be noted that the data were collected before the outbreak of COVID 19. Thus the researcher had easy access to M.A. translation students of both Islamic Azad and Public universities. The number of participants were 108 of whom females (N = 75) outnumbered males (N = 33). The questionnaire used in the present study had some similarities to that one used by Abdi (2019b) in his study. The questionnaire was divided into two parts. The first part encompassing questions relating to demographic information, educational background, and IT knowledge and skills. The second part covering questions about the participants' familiarity with ICT to support the following translation activities proposed by Fulford and Granell-Zafra (2005): information search and retrieval, communications, and marketing and work procurement, as well as the participants' opinions about ICT. A panel of experts in the field who had teaching experience in ICT were asked to validate the questionnaire and provide their comments on the content and wording of the questions. The comments made by the experts were constructive and led some minor changes to the questionnaire. The test-retest reliability was used to test the reliability of the questionnaire. Thus, the questionnaire was administrated to 15 M.A. translation students who share the characteristics of the sample of the present study. The test was repeated with the same students after two weeks. The scores obtained from time 1 and time 2 were correlated two see whether the scores are the same. The coefficient of correlation indicates the reliability of the test (r = .819). When the questionnaire was got ready for data collection, it was delivered to the participants in person wherever they were easy to reach, such as classrooms and universities' campus. The participants were, first, informed of the importance and objectives of the study and then asked to fill in the questionnaire carefully.

Design

From available methods, a survey questionnaire was an acceptable and cost-effective method for data collection because this method provided the researcher with the opportunity to collect data from a large numbers of Iranian M.A. translation students in a short time. Best and Kahn (2006) a questionnaire survey is a combination of two purposes, *an opinionnaire* and *attitude scale*, into one form. The main advantage of a questionnaire survey is that it enables the researcher "establish rapport, explain the purpose of the study, and explain the meaning of items that may not be clear" when administrating the questionnaire (Best and Kahn: 313); that is why the researcher used a questionnaire survey for data collection in the present study.

4. DATA ANALYSIS

This section reports the findings derived from the familiarity of M.A. translation students with ICT tools employed to support the related translation activities, such as information search and retrieval, communications, and marketing and work procurement, alongside the participants' opinions about ICT. Doing this, each question was analyzed severally and the frequencies and percentages of the given answers by M.A. translation students were calculated and illustrated in tabulation forms. Furthermore, the inferential statistic, chi-square (X^2) test was used to justify the hypothesis.

Personal Details

The participants of the present study belonged to the following age distribution: 20-29 years (63%), 30-39 years (29%); and 40-49 years (6%); and 50-59 years (2%). 86% of the participants had B.A. in translation; whereas 14% of them held a bachelor's degree unrelated to translation. Most of the participants (83%) had experience in translation of whom almost two-thirds (73%) had less than 10 years' experience in translation (49% between 1-4 years, 24% between 5-9 years) and the rest had between 10-19 years' translation experience. (14% between 10-14 years and 3% between 15-19 years). By contrast, a small number of the participants (17%) had no experience working as translators.

Around 13% participants dedicated 27 hours to translation-related tasks each week. An average of 64 hours the M.A. translation students spent on translation-related tasks each week. As the results indicate, the most/least preferred subject areas by the M.A. translation students were marketing and advertising translation (18%), and social & political sciences translation (7%) respectively. A great majority of the participants (91%) held no IT qualification and acquired the knowledge of IT via *self-taught* method. A few numbers of participants (9%) had got any form of formal IT qualification.

Information and Communication Technologies Familiarity

Information Search and Retrieval Activities

As Table 1 indicates, internet search engines alongside web browsers were the most familiar tools to the participants (98% familiar with internet search engines and 96% with web browsers). From internet search engines, Google (45%) and Yahoo! (45%) were of equal familiar to the participants. Among web browsers, Google Chrome (42%) was the most familiar browser to the participants; followed by Internet Explorer (34%) and Firefox (16%). A great majority of the participants (92%) expressed their familiarities with online dictionaries. The most familiar dictionaries were Oxford English Dictionary (28%), Cambridge Dictionary (23%), and Aryanpour (19%) respectively. Online encyclopedia (31%) were the least familiar types of online resources to the participants.

Table 1
Information Search and Retrieval Activities

Types		*f*	%	Total
Internet search engines		106	98.0	108
	Google	48	45.0	106
	Yahoo!	48	45.0	106
	Ask	7	7.0	106
	Bing	3	3.0	106
Major web browsers		104	96.0	108
	Google Chrome	44	42.0	104
	Internet Explorer	35	34.0	104
	Firefox	17	16.0	104
	Opera	7	7.0	104
Online dictionaries		99	92.0	108
	Oxford English Dictionary	28	28.0	99
	Aryanpour (E to P & P to E)	23	23.0	99
	Cambridge Dictionary	19	19.0	99
	LingvoSoft Online (E to P & P to E)	13	13.0	99
	Merriam-Webster	10	10.0	99
	Dictionary.com	6	6.0	99
Online encyclopedia		33	31.0	108
	Encyclopedia Britannica Online	17	51.0	33
	Encyclopædia Iranica	12	36.0	33
	Columbia Encyclopedia	4	12.0	33
Total activity familiarity		342	79.0	432

Marketing and Work Procurement Activities

According to Table 2, 64% of the participants (64%) chose "Yes" answer to state their familiarities with online translation market places of which IranTranslate.com (33%) was the most familiar online tool to the participants; followed by Transnet.com (26%) and Transnet.com (22%). Internet forums were the least familiar ICT tools (40%) to the participants.

Table 2
Marketing and Work Procurement Activities

	Types	*f*	%	Total
Online translation marketplaces		69	64.0	108
	IranTranslate.com	23	33.0	69
	Transnet.com	18	26.0	69
	Tarjomebazar.com	15	22.0	69
	Proz.com	9	13.0	69
	Irantypist.com	4	6.0	69
Internet forums		43	40.0	108
	Social networks	16	37.0	43
	Blogs	13	30.0	43
	Business networks	9	20.0	43
	Social bookmarking	5	12.0	43
Total activity employment		112	52.0	216

Table 3 indicates that electronic mail was of approximately familiar to all M.A. translation students (99%). Yahoo! Mail (57%) was the most and AOL Mail (2%) and Outlook Mail (2%) were the least familiar types of email to the participants. In addition, a high portion of the participants (94%) denoted their familiarities with instant messaging, among which WhatsApp Messenger (49%) and Telegram (44%) were the most familiar messengers to the participants respectively. More than half of the participants (48%) exhibited their familiarities with video chat which considered a form of communication. Other forms were familiar to the participants as follows: discussion mailing lists (34%), talkers (27%), Internet Relay Chat (IRC) (17%), File Transfer Protocol (FTP) (13%), and Multi-User Dungeon (MUDs) (8%).

Communication Activities

Table 3
Communication Activities

	Types	*f*	%	Total
Email		106	99.0	108
	Yahoo! Mail	60	57.0	106
	Gmail	42	40.0	106
	AOL Mail	2	2.0	106
	Outlook Mail	2	2.0	106
Instant messaging		102	94.0	108
	WhatsApp Messenger	50	49.0	102
	Telegram	47	44.0	102
	iMessage	8	7.0	102
	Facebook Messenger	2	2.0	102
Video chat		52	48.0	108
Discussion mailing lists		37	34.0	108
Talkers		29	27.0	108
Internet Relay Chat (IRC)		18	17.0	108
File Transfer Protocol (FTP)		14	13.0	108
MUDs (Multi-User Dungeon)		9	8.0	108
Total activity employment		367	42.0	864

Iranian freelance translators' perceptions of ICT

The participants were asked to state their opinions of the importance of ICT familiarity in the employment of ICT tools. The answers provided by the participants for this question indicated that a huge number of the M.A. translation students (97%) agreed with the importance of acquiring ICT knowledge before the use of ICT tools to support translation activities, such as information search and retrieval activities, marketing and work procurement activities, and communication activities. This was contrary to the opinions of a very small number of the participants (3%) who believed that familiarity with ICT tools is not necessary in order to employ them and also will not provide any benefit for M.A. translation students. Furthermore, a great majority of the participants (89%) were in agreement with the increasing of familiarity of ICT tools via ICT related courses and the employment of experts in the field by translation universities.

Chi-Square Test (X^2)

Chi-square test (X^2) used to make a "comparison between expected frequencies and actual, obtained frequencies" (Fraenkel et al. 2012: 238). They imply that if the results of the X^2 indicate the similarity of the obtained frequencies to the expected frequencies, researchers reach a conclusion that there is no difference between the groups. Thus, to find whether there is a significant relationship between each type of ICT tools and the given answers by the participants, the X^2 was run. Based on Table 4, the p value of types of ICT tools was higher than .05 ($p > .05$), except internet search engines, web browsers, online dictionaries and encyclopedia, IRC, and MUDs that the p values were lower than .05 ($p < .05$). Thus, the null hypothesis was rejected for these tools and the relationships between them and the M.A. translation students were significant. By contrast, the null hypothesis was not rejected for other types of ICT tools. It implies that there is not a significant relationship between such tools and the M.A. translation students.

Table 4
Summary of the X^2 for Each tool and the Participants' Answers

Types of ICT tools	X^2	p
Internet search engines	9.708	.001
Major web browsers	6.42	.011
Online dictionaries	4.707	.03
Online encyclopedia	5.312	.021
Online translation marketplaces	.003	.956
Internet forums	.034	.853
Email	1.414	.234
Instant messaging	2.52	.112
Video chat	.7	.402
Discussion mailing lists	.001	.974
Talkers	1.499	.22
Internet Relay Chat (IRC)	4.262	.038
File Transfer Protocol (FTP)	1.382	.239
MUDs (Multi-User Dungeon)	4.707	.03

Discussion

As the results indicate, the participants were mainly familiar with general-purpose software applications. From ICT related tools used to support translation activities included in the translator's workstation, the participants expressed their familiarities with those tools employed to cover information search and retrieval activities, such as inter search engines and online dictionaries. Such tools not only are familiar to M.A. translation students but also to almost all the Internet users because these tools are types of general-purpose applications that are used by them on a daily basis. For example, internet search engines used to retrieve the intended text, image, video, and etc.; or online dictionaries provide the opportunity for

users to find easily the meaning of the foreign word. The results obtained from Abdi's (2019b) study show the same results; that is, the Iranian freelancers were mostly familiar with activities used to retrieve and search information, namely online dictionaries and online encyclopedia.

The results of the study show the higher than the average familiarity of the participants with online translation marketplaces and the lower than average familiarity of them with internet forums employed to support marketing and work procurement activities. These activities are taken into account as specific-purpose ones that need specific-purpose software to be supported. Online translation markets provide considerable benefits for translation students, such as many job opportunities. That is to say, online market places can be beneficial to the students in their future career after they graduated. Thus, this familiarity of the M.A. translation students with such useful applications is promising. Along with benefits derived from online market places, internet forums enable translation students to make conversation about different subjects, for instance, they can discuss university courses and seek each other's opinions. Hence, it is expected that the M.A. translation students pay more attention to these effective software applications. This was very similar to the results of the study conducted by Granell-Zafra (2006). As the findings of his study indicate, the UK freelance translators had the lower than the average familiarity with ICT related tools employed to support marketing and work procurement activities.

Unfortunately, the findings of the present study report the lower than the average familiarity of the participants with most ICT related tools, such as takers and IRC, applied to support communication activities. This is due to that these tools employed to cover specific-purpose activities. For example, IRC is an online chat system that facilitates the communication process. In other words, it gives the translation students the opportunity to exchange information between each other with no difficulty. Talkers are types of ICT tools that make multiple users able to connect at the same time to hold conversation in an online virtual world. Translation students can communicate and exchange information between each other through such a useful online application. In this category, a few numbers of tools were familiar to the students to a large extent, such as electronic mail and instant messaging, because these online applications are types of general-purpose software used daily to support related activities.

Good news derived from the findings was that the M.A. translation students had a strong notion about the importance of ICT familiarity in the employment of ICT tools. In other words, acquiring the knowledge of ICT helps them to employ ICT tools appropriately in their translation related activities that causes them to be productive and efficient. This is a sign of change in their approaches towards the replacement of traditional tools with modern ones. Its rather to say, the more they improve their familiarity with ICT the more effective they use ICT tools. The results derived from the studies conducted by Abdi (2019b) and Fulford and Granell-Zafra (2005) demonstrate that the Iranian freelance translators and UK freelancers had also the same opinions of the importance of ICT in their productivity and efficiency.

5. FINDINGS AND CONCLUSION

The important role ICT plays in every single area of study has recently come to the fore in such a way that ICT itself has been investigated by many scholars in the world wide. The positive impact ICT produces on students and learning process has been shown by many studies (see for example Khan et al.: 2015). The types of ICT employment, and the enhancement of students' learning, are heavily dependent on the familiarity of students with such tools. Thus, the present study investigated the degree of familiarity of M.A. translation students with ICT tools to indicate the importance of ICT familiarity in the appropriate use of ICT tools and the positive impact of ICT on the familiarity of students with ICT related tools when included in educational programs. As the results of the study illustrated, general-

purpose software application were mostly familiar to the M.A. translation students in opposite to the specific-purpose software that were infrequently familiar to them. This may be due to either the lack of knowledge of the participants about such tools or the frequent use of traditional tools because of dereliction of duty of those responsible for broadening the ICT knowledge via translation, such as universities and translator-training institutions.

The results of the present study offer the following recommendations that should be beneficial to translation students and trainee translators, and to those responsible for increasing the knowledge of ICT through educational programs.

The recommendation goes for translation students and trainee translators is that along with familiarity with general-purpose activities that has increased their knowledge of using ICT related tools correctly, devote full attention to specific-purpose activities to become more familiar with them that leads translation students and trainee translators to employ ICT tools appropriate to such activities. To achieve this, attending seminars and workshops held by experts in the field, alongside self-taught method that was frequently used by the M.A. translation students in the sampling, help the students and trainees to not only update themselves on types of ICT tools and translation activities but also become competitive in todays' market.

Those responsible for translation students and trainee translators to broaden their ICT knowledge via educational programs, such as universities and translator-training institutions, are kindly recommended that it is time they move into the technological age. That is to say, universities and translator-training institutions move with technological changes side by side by including ICT related course in educational programs as well as by hiring experts in the field to teach ICT related courses. This leads to help students and trainees to become familiar with ICT and achieve business success in their future career.

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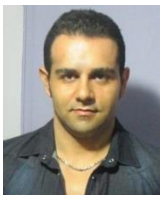

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