Investigating of Information and Communication Technology (ICT) Skills and Professionally-based Competencies of Translator Candidates

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Article Info	Abstract
	In this study, it is aimed to examine the professionally-based competencies and ICT skills of translator candidates with a relational approach. Relationships between professionally-based competencies and information communication technology (ICT) skills were examined. The sample of the study was conducted in Kazakhstan with 166 translator candidate participants. In the study, information communication technologies skills scale and Translator Professionally-Based Competence test were used to collect data from translators. Independent Samples t test, One Way ANOVA and Multiple Regression Analysis techniques were used in the analysis of the research data. According to the research findings, the professionally-based competencies of the participants were found to be high in general. However, it was observed that the participants had some problems in the domain/thematic sub-competence, Textual sub-competence, Research and technological sub-competence, Strategic sub-competence, Knowledge about translation sub-competence dimensions. On the other hand, professionally-based competencies show differences according to the class level and achievement perceptions of the participants. It was found that the general ICT tendencies and software usage skills of the translator candidates were at a medium level, their hardware knowledge was at a low level, while their access and communication skills in a virtual environment were at a high level. ICT skills differ according to the gender, class and achievement perceptions of the translator candidates. Finally, significant correlations were found between the professionally-based competencies and ICT skills of the translator candidates.

Introduction

The inclusion of translation practices in the curricula of language education or philology departments as English Kazakh/ Kazakh English Translation" or / Turkish-Kazakh" Translation is due to the fact that translation as an "activity" has been evaluated as a tool in language teaching (Ehnert & Schleyer 1987; Königs, 2000).However, since the end of the 20th century, the increase in international cooperation at all levels necessitated intercultural interaction, and the interaction environments that emerged on the basis of societies, cultures and communication

needs at the beginning of the 21st century, regardless of theoretical discussions, increased the importance given to translation, which is also a professional field of occupation. Dozens of factors such as touristic, economic, or political situation reveal this communication need.. In this context, the need for qualified professional translators has increased over time, and as a natural result of this, especially academic translation education has gained importance like never before. The translator is expected to know the features that the texts should have, to analyze whether they are texts or not, and to assist him in the translation process. The concept called 'textuality' has seven criteria. These criteria are named as 'coherence', 'coherence/consistency', 'intention', 'acceptability', 'informationalness', 'relevance to context' and 'intertextuality', respectively (de Beaugrande & Dressler, 1981).

Considering that translation is not only a language education, but also a vocational education, a cultural education, and an academic education that combines with different disciplines, general information about translation education and the translation education curriculum, which includes the theoretical and practical courses of this education, is given. (Aslan, 2007; Bartosh et al., 2020; Snell-Hornby, 2006). Before starting the translation profession, which has its own internal dynamics, the qualifications that the graduates of the translation education, which is a practical education, should have, are also discussed from a general point of view. The students of the translation department, who have more or less knowledge about the translation profession at the beginning, are required to acquire basic skills through language, text, culture, theory, and method knowledge during the education period. Because all these determinants are the basic features that a translator should have in his/her professional life and all of these features should be found together. Although it is not known which basic skill will come to the fore or dominate in which situation, candidates are expected to have these four basic skills at the same time in order to gain translation competence (Leyi, 2020; Olohan & Salama-Carr, 2011).

Translation competence, which is one of the basic concepts that translation education wants to teach prospective translators, can simply be defined as the set of knowledge and skills required to be able to translate. Translation competence, which is one of the basic concepts that translation education wants to teach prospective translators, can simply be defined as the set of knowledge and skills required to be able to translate. Translation competence can also be acquired without the need for a certain education and formation. However, when it comes to translation education, scientific criteria must be taken as a basis (Aksoy, 2021; Akalın, 2016; Ivanova, 2016). Considering the general objectives of the translation education programs, in addition to educating students who have adopted translation as an intercultural communication expertise that can produce solutions to real needs, they are equipped with terminology and field knowledge in the fields of medicine, law, social sciences, technical and literature, and who translate at national and international level in these fields, it is understood that the aim is to train English translators who have ethical values and who can successfully carry out the translation and interpreting profession in all public or private institutions and organizations in their country and abroad (Bassnet, 1998; Bernardi, 2004).

The main goal of translation education is to say that translator "develops automatically and organically with an increasing foreign language and mother tongue competence" (Hönig 1992). According to Amman (2008), even if languages that are not taught in translation education programs are taught, programs and courses aimed at improving foreign language skills should be guided by the translation profession that students will undertake in the future. Because translation education is not language education. It is widely accepted that in addition to foreign

language knowledge, cultural knowledge and information technology skills are one of the important basic principles of translation education (Aslan, 2016; Atayman, 1997; Chesterman & Wagner, 2002; Şengül & Sünbül, 2015). Theoretical knowledge and practices, which are one of the main basic principles in translation education, constitute another important dimension that should be observed in developing translation competence. The condition for prospective translators to be able to look at various types of facts and realities regarding the phenomenon of translation holistically and to be able to approach the whole of translation with a questioning and skeptical attitude is that they have an awareness that "translation" is a multidimensional and multidimensional set of facts (Gündoğdu 2004).

According to Bernardini (2004), who draws attention to the fact that the priorities of the courses in translation education should be determined by focusing on the skills that need to be developed, not the competencies that need to be gained, the educational priority of translation education is to raise translators who are aware, reflective and can solve problems. According to him, having awareness means going beyond seeing texts as a whole consisting of independent words, seeing beyond words and texts, seeing language as a network of connected choices belonging to the culture that it affects and is affected by. Being reflective is learning specific translation strategies and processes and using them more or less as needed. Problem solving is the ability to overcome new and unexpected problems by using limited resources and to create new resources by oneself when necessary (Balcı & Sünbül, 2015). Bernardini (2004) states that the place of technology is important in an educational process aimed at providing translators with these skills, but it is not as direct as it is thought.

The translation process and the translation profession have been exposed to rapidly increasing technological developments in recent years. One of the reasons for this is the increasing business volume in every field. In this way, with the business volume increasing day by day, some professions have completed their life and some professions have turned to development and professionalization in coordination with technological developments (Ersoy & Balkul, 2012). The translator is no longer just a text reader and transmitter, but sometimes takes on the role of the project manager and sometimes the editor. In this context, when the scope is broad, general communication and information technologies and translation technologies, in particular, translation memories, matching tools, terminology databases, quality control systems, voice recognition software, optical character recognition tools, etc. A number of emerging technologies such as these make translators' work easier on the one hand, and create new requirements for them on the other. However, while these requirements are clear, the number of qualified translators to meet them is insufficient. Due to the reasons given above, the current translator supply cannot meet the increasing business volume demands (Bowker, 2015; Christensen & Schjoldager, 2017).

In parallel with technological developments, the sub-field of translation technologies in translation studies is also developing. In the Kazakh translation studies literature, although the resources related to translation technologies are few in number compared to other research areas of translation studies, it is observed that there has been an increase in the number of international scientific studies on translation technologies, especially since the 2000s (Bin-Hady & Altamimi, 2021; Karimi et al., 2015; Munkova et al., 2021; Wei, 2020). In this context, a number of studies have been carried out on the perceptions and attitudes of people who receive translation training or practice their profession towards technological developments (Demirer et al., 2015; Doherty, 2016; Dillon &

Fraser, 2006; Garcia, 2009; Kelly, 2008). These studies have increased the awareness of translation technologies in professional translators and people who give translation training.

Information and Communication Technology (ICT), "computer software, CD-ROM, internet, television, film and internet-based project work, e-mail, chat, blogs, wikis, podcasts, etc. represents new multimedia technologies, including" (Zhou, 2018, p. 22). In the last two decades, ICT skills, that is, the ability to use information and communication technologies, have become valid for both individuals and societies (Altunisik & Akturk, (2021; International ICT Literacy Panel, 2007; Kaleli, 2021; Noroozi, Banihashem & Biemans, 2021; Shastri & Chudasma, 2022; Sünbül, Gündüz & Yılmaz, 2002). For example, recent research confirms the important role of ICT skills for the employability, earnings and social inclusion of individuals, as well as for the economic growth of societies (Alan & Sünbül, 2015; European Commission, 2021; Falck, Heimisch & Wiederhold, 2016; Hebebci, 2021; Kaleli, 2020). As a result of this digital transformation, ICT skills have become an important factor in individuals' professional careers and job performances. Given the increasing importance of ICT skills, the question arises regarding factors that predict individual differences in ICT skills. However, the available evidence on translators' ICT skills is sparse, scattered, and lacks theoretical coherence.

In general, ICT skills refer to interactions with individuals' participation in information processing practices such as information acquisition, documentation, presentation of content, use of digital technologies, or use of computers or the Internet for communication (Baş, Kubiatko & Sünbül, 2016;Wicht, Reder & Lechner, 2021; Sahin, Akturk, & Schmidt, 2009). A study on the information needs of university faculties in the ICT environment revealed that 80% of the participants found the ICT useful, 13% found it stressful, and that the accuracy and quality of the information was the biggest concern of faculty when using web resources (Jankowska, 2004). In this study, we develop a unified framework aiming to better understand the correlations of individual differences in translators' ICT skills with their professional skills, with an approach that reinforces previous theorizing and research.

Recently, numerous online technology developments and the ever-increasing expansion of electronic devices have provided language learners with comprehensive and authentic language input. Modern technologies have supported English as a foreign language (EFLs) to integrate language learning into the educational context (Rassaei, 2017; Teng & Wang, 2021). Recently, limited research has examined the effects of the integration of various technologies into foreign language education (Aksoy, 2021; Benson & Chik, 2011; Wei, 2011). In addition, ICT-assisted language learning has provided new opportunities for EFL students to increase collaboration and performance in developing language skills (Azmi, 2017; Godwin-Jones, 2011). Among online ICT technologies, mobile social applications including Facebook, Twitter, YouTube, Instagram and Flicker, and applications such as Course Management Service (CMS), Mobile Podcasting and Automatic Speech Recognition (ASR) are very important in language performance and skills (Kim & Kwon, 2012).

In EFL/ESL learning and teaching, ICT requires the integration of various information and communication technologies to leverage their capabilities for the creation, development and optimization of better learning environments (Alobaid, 2021). Translators use a large number of technological resources and tools to communicate with employers and other translators and to do their translation work. Some of these can be listed

as search engines, online library and archive catalogs, online encyclopedia, dictionary and multilingual terminology databases, online newspapers and magazines, translation memories, CD-ROM dictionaries and encyclopedias, e-mail groups, chat groups on the Internet (Printer. 2007). Forums, blogs, machine translation systems, terminology management software, project management software, localization software, and increasingly popular cloud translation memories and telephony applications (eg Skype) and audio resources (eg http://tr.forvo.com) can also be added to this list. In addition, word processing software (eg MS Office Word), spreadsheet software (eg MS Office Excel) and presentation software (eg MS Office Powerpoint) are also general-purpose software that is not designed for translation purposes for translators, but is prepared for many tasks so they can be counted among other tools used by translators (Austermühl, 2001). Although these tools contribute to translators in terms of speed and efficiency in the translation process, it is clear that they cannot replace human translators, at least under today's conditions.

One of the important factors of technology use is the competencies of individuals in using information and communication technologies. Until recently, there was no common understanding of what proficiency in ICT fields is and which ones are necessary for students (Alan & Sünbül, 2010; Chehimi & Alameddine, 2022; Liang, 2021). Competencies in information and communication technologies is a broad term that covers not only skills but also knowledge and attitudes towards technology. In this context, "digital competence", "information society technologies" include versatile uses in the fields of business, entertainment and communication. In this respect, competence in digital technologies includes the effective use of computers to collect, evaluate, store, produce, present, exchange information, communicate via the internet and participate in collaborative networks (Walters, Gee & Mohammed, 2019). In this context, according to (Gurgenidze, 2018), translator candidates need to connect their competencies in information and communication technologies with their applications in the field in order to be successful in their fields.

In addition, many studies focusing on foreign language education argue that information and technology competencies should be included more in academic programs in this field (Gurgenidze, 2018; Paudel, 2021; Zhou et al, 2021). Based on this theoretical basis, it is aimed to examine the professionally-based competencies and ICT skills of the translator candidates in Kazakhstan with a relational approach. In this context, answers to the following questions were sought in the study:

- What level of professionally-based competencies do translators have?
- What is the information and communication technology skills of the translator candidates?
- Does the professionally-based competencies of translators differ according to their grade level?
- Does the information and communication technologies of the translator candidates differ according to the grade level?
- Does the professionally-based competencies of translator candidates differ according to their perception of success?
- Does the information and communication technologies of the translator candidates differ according to their perception of success?
- Do candidates' ICT skills significantly affect Professionally-Based Competencies?

Method

This study was conducted in accordance with causal comparison and correlational research designs. The causal comparison design is a research method that aims to examine the studied problem, event, phenomenon, variable or subject by comparing different groups with each other. The subject and event studied in this research design emerged independently of the researcher's directions and manipulations. In this design, the researcher has no influence or intervention in the formation of the groups to be compared (De Vaus, 1990; Sünbül, 2008). In this research, using the causal comparison design; professionally-based competencies and information and communication technology skills (ICT) of translator candidates (English Philology) studying in Kazakhstan were compared according to gender, grade level and perception of success variables.

Correlational research, on the other hand, is a research method in which the relationship between two or more variables is examined without any intervention, effect or manipulation. Based on the relationships obtained with this research method, an opportunity to predict some results can be created. While the cause-effect relationship is emphasized in the causal comparison design, the co-change of the variables is mostly discussed in the correlational research method. The results obtained in the correlational research method only give an idea about the cause-effect relationship (Kumar, 1996; Purpura, 2011). Based on the correlational research design, in this research, the relationships between the professionally-based competencies and information communication technology skills (ICT) of translator candidates (English Philology) studying in Kazakhstan were examined. In addition, the effect of the information and communication technologies skills of the translator candidates participating in the research on professionally-based competencies was also investigated.

The convenience sampling method was used as the basis for the selection of the translators participating in the research. In other words, the translator candidates participating in the research were selected from a group that is easily accessible and therefore easy to communicate with. Persons participating in the research are translator candidates who responded positively to the invitation of the researchers and accepted to participate in the online survey and scale. The study was based on voluntary participation. All study participants were informed that they could withdraw their consent at any time. The online survey is available on Google Forms. Following the snowball sample (Bryman, 2016), the first participants (from the researcher's personal communication, previously interacted English department students) were invited to participate in online scales via social platforms. After approval for the initial respondents, they were encouraged to invite anyone who was eligible for the survey. A total of 177 Kazakh English department students and graduates finally took the online survey, and 175 gave valid answers. After performing Missing Value Analysis and Little's (1995) MCAR test ($\chi 2 = 108.22$, df $= 136$, p $= 0.89$), nine cases whose data were randomly concluded to be completely missing were excluded from the study due to missing values. Thus, research processes were carried out with a total of 166 participants.

Data Collection Tools

Questionnaires (self-report scales) and standardized scales were used as data collection tools in this study. Questionnaires are widely used in scientific research due to increased speed of data collection, low or no cost

requirements, and higher levels of objectivity compared to other techniques (Cohen et al., 2000; Yılmaz & Sünbül, 2009). No survey can be successful without a well-designed measurement tool. The researcher should have a long list and to-do list, arising from the experiences of other researchers, past, and present that should guide him in this matter. The most important practice questions at this stage is the process of putting the questions in a meaningful order and format. In this regard, it is important to fulfill the following principles and tendencies (Cohen et al., 2000): *Opening questions:* Opening questions should be easy to answer and should not threaten the participants in any way. *Question flow:* Questions should flow in some kind of psychological order so that one easily and naturally leads to the other. *Variety of questions:* When respondents ask similar questions for half an hour, they become quick and restless. Therefore, it is often helpful to ask the respondent questions of different styles and styles. All these principles were tried to be fulfilled in the development of research scales by taking into account the characteristics of the translator candidates such as their current school status, time, interest and attention.

In this context, research measurement tools include short descriptive, multiple choice and expression type questions, multidimensional psychometric rating scale-Likert five-point scales. In the study, a five-point Likert-type measurement tool designed and developed by Günbatar (2014) was used as a data collection tool to measure the information and communication technologies skills of translators. The first sub-dimension of the scale is "General ICT Tendency", the second sub-dimension is "Accessing Information in the Virtual Environment", the third sub-dimension is "Computer Hardware Knowledge", the fourth sub-dimension is "Software Usage" and the fifth sub-dimension is "Communication in the Virtual Environment". Scale statements are in 5-point Likert type, ordered from "Totally Disagree" to "Totally Agree". The highest score that can be obtained from the scale is 115 and the lowest score is 23. The internal consistency coefficient was calculated as .92 in the whole and the highest .90 and the lowest .76 among the sub-dimensions. The factor loadings of the scale items varied between .90 and .61, while the correlation between the items varied between .40 and .85.

The Scale of Translation Competence test developed by Eser (2015) was used to measure Translator Professionally-Based Competence in the study. The scale, which is in 5-point Likert form, consists of 8 sub-dimensions and 50 related questions. Dimensions of the Translator Professionally-Based Competence scale: bilingual sub-competence, cultural sub-competence, domain/thematic sub-competence, textual sub-competence, research and technological sub-competence, strategic sub-competence, knowledge about translation sub-competence are the translation service provision sub-competence subscales.

The Cronbach Alpha reliability coefficients of the sub-dimensions ranged from .75 to .90 as a result of the analyses of the scale on the translator candidates who participated in the sample of this study. In the sample of translator candidates, the reliability coefficient of the whole Scale of Translation Competence scale is .88. According to Heale and Twycross (2015), there are some reliability calculation methods that can be used according to the type of a measurement tool and the characteristics of the variables. There are different processes for estimating reliability with each method. Some of these are: Test-retest method, parallel form method, equal halves method, KR-20 and Cronbach Alpha methods. In this context, Cronbach's Alpha method is preferred especially in Likert type scales in terms of revealing internal consistency.

Data Analysis

Items for quantitative data were designed according to these factors. Scales designed to measure ICT skills and professionally-based competencies of translator candidates were coded as a five-point Likert scale: 1= strongly disagree, 2= somewhat disagree, 3= neither agree nor disagree, 4= somewhat agree, 5= strongly agree. Then, after the preliminary analysis of the data, descriptive statistics (mean and standard deviation, percentage) were obtained from the SPSS 24.0 software package. The tables helped to understand the features. In addition, whether the professionally-based competencies scores of the participants' ICT skills meet the normal distribution assumptions were analyzed with the Shapiro Wilk test. As a result of the procedures, it was seen that the professionally-based competencies scores of the participants' information and communication technologies skills met the assumptions of normal distribution (Yurt & Sünbül, 2012). Parametric tests should be used in the analysis of study variables if the assumptions of normal distribution are met. According to Montgomery (2008), parametric testing is hypothesis testing that provides generalizations to make statements about the mean of the main population. In this context, Independent Samples t test and One Way ANOVA (F test) techniques from Parametric Tests were used to compare the professionally-based competencies and ICT skills scores of the translator candidates according to the variables of gender, grade level, perception of success and use of online technologies (see Table 1).

Table 1. Dependent and Independent Variables and Applied Analysis Techniques

Dependent Variable	Independent Variable	Analysis Technique
Professionally-based Competency Scores Obtained from	Grade Level	Independent Samples t Test
Information and Communication Technology Skills Scales	Success Status	One Way ANOVA (F test)

Finally, the Multiple Regression Analysis technique was used in the analysis of the relations between the two variables (Professionally-based competencies and ICT skills). Before performing the regression analysis, the assumptions of the multivariate normal distribution, the existence of a linear relationship between the independent variable and the predictor variables, and the absence of a multi-collinearity problem between the independent variables should be tested (Wulandari, Sutrisno, & Nirwana, 2021). To control the multivariate normal distribution, Mardia's multivariate standardized kurtosis coefficient was calculated and examined. The fact that the Mardia multivariate standardized kurtosis value is less than 8 indicates that the data have a multivariate normal distribution. In this context, it was deemed appropriate to use Multiple Regression Analysis to predict the relationships between professionally-based competencies and information and communication technologies skills.

Results

The first sub-problem of the research was expressed as "What is the professionally-based competencies of the translator candidates?" For the solution of this sub-problem, the scores obtained from the scale were analyzed with descriptive analysis techniques. The results obtained are given in Table 2.

Table 2. Professionally-based Competencies Levels of the Research Sample

	N	Minimum	Maximum	Mean	Std. Deviation
Bi-lingual sub-competence	165	3.00	5.00	3.93	0.49
Cultural sub-competence	165	2.88	4.88	3.52	0.46
Domain/thematic sub-competence	165	2.25	4.38	3.30	0.32
Textual sub-competence	165	2.25	4.75	3.26	0.41
Research and technological sub-competence	165	2.50	4.38	3.25	0.31
Strategic sub-competence	165	2.75	4.25	3.21	0.30
Knowledge about translation sub-competence	165	2.13	4.00	3.24	0.32
Translation service provision sub-competence	165	3.00	5.00	3.65	0.53
Total	165	3.06	3.81	3.42	0.21

When Table 2 is examined, it is understood that Bi-lingual sub-competence, Cultural sub-competence, Domain/thematic sub-competence, Textual sub-competence, Research and technological sub-competence, Strategic sub-competence, Knowledge about translation sub-competence, Translation service provision sub – competence and total scores of the students have values varying between 1.00-5.00. It was also calculated that Bi-lingual sub-competence, Cultural sub-competence, Domain/thematic sub-competence, Textual sub-competence, Research and technological sub-competence, Strategic sub-competence, Knowledge about translation sub-competence, Translation service provision sub-competence and their total mean score was 3.93, respectively; 3.52; 3.30; 3.26; 3.25; 3.21; 3.24; 3.65 and 3.42. According to the average values obtained, the participants' Bilingual sub-competence, Cultural sub-competence, Translation service provision sub-competence and total competencies were found to be high. On the other hand, it was determined that the participants' competencies in other dimensions were at a moderate level.

The second sub-problem of the research was expressed as "What is the information and communication technology skills of the translator candidates?" For the solution of this sub-problem, the scores obtained from the scale were analyzed with descriptive analysis techniques. The results obtained are given in Table 3.

Table 3. Information and Communication Technology (ICT) Skills of the Research Sample

	N	Minimum	Maximum	Mean	Std. Deviation
General ICT Trend	165	2.38	4.00	2.93	0.47
Virtual Access	165	1.83	5.00	3.82	0.82
Hardware Information	165	2.00	3.14	2.33	0.37
Software Usage	165	2.00	3.25	2.61	0.34
Communication in Virtual Environment	165	1.83	4.67	3.76	0.51

When Table 3 is examined, it is understood that the General ICT Tendency, Access in Virtual Environment,

Hardware Knowledge, and Software Usage scores vary between 1.00-5.00. It was calculated that General ICT skill, Access in Virtual Environment, Hardware Knowledge and Software Usage mean scores were 2.93, respectively; 3.82; 2.33; 2.61 and 3.76. According to the average values obtained, it is understood that the General ICT tendency and Software Usage skills of the participants are at a *moderate level*, while their Access to the Virtual Environment and Communication in the Virtual Environment skills are at a *high level*. However, it was determined that the Hardware Knowledge of the participants was at a low level.

Another sub-problem of the research was expressed as "Is there a significant difference based on the professionally-based competencies grade level of the translator candidates?" For the solution of this sub-problem, the scores obtained from the scale were compared according to the grade level and examined. The results obtained are given in Table 4.

Table 4. Comparison of Translator Candidates by professionally-based competencies Grade Level

		N	Mean	Std. Deviation	F	p
Bi-lingual sub-competence	1	46	3.67	0.33	18.135*	0.000
	2	39	3.73	0.25		
	3	40	4.16	0.54		
	4	40	4.20	0.52		
	Total	165	3.93	0.49		
Cultural sub-competence	1	46	3.35	0.40	7.327*	0.000
	2	39	3.38	0.30		
	3	40	3.66	0.49		
	4	40	3.71	0.52		
	Total	165	3.52	0.46		
Domain/thematic sub-competence	1	46	3.17	0.33	1.560	0.089
	2	39	3.27	0.23		
	3	40	3.32	0.33		
	4	40	3.44	0.37		
	Total	165	3.30	0.32		
Textual sub-competence	1	46	3.10	0.27	2.321*	0.038
	2	39	3.27	0.26		
	3	40	3.28	0.48		
	4	40	3.43	0.54		
	Total	165	3.26	0.41		
Research and technological sub-competence	1	46	3.25	0.21	0.561	0.641
	2	39	3.21	0.19		
	3	40	3.24	0.29		
	4	40	3.30	0.47		

		N	Mean	Std. Deviation	F	p
	Total	165	3.25	0.31		
Strategic sub-competence	1	46	3.10	0.18	6.442*	0.000
	2	39	3.14	0.21		
	3	40	3.25	0.32		
	4	40	3.35	0.39		
	Total	165	3.21	0.30		
Knowledge about translation sub-competence	1	46	3.10	0.21	2.302*	0.045
	2	39	3.20	0.20		
	3	40	3.29	0.33		
	4	40	3.39	0.47		
	Total	165	3.24	0.32		
Translation service provision sub-competence	1	46	3.50	0.34	3.158*	0.026
	2	39	3.58	0.43		
	3	40	3.76	0.66		
	4	40	3.79	0.59		
	Total	165	3.65	0.53		
Total	1	46	3.31	0.17	15.067*	0.000
	2	39	3.35	0.16		
	3	40	3.49	0.22		
	4	40	3.54	0.20		
	Total	165	3.42	0.21		

*: $p<0.05$

When the table is examined, it is understood that the research and technological sub-competence and Domain/thematic sub-competence-related mean scores of the participants do not show a statistically significant difference according to the grade level ($p>0.05$). However, significant differences were found in the other dimensions and total scores of the professionally-based competencies scale according to the class level ($p<0.95$). According to further analysis, as the grade level increases, the average score in professionally-based competencies and related sub-dimensions increases.

Another sub-problem of the research was expressed as "Is there a significant difference in the ICT skills of translator candidates based on grade level?" For the solution of this sub-problem, the scores obtained from the scale were compared according to the grade level and examined. The results obtained are given in Table 5. When Table 5 is examined, it is understood that the mean scores of the participants related to hardware knowledge, software usage skills, access to the virtual environment and communication skills in the virtual environment do not show a statistically significant difference according to the class level ($p>0.05$). However, significant differences were found in General ICT tendency scores according to grade level ($p<0.95$). According to further analysis, the general ICT tendency increases as the grade level increases.

Table 5. Comparison of Translator Candidates' ICT Skills by Grade Level

		N	Mean	Std. Deviation	F	p
General ICT Trend	1	46	2.77	0.24	8.755*	0.000
	2	39	2.75	0.23		
	3	40	3.07	0.56		
	4	40	3.14	0.60		
	Total	165	2.93	0.47		
Virtual Access	1	46	3.64	0.81	2.043	0.110
	2	39	3.74	0.67		
	3	40	4.05	0.84		
	4	40	3.87	0.91		
	Total	165	3.82	0.82		
Hardware Information	1	46	2.29	0.33	2.396	0.070
	2	39	2.22	0.29		
	3	40	2.41	0.42		
	4	40	2.40	0.42		
	Total	165	2.33	0.37		
Software Usage	1	46	2.58	0.35	1.572	0.198
	2	39	2.54	0.33		
	3	40	2.61	0.37		
	4	40	2.70	0.31		
	Total	165	2.61	0.34		
Communication in Virtual Environment	1	46	3.70	0.61	0.613	0.607
	2	39	3.76	0.55		
	3	40	3.85	0.49		
	4	40	3.75	0.36		
	Total	165	3.76	0.51		

*: $p < 0.05$

Another sub-problem of the research was expressed as "Is there a significant difference based on the perceived success level of the Translator candidates from Professionally-Based Competencies?" For the solution of this sub-problem, the scores obtained from the scale were compared according to the perceived success level and examined. The results obtained are given in Table 6. When the table data is analyzed, it is understood that the participants' mean scores related to Research and technological sub-competence, Domain/thematic sub-competence and Knowledge about translation sub-competence do not show a statistically significant difference according to the perceived success level ($p > 0.05$). However, significant differences were found in the other dimensions and total scores of the professionally-based competencies scale according to the perceived level of success ($p < 0.95$). According to further analysis, as the level of success increases, the average score in professionally-based competencies and related sub-dimensions increases.

Table 6. Comparison of Participants by Perceived Success Level of Professionally-Based Competencies

		N	Mean	Std. Deviation	F	p
Bi-lingual sub-competence	Low	31	3.68	0.22	17.534*	0.000
	Moderate	79	3.84	0.40		
	High	55	4.21	0.58		
	Total	165	3.93	0.49		
Cultural sub-competence	Low	31	3.36	0.33	8.511*	0.000
	Moderate	79	3.44	0.40		
	High	55	3.72	0.54		
	Total	165	3.52	0.46		
Domain/thematic sub-competence	Low	31	3.26	0.19	1.960	0.144
	Moderate	79	3.27	0.28		
	High	55	3.37	0.41		
	Total	165	3.30	0.32		
Textual sub-competence	Low	31	3.21	0.23	5.204*	0.006
	Moderate	79	3.19	0.28		
	High	55	3.40	0.57		
	Total	165	3.26	0.41		
Research and technological sub-competence	Low	31	3.20	0.18	0.873	0.420
	Moderate	79	3.24	0.27		
	High	55	3.29	0.40		
	Total	165	3.25	0.31		
Strategic sub-competence	Low	31	3.09	0.09	16.712*	0.000
	Moderate	79	3.13	0.23		
	High	55	3.38	0.38		
	Total	165	3.21	0.30		
Knowledge about translation sub-competence	Low	31	3.20	0.22	1.940	0.147
	Moderate	79	3.21	0.26		
	High	55	3.31	0.42		
	Total	165	3.24	0.32		
Translation service provision sub-competence	Low	31	3.54	0.40	5.417*	0.005
	Moderate	79	3.57	0.45		
	High	55	3.84	0.64		
	Total	165	3.65	0.53		
Total	Low	31	3.32	0.15	25.601*	0.000
	Moderate	79	3.36	0.18		
	High	55	3.56	0.21		
	Total	165	3.42	0.21		

*: $p < 0.05$

Another sub-problem of the research was expressed as "Is there a significant difference in the information and communication technology skills of the translator candidates based on the perceived success level?". For the solution of this sub-problem, the scores obtained from the scale were compared and analyzed according to perceived success. The results obtained are given in Table 7.

Table 7. Comparison of Translator Candidates' ICT Skills According to Perceived Success Levels

		N	Mean	Std. Deviation	F	p
General ICT Trend	Low	31	2.78	0.22	14.406*	0.000
	Moderate	79	2.81	0.36		
	High	55	3.18	0.59		
	Total	165	2.93	0.47		
Virtual Access	Low	31	3.62	0.78	1.071	0.345
	Moderate	79	3.86	0.77		
	High	55	3.86	0.90		
	Total	165	3.82	0.82		
Hardware Information	Low	31	2.35	0.33	3.549*	0.031
	Moderate	79	2.25	0.34		
	High	55	2.43	0.42		
	Total	165	2.33	0.37		
Software Usage	Low	31	2.60	0.35	3.492*	0.033
	Moderate	79	2.54	0.32		
	High	55	2.70	0.35		
	Total	165	2.61	0.34		
Communication in Virtual Environment	Low	31	3.82	0.50	1.592	0.207
	Moderate	79	3.69	0.53		
	High	55	3.83	0.48		
	Total	165	3.76	0.51		

*: $p < 0.05$

When Table 7 is examined, it is understood that the mean scores of the participants related to access to the virtual environment and communication skills in the virtual environment do not show a statistically significant difference according to their perceived success ($p > 0.05$). On the other hand, significant differences were found in General ICT tendency, hardware knowledge and Software Usage skill scores according to perceived success level ($p < 0.95$). General ICT skills, hardware knowledge and Software Usage skills of students with high success levels were found to be significantly higher according to further analysis.

Another sub-problem of the research was expressed as "Does the ICT skills of translator candidates significantly affect Professionally-Based Competencies?" The results of the Multiple Regression performed for the solution of this sub-problem are given in Table 8.

Table 8. Results of Regression Analysis Performed to Determine the Impact of ICT Skills on Professionally-Based Competencies

	β	Standardized β	t	p
(Constant)	2.358		14.995	0.000
General ICT Trend	0.26	0.57	8.274	0.000
Virtual Access	0.03	0.11	1.721	0.087
Hardware Information	0.01	0.01	0.160	0.873
Software Usage	0.10	0.18	2.880	0.005
Communication in Virtual Environment	0.00	-0.01	-0.165	0.869

R=0.53; R^2=0.29; F=19.10; p=0.000

When Table 8 is examined, it is understood that the regression model developed to test the effect of translator candidates' ICT skills on professionally-based competencies scores was found to be statistically significant (R=0.53; R2=0.29; p<0.001). ICT skills explain approximately 29% of the total variance in professionally-based competencies scores. This indicates a high level of predictive and correlation. When the significance values of the calculated standardized path coefficients are examined, it is understood that only general ICT tendency and software use proficiency are significant predictors of professionally-based competencies (p<0.05).

Discussion and Conclusion

In the study in which the professionally-based competencies of the translators were examined in terms of their relationship with their ICT competencies, the participants' general competencies were found to be high. However, it was observed that the participants had some problems in *the domain/thematic sub-competence, Textual sub-competence, Research and technological sub-competence, Strategic sub-competence, Knowledge about translation sub-competence dimensions*. According to the mean values of these findings, *the participants' Bilingual sub-competence, Cultural sub-competence, Translation service provision sub-competence and total competencies were found to be high*. These findings are similar to the findings of studies conducted by Ammann (2008), Tahir-Gürçağlar (2011) and Vermes (2010). According to Amman (2008), an important prerequisite of translation education is that the translator has the ability to produce and analyze texts. In this process, which is called text acquisition, the translator is expected to "receive texts" and "produce texts" both in a foreign culture and in his own culture. Text reception includes the processes of how a person reads, interprets, and ultimately understands the text. Text generation shows that the person has now moved to the application part. In addition to a good language and cultural competence, text producers should have sufficient creativity, research skills and strategic competencies. Especially in programs that train translator candidates, inadequacies are observed in achieving the goals of Domain/thematic sub-competence, textual sub-competence, Research sub-competence and Strategic sub-competence (Tahir-Gürçağlar 2011, Vermes, 2010). In an academic translation, it is important for students to be able to analyze a written text and transfer it to the target language in accordance with the function of the text and the expectations of the target culture. During translation, the student should demonstrate competence in the basic elements and techniques of translation by working on different types of text.

Another finding of the study is that professionally-based competencies differ significantly according to the class and achievement perceptions of the participating students. In the study, it was observed that as the grade level increased, the competencies in professionally-based competencies and related sub-dimensions increased. Again, the participants who perceived themselves as very successful achieved high levels in professionally-based competencies and related sub-dimensions. These findings are similar to the results of studies conducted by Elahi Shirvan et al (2021), Guo (2021), Liu (2021), Roby (2004), and Wang et al (2021). According to Roby (2004), the development of foreign language skills takes place with a process-based approach. In this context, students' participation and academic expectations on the basis of success are important factors. In terms of translation competence, Toury (1995), who describes it as a linguistic, but also stylistic and literary resources that the translator will refer to when producing translation solutions, also points out that this competence can only be gained through conscious training and experience, and argues that only this way can one become a real translator (Toury, 1995).On the other hand, Hii (2011) pointed out the importance of motivation and readiness in the development of students' English skills. According to the researcher, there is significant difference in terms of foreign language learning motivations according to achievement variable.

Another variable discussed in the research is about the ICT skills of translator candidates. According to the research findings, it was found that the general ICT tendencies and software usage skills of the translator candidates were at a medium level, their hardware knowledge was at a low level, while their access and communication skills in a virtual environment were at a high level. These findings are similar to the research findings of Doğru (2020), Hatlevik & Hatlevik (2018), Kibici (2022), LeBlanc (2013), Pooparadai (2016). In these studies carried out with samples of university students in different fields, the virtual access and communication, general digital and ICT competencies of the participants were found to be above average, whereas the hardware and software knowledge including professional competencies were found to be low. According to Pooparadai (2016), universities should take responsibility for preparing their graduates in terms of ICT skills. However, there are problems for translators in demonstrating their digital and technological competencies. In this context, one of the problems experienced in the teaching of translation tools is that students do not show much interest in these tools, mostly due to ignorance or having wrong knowledge. Students have negative thoughts about these tools with baseless information (Ersoy & Balkul, 2012; Kara, 2020; Kibici & Sarıkaya, 2021; Koyuncuoğlu, 2021; Sieverding & Koch, 2009).

Another variable discussed in the study is the comparison of ICT skills of participant translator candidates to their grade level and perceived success level. In the study, it was observed that as the grade level increased, the competence in ICT skills increased. General ICT tendencies, hardware knowledge and software usage skills of students with high success levels were found to be significantly higher. These findings are similar to the results of the studies conducted by Kelly (2008), Li (2022), and Mac Callum et al. (2014).

Another aspect of ICT preparation is ICT literacy, which is "a measure of an individual's ability to use digital technology" that focuses on a set of skills using a variety of technologies (Mac Callum et al., 2014). According to Mac Callum et al. (2014), students develop basic ICT skills with advancing classes in the foreign language learning process at universities. Parallel to these studies, a number of studies have also been conducted on the

perceptions and attitudes of people who receive translation training towards technological developments (Kelly, 2008). Kelly (2008) argued that students who are successful in their successful departments and who have academic expectations exhibit high proficiency in ICT and related research skills. In this context, Bowker (2005) pointed out that it is important for prospective translators not only to specialize in translation tools, but also to develop the necessary skills in ICT skills, adoption of best practices, and making the right decisions in choosing and using the relevant translation tool.

The last finding of the research is about the relations between the information and communication technologies skills of translator candidates and Professionally-Based Competencies. According to the regression analysis, it was found that the ICT skills of the translator candidates significantly affected the professionally-based competencies levels. According to further analysis, it was seen that general ICT tendency and software usage proficiency, which are among ICT skills, affect professionally-based competencies at a significant and high level.

These findings are supported by research findings by Austermühl (2001), Desjardins (2011), Inose (2012), O'Hagan (2008), Olvera-Lobo & Gutierrez-Artacho (2014), Robinson and Olvera-Lobo (2011). Within the scope of the study, it has been seen that ICT tools and social networks, which are one of the important innovations created by new media environments and tools, positively affect translators' field competencies and achievements in translation education (Robinson & Olvera-Lobo, 2011; Olvera-Lobo & Gutierrez-Artacho, 2014). The positive effects of skills and competencies in information technologies on translation competencies and skills were thus tested within the scope of a quantitative model. In this respect, it has important clues about the direction in which translator candidates' ICT skills can be improved in translation education.

As a result, the professional profile of translators and their candidates has changed radically in recent years. While translators' ICT skills were not taken into account much before, they have been seen as an indispensable condition for translators' competitiveness, especially in the last few years, in terms of social, economic and technological change processes. Technology has recently taken its place in a wide range of constantly evolving and complex business processes for language and information processors, for partial or fully automatic translations, to create information design for concrete purposes. For this reason, institutions that provide translation education should definitely include new applications arising from technological changes in their curricula and better prepare students for the conditions of the future by educating students on the use of these technologies. Thus, the knowledge and skills of the students who graduated from translation departments on current applications in technologies related to their profession will be up-to-date in line with the demands of the market.

In this context, besides the knowledge of language recognition, terminology development, as well as the establishment, use and maintenance of a database to create terminology, besides the knowledge of technology acquisition, computer typing and use for research, translator candidates' knowledge of many different multimedia tools, language, information, communication, etc. technologies, ICT skills, and monitoring of developments in the field. In this context, this research study, which was conducted with translator candidates, can be done with graduate students and translators practicing their profession. Studies can be conducted with experimental and qualitative research models on the professionally-based competencies and ICT skills of translator candidates.

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