

Attitudes to CAT Tools: Application on Egyptian Translation Students and Professionals

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Abstract

Computer-aided Translation (CAT) tools have become indispensable in most organizations, with major benefits including increasing productivity, unifying terminology and minimizing translation costs. With both positive and negative feedback being reported about these systems, it is imperative to further explore users' attitudes to CAT tools. Given the scarcity of research conducted in this field on the English-Arabic language pair, the present study attempts to examine users' attitudes to CAT tools among 114 translation students and professional translators in Egypt. The main purpose of the research is to examine user attitudes towards these tools with specific reference to their perceived benefits, ease of use and compatibility. The survey instrument was adapted from Moore and Benbasat with some modifications. Drawing upon Dillon and Fraser's premises, the research investigates the relationship between user attitudes to CAT tools and various factors, including years of experience, computer skills and type of texts translated. Semi-structured interviews were also used to achieve a mixed-method. The study points to an overall favorable attitude among participants towards using CAT tools, despite some mixed and contradicting opinions on some aspects. The findings also confirm that users with better computer skills have more favorable attitudes towards CAT tools unlike those with more experience in translation. The study concludes with some recommendations for future research.

Keywords: attitudes, CAT tools, Egyptian students, teaching translation, translation memory (TM)

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1. Introduction

Globalization and the accelerated growth of trade worldwide have resulted in an increased demand for translation services. With translators facing more workload and seeking to meet deadlines, Computer-aided/assisted Translation (CAT) tools have become indispensable in most organizations. Since their introduction in the 1990s, CAT tools have been used to facilitate and accelerate the translation process, unify terminology and minimize translation costs. The integration of CAT in most translation organizations, as well as in university curricula has changed the way in which translators work. In today's highly competitive market, knowledge of a CAT tool is often a prerequisite when applying for a translation job.

Despite all the benefits that CAT tools offer, they are not without shortcomings. In addition to their relatively high cost, working with a CAT tool may be rather time-consuming at the beginning, since the translator has to invest some time in training, referring to manuals, or seeking technical support (Elimam, 2007). Leblanc (2013) reports some drawbacks that may be involved in the use of CAT tools including hindering creativity among translators and propagating errors through translation recycling. He argues that "the main drawback of TMs is that they force translators to use a sentence-by-sentence approach, thereby requiring them to work with segments (or translation units) instead of the whole text" (Leblanc, 2013, p. 7).

With both positive and negative attitudes being reported about CAT tools, as well as with their significant impact on the translation process and profession in today's world, it has become imperative to explore users' attitudes to these systems. Given the scarcity of research conducted in this field on the English-Arabic language pair, the present study attempts to examine users' attitudes to CAT tools among 114 translation students and professional translators in Egypt. The main purpose of the research is to examine user attitudes to CAT tools with specific reference to their perceived benefits, ease of use and compatibility. The instrument is adapted from Moore and Benbasat (1991) with some modifications, in addition to the use of semi-structured interviews. The research also investigates the relationship between user attitudes to CAT tools and user's profile, including years of experience, computer skills and type of texts translated.

2. Literature Review

Eagly and Chaiken (1993) define an attitude as a "psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (p. 1). Several studies have contributed to the literature on translators' attitudes to CAT tools, as outlined below. Moore and Benbasat (1991) and Dillon and Fraser (2006) are of particular relevance to the present research.

Moore and Benbasat (1991) investigated how potential users' perceptions of an information technology innovation influence its adoption. For this purpose, they propose a key instrument for the study of the adoption and diffusion of information technology innovations based on theories of innovation diffusion. According to Moore and Benbasat (1991), "innovations diffuse because of the cumulative decisions of individuals to adopt them. Thus, it is not the potential adopters' perceptions of the innovation itself, but rather their perceptions of using the innovation that are key to whether the innovation diffuses" (p. 196). Dillon and Fraser (2006) then made use of a simplified version of the aforementioned instrument to examine the perception of UK-based

translation professionals to Translation Memories (TMs). They tackle the same eight constructs but this time using only 24 statements. They argue that:

- 1) Younger translators and those who are relatively new to the translation industry have a more positive general perception of CAT tools than experienced translators;
- 2) Translators who use CAT tools have a more positive general perception of it than translators who do not;
- 3) Perceived computer proficiency positively correlates with translators' perception of the importance of CAT tools.

In the literature on CAT system evaluation, two key studies are particularly widely referred to: Rico (2001) and Höge (2002), both of which emphasize the importance of a user-oriented perspective for evaluation based on context of use (see also Zaretskaya et al., 2015). The former proposes a rigorous methodology for evaluation that takes context into account and identifies a number of relevant features along with the relative weight of each feature. An apparent shortcoming, nevertheless, is that the model is purely theoretical and remains without application. Höge (2002) also highlights the importance of the reusability of an evaluation framework.

McBride (2009) explored translators' opinions regarding the usage of TMs using posts on translators' discussion boards and mailing lists as well as vendors' promotion material. Leblanc (2013), on the other hand, conducted an ethnographic case study in three different translation organizations in Canada mostly based on interviews with translators. He reports that despite the consensus among his participants about the benefits of using CAT tools, they still voice some dissatisfaction with the tool design and conception. Starlander and Vázquez (2013) explored postgraduate students' evaluation of CAT tools using Eagle (1999), a seven-step process for evaluation. An apparent drawback reported by the authors, however, is that this method requires simplification, since it is rather complicated and too detailed.

As for the Arab world, very few studies have tackled the use of CAT tools in general and even fewer have attempted to explore user attitudes to CAT tools. One of the reasons may be that these tools have only been recently introduced to the Arab market, in addition to their relatively high price which may hinder their purchase by some organizations, especially educational ones. Thawabteh (2013) suggests that CAT tools may usually seem too complicated, even frustrating when first introduced to students. Eventually, they get used to this technology and appreciate it in time, given proper training. However, he points out that, with little attention devoted to CAT tools both in the academic and industrial realms in the Arab world as a whole, the stereotypical image of the translator still persists, thus grounding the concept of translation in its purely traditional sense.

One of the pioneering studies on attitudes to CAT tools in the Arab world was conducted by Abotaibi (2014) who studied the expectations and attitudes of female Saudi translation students regarding this technology. An obvious limitation of the study, however, is that it solely relies on freely available online services and video tutorials of the program rather than the software itself, which may not give a valid image of users' attitudes to actual hands-on use.

From the above discussion, it may be argued that the significance of the present study lies in the fact that it investigates the attitudes of actual users of CAT tools (as opposed to potential users) involving the Arabic-English language pair. A comparison is also drawn between the attitudes of undergraduate students and professional translators to provide an additional dimension (previous studies dealt with only one of these).

3. Methodology

A mixed method approach is employed in order to integrate both quantitative and qualitative data. Combining both questionnaires and semi-structured interviews is meant to give a more in-depth view of users' attitudes.

The survey comprises two sections: the first is devoted to demographic data, including age, years of experience, computer skills, etc. The second is adopted from the instrument developed by Moore and Benbasat (1991) to examine user's attitudes to a new technology (see also Dillon & Fraser, 2006). The original instrument comprises 34 statements based around eight different constructs. For the purpose of the present study, however, only three of these constructs are selected for a shorter and more applicable version. The wording of the original items was sometimes slightly modified to be tailored to the specific topic of study, i.e., CAT tools. The design of the instrument is shown in table 1.

Table 1. *Summary of study constructs and number of survey items*

Construct /section	Number of statements	Statements added to original
1) Benefits	10	None
2) Ease of use	10	facilitating teamwork, document recoverability, importance of training
3) Compatibility	10	affordability, effect on creativity, suitability to text type, compatibility with Arabic language
Total: 30 statements		

Therefore, in addition to seven demographic questions, the researcher ended up with 30 statements targeting three main constructs. Respondents were asked to choose one of five possible responses on a 5-point Likert scale, the most commonly used scale for attitudinal research. Responses range from Strongly Agree to Strongly Disagree, in which strongly disagree corresponds to 1 point, while strongly agree corresponds to 5 points. A middle point *Neutral* was included for users who may feel uncertain about any of the statements. The questionnaire was carried out using SurveyMonkey, an online software for creating, disseminating and processing questionnaires, in order to make it accessible to all participant.

The survey was piloted among four judges distinct from the participants of the study (two college instructors and two professional translators) in order to insure the validity and reliability of the items. Some items were subsequently added and some modified according to the comments obtained. A few words in the questionnaire had to be simplified or paraphrased to make sure it is

fully intelligible to respondents and avoid confusion. The use of technical jargon and terminology was kept to the minimum. The survey link was distributed through translation agencies and social media groups for translators, as well as via email to both translation students and professional translators.

The participants in the present study are either translation students or professional translators at a number of Egyptian translation agencies. All the translators participating in the study hold a university degree in translation or in a relevant field and have had some experience with using CAT tools. The students or recent graduates, on the other hand, had studied several general and specialized translation courses and received some training and practice on CAT.

Semi-structured interviews were then conducted with eight participants (four students and four translators) in which the researcher asked further questions to the respondents in order to obtain a more profound view of their attitudes. The questions particularly addressed what they liked/disliked most about CAT tools. These interviews are meant to complement the quantitative data.

5. Data Analysis

Over the survey period (29 March - 17 April, 2018), a total of 114 responses was received. The data analysis is divided into three sections. The first section deals with demographic data, the second with participants' responses to the three constructs and the third discusses the data obtained from the interviews.

5.1 Respondent demographics

The initial questionnaire identified basic participants' characteristics. As far as participants' profile is concerned, the majority of those who took the survey (68%) were between 20 to 24 years old (see figure 1). This was followed by 17% whose age ranged from 25 to 32, and 10% who were between 33 and 40, whereas only 4% of the respondents were above 40. Noticeably, 83% of the participants were female, whereas only 17% were males (the field of language study is usually dominated by females in Egypt as well as in the Arab world). More than half the participants were students, followed by free-lancers and translators who work at translation organizations who account for an almost equal portion (approximately 22% each).

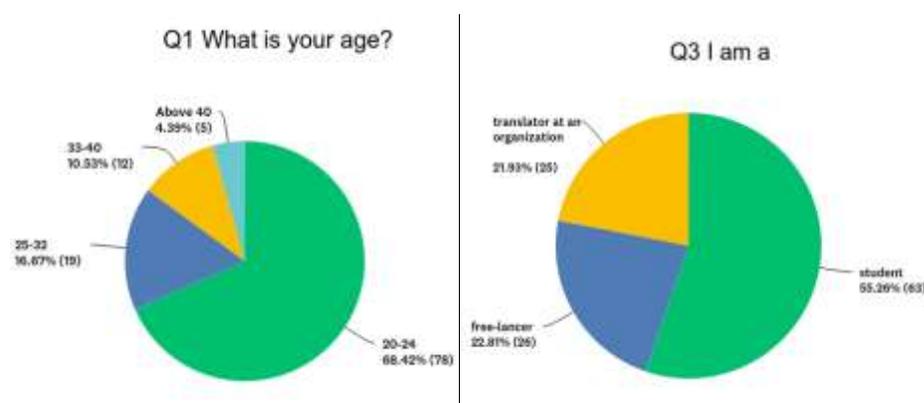


Figure 1. Participants' age and distribution among students / translators

In line with the dominating percentage of students in the sample, exactly half the participants in the study had no experience as translators (see figure 2). On the other hand, more than quarter of the respondents had an experience that did not exceed three years, whereas a smaller portion have worked in the translator profession for four to eight years (14%). Only less than 10% have worked as translators for over 10 years. As for self-rated computer skills, half of the participants rated their computer skills as very good. Quarter of the respondents described their computer skills as good and one-fifth as excellent. Only less than 4% of those who took the survey rated their computer skills as little.

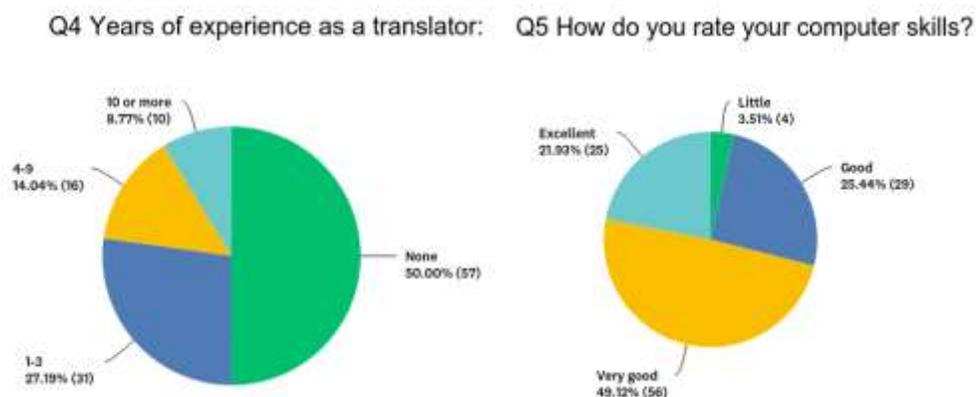


Figure 2. Participants' years of experience and self-rated computer skills

As shown in figure 3, more than 85% of the participants said that they translate general texts (participants were allowed to choose more than one type of text for this question). This was followed by other types of texts, including legal (24.5%), technical (23.6%) and financial texts (18.4%). About one-fifth of the respondents also mentioned that they translate other text types, particularly medical, political, literary and religious ones. Regarding the type of CAT tool used, the majority of participants (more than 65%) indicated that they use SDL Trados Studio. This was followed by Wordfast which accounts for one-third of the responses. Other software mentioned by the participants also comprises Star Transit (less than 2%), in addition to Omega T and MemoQ. Very few said that they use client-specific tools.

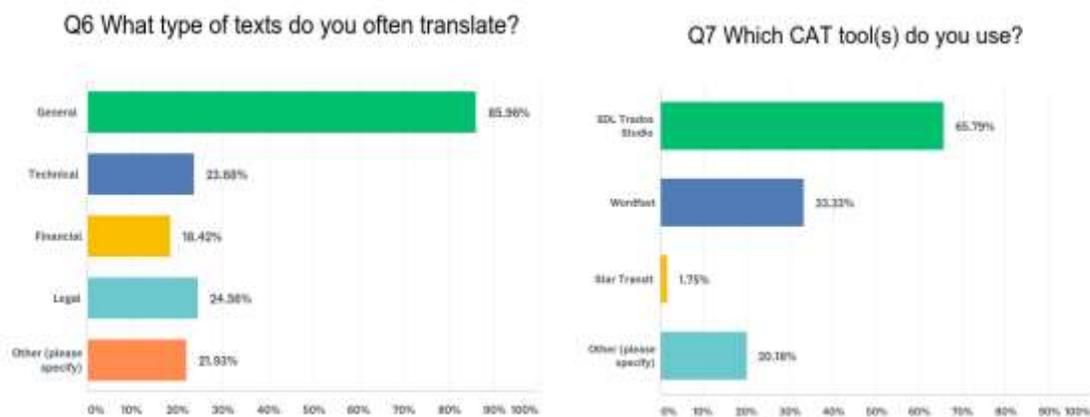


Figure 3. Text types and type of CAT tools used by participants

5.2 Benefits

In general, users were found to have favorable attitudes to the benefits of CAT tools (see table 2). In fact, over 75% of the participants believe that the benefits of using CAT tools are readily apparent to them. The benefits on which most participants agreed include working faster, increasing productivity and making translation easier, with almost three quarters of the participants agreeing or strongly agreeing with these statements. Very few participants (less than 5%) disagreed with these statements and even fewer strongly disagreed (less than 1%). Participants agreed to a lesser extent with other benefits such as improving the quality of their translation (60%). Statement (d) displays the highest degree of agreement by calculating the weighted average (4), implying that respondents consider acceleration of work rate the primary benefit they gain from using CAT tools.

Table 2. Responses to statements on benefits

	STRONGLY AGREE (1)	AGREE (2)	NEUTRAL (3)	DISAGREE (4)	STRONGLY DISAGREE (5)
a) Using CAT tools makes translation easier.	21.93% 25	51.75% 59	23.68% 27	2.63% 3	0.00% 0
b) Using CAT tools improves the quality of my translation.	14.91% 17	43.86% 50	28.07% 32	11.40% 13	1.75% 2
c) CAT tools increase my productivity.	23.01% 26	53.10% 60	19.47% 22	4.42% 5	0.00% 0
d) I work faster using CAT tools.	26.07% 32	48.25% 55	18.42% 21	4.39% 5	0.88% 1
e) The advantages of CAT tools are far more than the disadvantages.	17.54% 20	44.74% 51	28.95% 33	8.77% 10	0.00% 0
f) The benefits of using CAT tools are apparent to me.	16.67% 19	58.77% 67	20.18% 23	4.39% 5	0.00% 0
g) I would lose out on work if I could not work with CAT tools.	5.26% 6	19.30% 22	28.95% 33	40.35% 46	6.14% 7
h) Translators who use CAT tools get more work in my area than those who do not.	14.91% 17	29.82% 34	42.11% 48	10.53% 12	2.63% 3
i) It is more difficult to become established as a translator if you are not familiar with CAT tools.	12.28% 14	33.33% 38	25.44% 29	24.56% 28	4.39% 5
j) Translators who use CAT tools have a high profile within the industry.	26.32% 30	42.11% 48	28.07% 32	3.51% 4	0.00% 0

Statements that refer to the effect of CAT tools on translators' jobs, on the other hand, received relatively less agreement. Although most participants believe that knowledge of CAT tools helps translators acquire a high profile within the industry (68%), nearly 30% disagreed with the fact that it is more difficult to become established as a translator if one is not familiar with CAT tools (j). Remarkably, slightly less than half of the participants disagreed with the fact that they would lose out on work if they could not work with CAT tools (g), which is the statement that showed the largest degree of disagreement in this section.

In several cases, a considerable portion of the respondents (almost 30%) gave neutral responses to the statements. This applies to improving translation quality, advantages exceeding the disadvantages, losing out on work, in addition to having a high profile in the industry. This was all the more the apparent with statement (h) concerning getting more work with up till 42% neutral responses.

5.3 Ease of use

Generally speaking, most participants believe that CAT tools are easy to use (see table 3). Approximately three quarters of those who took the survey think that it is easy for them to perform tasks using these tools, whereas 65% agree that they are user-friendly and easy to use. An equal

percentage also agree that the tools are overall easy to use and that they make them comfortable with the translation process. The majority of the respondents (70%) also agree that CAT tools facilitate teamwork and that it is easier to recover work while working on these tools in case of system crash, with quarter of them strongly agreeing with the former statement and only less than 1% strongly disagreeing with the latter.

Table 3. Responses to statements on ease of use

	STRONGLY AGREE (1)	AGREE (2)	NEUTRAL (3)	DISAGREE (4)	STRONGLY DISAGREE (5)
a) Overall, CAT tools are easy to use.	14.91% 17	50.00% 57	18.42% 21	14.91% 17	1.75% 2
b) It is easy for me to perform tasks using CAT tools.	23.68% 27	50.00% 57	14.91% 17	10.53% 12	0.88% 1
c) CAT tools are user-friendly.	14.91% 17	49.12% 56	27.19% 31	7.89% 9	0.88% 1
d) Using CAT tools makes me comfortable with the translation process.	18.42% 21	46.49% 53	26.32% 30	7.89% 9	0.88% 1
e) CAT tools facilitate team work.	24.56% 28	45.61% 52	18.42% 21	7.89% 9	3.51% 4
f) CAT tools are not complicated.	11.50% 13	37.17% 42	36.20% 41	13.27% 15	1.77% 2
g) I feel confident while using CAT tools.	15.79% 18	45.61% 52	30.70% 35	7.02% 8	0.88% 1
h) It is easier to recover work on CAT tools in case of system crash.	21.05% 24	42.98% 49	25.44% 29	9.65% 11	0.88% 1
i) I am rarely frustrated while using CAT tools.	9.65% 11	37.72% 43	35.09% 40	15.79% 18	1.75% 2
j) CAT tools do not require much training.	6.14% 7	23.68% 27	25.44% 29	34.21% 39	10.53% 12

On the other hand, a considerable portion of the participants revealed some negative attitudes regarding ease of use. For instance, about 18% indicated that they are sometimes frustrated while using CAT tools, whereas 15% believe that they are complicated. Although the majority of respondents think that CAT tools are overall easy to use, the greatest disagreement occurred with statement (j), scoring the least weighted average in this section (2.81), as over one-third of the participants think that using the tools requires much training. The fact that a significant number of respondents expressed disagreement with several statements in this section still indicates that not all translators believe that CAT tools are easy to use.

5.4 Compatibility

Similar to attitudes regarding benefits and ease of use, the data reveals overall favorable attitudes concerning the compatibility of CAT tools with different users (see table 4). More than 65% of the participants believe that using CAT tools suits their learning or work style and fits their current situation. Moreover, slightly less than 70% of those who took the survey find CAT tools helpful in the areas in which they translate, and an almost equal percentage agree the tools offer the features they need. Slightly less than half the respondents also agree that the tools work with all document types (e.g., Word, pdf, Excel and PowerPoint), although significantly 34% were neutral about this aspect.

Table 4. Responses to statements on compatibility

	STRONGLY AGREE (1)	AGREE (2)	NEUTRAL (3)	DISAGREE (4)	STRONGLY DISAGREE (5)
a) Using CAT tools suits my learning / work style.	21.05% 24	46.49% 53	26.32% 30	4.39% 5	1.75% 2
b) Using CAT tools completely fits my current studying / work situation.	23.68% 27	42.11% 48	26.32% 30	7.89% 9	0.00% 0
c) CAT tools are helpful in the areas in which I translate.	18.42% 21	50.88% 58	20.18% 23	9.65% 11	0.88% 1
d) CAT tools offer the features I need.	16.67% 19	54.39% 62	21.93% 25	7.02% 8	0.00% 0
e) CAT tools do not hinder my creativity as a translator.	16.67% 19	40.35% 46	21.93% 25	12.28% 14	8.77% 10
f) CAT tools meet the needs of translation agencies more than those of the translator.	22.12% 25	35.40% 40	28.32% 32	14.16% 16	0.00% 0
g) CAT tools work with all document types (e.g. Word, pdf, Excel, PowerPoint).	10.53% 12	33.33% 38	34.21% 39	21.05% 24	0.88% 1
h) I think CAT tools are affordable.	5.31% 6	30.97% 35	35.40% 40	22.12% 25	6.19% 7
i) CAT tools are suitable for translating from English into Arabic.	26.32% 30	50.00% 57	18.42% 21	5.26% 6	0.00% 0
j) CAT tools are suitable for translating from Arabic into English.	28.95% 33	58.26% 63	14.04% 16	0.88% 1	0.88% 1

By contrast, some responses reveal unfavorable attitudes where compatibility is concerned. For instance, nearly 57% of those who took the questionnaire believe that CAT tools meet the needs of translation agencies more than those of the translator. Furthermore, about one-fifth of the participants indicated that using the tools hinders their creativity, which is the statement that received the largest number of strongly disagreeing responses (9%) in this section. It is also worth mentioning that this statement is the one with the least weighted average in this section (3.4). Regarding cost, 28% of the respondents indicated that CAT tools are unaffordable, whereas a considerable portion (35%) were neutral in this respect. Relatively less participants agree that the tools are suitable for translating from English into Arabic (76%) than in the other direction (84%), with the latter being the statement that received the highest weighted average in this section (4.11).

5.5 Relationship between participant profile and attitude

The responses of different groups of participants were compared based on their profile, with special focus on years of experience, computer skills and the types of text they translate.

Regarding experience, it was noticed that the more the years of experience, the more the types of CAT tools that translators use, the better they rated their computer skills, and also the more varied the types of texts they translate. Translators with less experience generally provided more neutral responses than more experienced ones, which reached up to almost half the participants in some cases, as opposed to translators with over 10 years of experience who sometimes gave no neutral responses whatsoever.

By comparing attitudes of users with different years of experience, mixed evidence was observed. No significant difference was found in attitudes to the benefits of CAT tools among participants with varying translation experience. Responses in this section scored very close values by different groups, although more experienced users sometimes expressed relatively more positive opinions concerning improving translation quality, increasing productivity, and working faster (b, c, d). On the other hand, experienced translators mostly showed less favorable attitudes

to CAT tools as far as ease of use is concerned, particularly regarding user-friendliness, complexity and confidence during use (c, f, g - see figure 4). However, this group displayed more agreement with facilitating teamwork and recoverability (e, h).

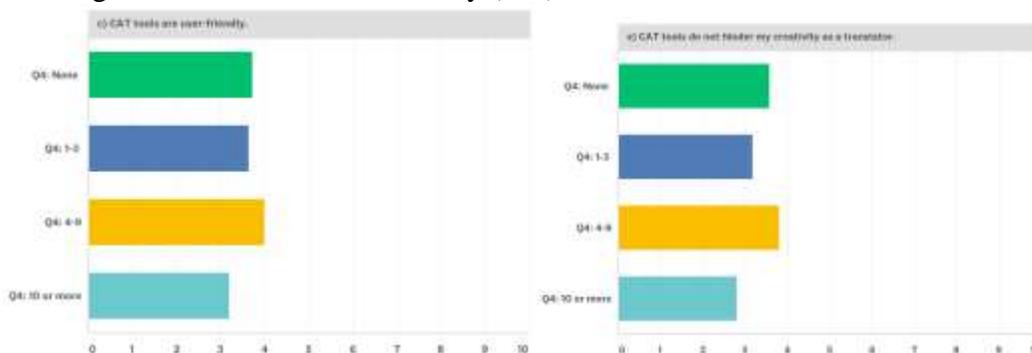


Figure 4. Example of relationship between experience and attitudes to CAT tools

Similar to benefits, not much variation was observed between participants in their attitudes to compatibility based on difference in experience. However, less experienced translators gave somehow more positive responses about the suitability of the tools to all document types and also about their affordability. Translators with more experience also showed more agreement with the suitability of CAT to Arabic into English translation than vice versa. For some reason the group of translators with 4-9 years of experience had the most positive attitudes among all groups in the three sections of the survey.

Overall, self-rated computer skills positively correlated with users' attitudes to CAT tools (see figure 5). Users with better computer skills display more positive attitudes towards benefits, except for statements related to the translator's career (g and i). Remarkably, they expressed more agreement with ease of use in all aspects. More favorable attitudes were also shown by users with better computer skills of participants towards compatibility, except for hindering creativity and affordability. These also expressed more agreement with compatibility with Arabic into English translation.

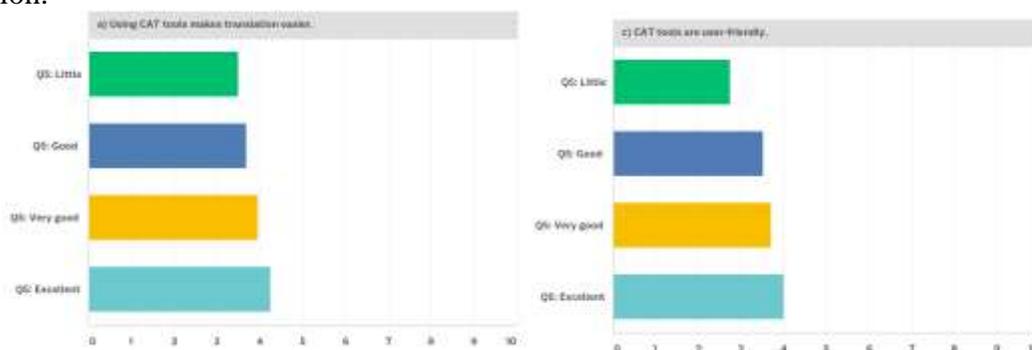


Figure 5. Example of correlation between self-rated computer skills and attitudes to CAT tools

As regards the effect of translated text types on participants' attitudes, it was noticed that those who translate technical and financial texts provided more positive responses towards the benefits of CAT tools in the majority of the statements (see figure 6). Exceptions occurred with statements about translators' career (g and i) with which translators of legal texts showed more agreement.

The former also expressed more positive attitudes with ease of use in almost all statements than translators of other text types. No significant correlation was observed between text type and compatibility since translators of different text types agreed with different aspects of compatibility. For instance, those who translated legal texts agreed more that CAT suited their work style and current situation, whereas those who translated financial texts said it did not hinder their creativity. Translators of general texts, on the other hand, said they are affordable and compatible with different document types. Very slight variation was noticed between translators of different text types regarding the features offered by CAT tools and the direction of translation.

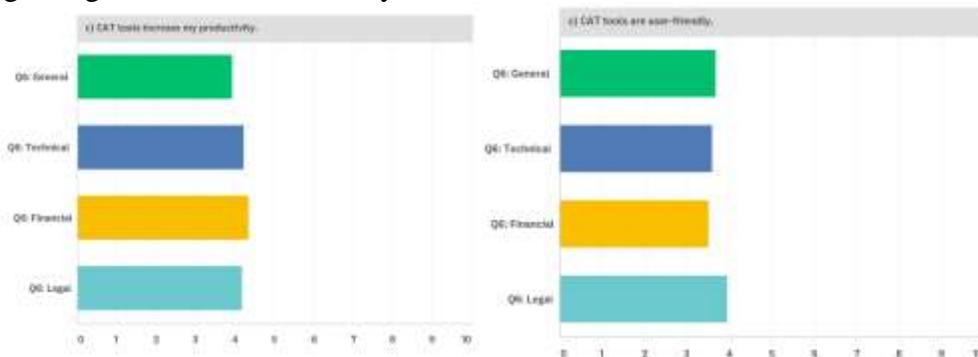


Figure 6. Example of relationship between text type and attitude to CAT tools

5.6 Interview responses

Semi-structured interviews were conducted with 10 of the participants in the survey (five students and five translators). The themes in the answers to interview questions were analyzed and categorized. The responses mainly point to the following positive aspects of CAT tools as perceived by the users (in order of recurrence):

1. Saving time and increasing productivity, especially when translating similar or repetitive documents, e.g., legal or technical texts.
2. User-friendly, uncomplicated interface.
3. Making translation easier by dividing texts into segments and indicating the finished and remaining portions of translation.
4. Maintaining original text formatting, which may be difficult to track otherwise.
5. Consistency of terms between a team of translators.
6. The well-organized layout offers helpful features by aligning the two documents side by side, zooming, etc.
7. Backing up work to prevent it from being lost due to any technical problem that may arise.
8. Compatibility with different document formats.
9. Cost-effectiveness since they save time and effort due to matches.
10. Allowing translators to benefit from previous experience through TM and TB.

In contrast, the interviewees mentioned the following shortcomings of CAT tools (in order of recurrence):

1. They are too expensive.
2. Creating and updating the TB and preparing project folders and files are time-consuming (unless one is part of an organization that provides translators with ready-made TBs).

3. Technical support is needed in case of hardware or software malfunction.
4. It is risky to depend on previous translations.
5. They do not help the translator to be creative.
6. Segmentation into sentences may result in translated texts that lack coherence and cohesion.
7. They require considerable training and hands-on experience.
8. There are technical problems in some versions, e.g., Arabic recognition of pdf files sometimes fails.
9. Negatively affecting translators' pay by decreasing word counts due to matches.

6. Findings and Discussion

From the above discussion, it becomes clear that there is a near consensus among participants on the benefits of using CAT tools, particularly speeding up the translation process and increasing productivity. Although most participants believe that knowledge of CAT tools enhances their career, they still do not think they would lose much without them. Students and less experienced translators revealed lack of knowledge on many aspects of CAT tools as indicated by their numerous neutral responses. More experienced translators, on the other hand, surprisingly display more unfavorable attitudes to CAT tools in many respects, despite their supposedly greater familiarity with them.

Participants mostly consider CAT tools user-friendly and easy to use, especially those with better computer skills, with facilitating teamwork and work recoverability in case of system malfunction being the most prominent points of agreement in this respect. The need for thorough training is, nevertheless, suggested by the responses.

The findings point to an overall positive attitude towards the compatibility of CAT tools with participants' needs, including their working style, the document formats they use and the type of texts they translate. Indeed, translators of specialized texts, especially financial and legal ones find the tools more suitable to their needs than those of general texts. The most obvious shortcoming according to the results of both the survey and the interview is the unaffordability of CAT tools, as most participants believe they are too expensive. Several negative attitudes also point to the tools hindering translators' creativity and sometimes resulting in segmented incoherent texts.

The semi-structured interviews have served to provide further insights into users' attitudes. Whereas most interviewees agree that the basic benefits of CAT tools lie in saving time and increasing productivity, they show mixed, even contradicting opinions on several aspects. Regarding cost, some translators said that CAT tools are cost-effective since they enable them to accomplish more translation tasks in less time, thus increasing their profit. Others, by contrast, claim that the tools negatively affect their pay since matches, whether perfect or fuzzy, reduce the word count of their work. Moreover, whereas translators indicated that TM and TBs save time, students mentioned that creating and updating these files are already time-consuming. Another point of contradiction involves depending on previous translation, which is viewed by some as a good opportunity to benefit from previous experience and by others as posing the risk of inaccurate translation. In addition to these opposing views, while some consider segmentation a helpful feature to guide the translation process and highlight finished and remaining portions, others

believe it may result in incoherent texts. Overall, almost all interviewees agreed that CAT tools are not affordable.

It may thus be argued that the findings of the present study are in line with Dillon and Fraser's (2006) findings that self-rated computer skills positively correlate with user attitudes to CAT tools. They also show some agreement with their finding that translators who are relatively new to the translation profession have more favorable attitudes to CAT tools than more experienced ones, although this correlation cannot be spotted in all aspects.

7. Conclusion

The present study has attempted to examine users' attitudes to CAT tools among 114 translation students and professional translators in Egypt with specific reference to their perceived benefits, ease of use and compatibility. The modifications introduced to Moore and Benbasat's (1991) instrument in order to capture aspects such as effect on teamwork and translator's creativity as well as the importance of training and text types have proved helpful. The semi-structured interviews have also served further important insights into user attitudes.

The use of CAT has clearly brought about many advantages to all players in the translation process, but this has not happened without significant changes to work practices and serious challenges for the translation profession and translator trainers (O'Brien, 2010). In the literature, the question of how technology will impact the work of translators in the future is often recurrent. Some view computers as a 'job killer' to translators. The ubiquity of translation technologies has resulted in the emergence of new types of translation-related roles, such as localization, post-editing, project management, and quality assessment (Doherty, 2016). Further research is needed in the following areas:

- Applying the same instrument to other samples both of translation students and professional translators in other contexts.
- Conducting more qualitative research involving analysis of users' attitudes over time, in addition to extended interviews in order to yield more profound insights into this issue.
- Exploring instructors' and learners' attitudes and their perceived effectiveness of courses devoted to teaching CAT tools.
- Investigating the effectiveness of CAT tools in particular areas, such as localization, terminology standardization, post-editing as well as quality checks, which require more in-depth research into the technical aspects of CAT.
- Gearing attention towards psycholinguistic studies into the effect of using CAT tools on the cognitive and mental aspects of the translation process.

According to Christensen and Schjoldager (2010), there is a consensus among scholars that CAT technology is here to stay. Krüger (2016) also suggests that "the good old days of pen-and-paper translation are inevitably coming to an end" (p. 114). As Elimam (2007) highlights, "the question now for translators is not whether to use electronic tools or not but rather which tools to buy, learn, and use" (par. 10). He suggests that "a translator is no longer someone sitting at a desk with a pen in hand, sheets of paper before him/her and a number of dictionaries within reach (Elimam, 2007, par. 12). CAT tools are likely to affect the image of the translator and the

translation profession as a whole. Unlike what some may think, the image and role of the translator in Egypt and probably in the entire Arab world may be witnessing a turning point due to the proliferation of CAT tools.

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