# THE PERCEPTIONS OF IRANIAN EFL LEARNERS TOWARDS COMPUTER-ASSISTED LANGUAGE LEARNING

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**Abstract**

Computers have an important role in different aspects of today's life, one of which is education. Considering the increasing interest in learning English language in countries like Iran and the contribution of language institutes in this regard, the present study aimed at exploring the attitudes of Iranian EFL learners in language institutes towards the implementation of computer-assisted language learning (CALL). Moreover, it attempted to determine the effects of the participants' age and gender on their views. To this end, an attitude towards CALL (A-CALL) questionnaire was administered to 200 EFL learners in three language institutes in Urmia, Iran. The results of the descriptive statistics indicated that the participants held neutral attitudes towards the application of CALL. Furthermore, using ANOVA and t-test, it was found that their views were not influenced by the above mentioned variables. These findings have implications for language institutes in Iran to integrate CALL into the design of EFL curriculum, so that the learners have more opportunities to get familiar with this technology.

**Key words:** computer- assisted language learning, attitude, Iranian EFL learners, language institutes, age, gender

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## 1. Introduction

### 1.1 Computers and education

Using computers has become a necessity of present life. It is no longer a machine used exclusively by important professionals. Many of us use computers for our daily needs, sometimes without even being aware of the fact. Banking, word processing, design, office management, computer games, and various hobbies are merely a few of the applications where computers are part of our life (Ahmad, Corbett, Rogers, & Sussex, 1985).

The rapid spread of computers has been inspired by the intensive development in the field of computer technology. They have become much more powerful, yet smaller in size, more adaptable, and easier to use. The flexible information processing capability of computers makes them potentially useful for a wide variety of educational purposes. They can facilitate teaching and learning at all levels, from preschool children mastering the alphabets to doctors learning new diagnostic techniques (Kleiman, 2004).

Computers can be used in teaching and learning all subjects, including language, mathematics, history, science, music, and art. The abbreviation CALL stands for computer-assisted language learning. Levy (1997, p. 1) defines CALL as "the search for and study of applications of the computer in language teaching and learning". According to Cameron (1999, p. 2) the main purpose of CALL is to "improve the learning capacity of those who are being taught a language through computerized means".

The utilization of computers in the process of language learning have several benefits some of which are practice with immediate feedback, the fun factor, variety in the resources available and learning styles; opportunities to find, share, and interpret on-line information; and opportunities to contact with native and non-native speakers of the target language (Warschauer & Healey, 1998). Moreover, the use of technology also seems to influence learners' linguistic skills. CALL provides highly interactive and communicative support for listening, speaking, reading, and writing (Chambers & Davies, 2001). Several researchers have reported an improvement in the students' writing skills through the use of networked computers (Cononelos & Oliva, 1993; Warschauer, 1996). Beauvois (1994) observed that students in the networked writing project

used more complex sentences, and could express themselves better. She believed that when there was no strong teacher dominance, the students were able to express themselves more freely, which led to a larger quantity and better quality of communication.

1.2 Attitudes towards CALL

According to Chapelle (2003), there are three types of research in CALL, with respectively a focus on software, the learning task or task pedagogy, and the learners. Most of the research in CALL focuses on software, indicating the most successful strategies and possibilities for software design. Other research comprises studies examining the learning tasks and how to structure learning tasks in order to produce ideal language learning conditions for learners. Only few studies focus on the learners and their interaction with the task and the software provided, and an even smaller part of research takes into account the individual differences between the learners using an electronic learning environment. Individual differences, such as personal attitudes are very effective in individual usage of information technology (Liaw, Huang, & Chen, 2007). A major strength of CALL research, emphasizing the learners and their attitudes towards CALL, is that learners can be ensured against failure, and a more adaptive way of CALL becomes possible.

People's attitudes toward a new technology are very crucial in its diffusion (Rogers, 1995). Liaw et al. (2007) concluded that if individuals' attitudes towards computer-based learning become more positive, they will use it more enthusiastically. Brown, Fuller, and Vician (2004) also found a positive relationship between positive attitudes towards computers and learners' success in both the subject matter being learned and the use of communication technologies. However, Conti-Ramsden, Durkin, and Walkerreported (2010) reported that a negative attitude may cause computer resistance among both experienced and inexperienced users.

It is clear to all researchers that positive attitudes towards language learning can make learners motivated and help language learning (Merisuo-Storm, 2007). In the context of computer use in language learning, Rahimi and Yadollahi (2010) suggested that students' beliefs about computers can determine the degree they intend to use them in language learning.

There is also some evidence on the influence of language learners' background variables, such as age and gender, on their attitudes towards CALL. However, there are some conflicts on the effect of these variables on the learners' perceptions of CALL. While Warschauer (1996) and Ayres (2002) found that gender did not have any effect on attitudes towards CALL, Mahfouz and Ihmeideh (2009) and Almahboub (2000) showed that males and females held different attitudes towards CALL. Besides, all these studies have been carried out at universities and schools, and no literature is available on the attitudes of language learners in institutional contexts towards the integration of CALL. In countries like Iran, most of the schools and universities do not take advantage of computer technology due to some practical problems. On the other hand, language institutes attempt to contribute to language teaching and learning and attract more learners through updating their teaching systems and providing the required facilities. Hence, language learners are more likely to be exposed to CALL technology and encouraged to use it in these settings. Therefore, this study attempted to investigate the attitudes of Iranian EFL learners in language institutes towards CALL and how these attitudes are influenced by their age and gender.

1.3 The importance of the problem

Zhao and Tella (2002) pointed to the need to have extensive research on the implementation of CALL. According to Ayres (2002), CALL is relevant to students' needs as it provides them with useful information. He believes that CALL should be used more frequently in different language courses. This can result from the fact that in CALL environment, learners are less stressed and more relaxed than the classroom (Roed, 2003). Furthermore, there is more interaction between learners in computer-based learning, and the class becomes more student-centered than teacher-centered. So, chances for cooperation increase because students spend a lot of time working together (Brandl, 2002).

Van Lier (1996) proposed that motivation may be derived from three different sources. It may be due to the learners' past experiences. It may also stem from the enjoyment of the performance in the present. Moreover, it might be in the future, resulting from the learners' future goals. However, in language teaching, it is not easy to find the exact source of motivation. It might be due to individual variables, such as learner orientation and need achievement or situational

variables, such as the nature of the learning materials, teaching techniques, and teacher attitudes (Gardner, Tremblay, & Masgoret, 1997). Hence, in computer assisted language learning settings, it is important to examine the learners' attitudes towards CALL and its motivating aspects, which constitute a fertile field for further analysis.

Considering the significant roles computers and the attitudes towards them play in the language learning process on one hand and the increasing interest in learning English language in countries like Iran on the other, it seems necessary to have a deeper insight into how Iranian EFL learners in language institutes perceive CALL technology.

The findings of the present study have implications for integrating computer technology into the design of EFL curriculum, which can extend the resources available to teachers and students. Moreover, given that CALL has the potential of individualization, the findings can also assist educators to design and implement student-centered learning. Finally, understanding language learners' perspectives should help EFL instructors and curriculum designers in any future English programs that incorporate CALL materials.

## 2. Review of the related literature

One of the most influential frameworks used in attitudinal studies is the theory of reasoned action (TRA) (Fishbein&Ajzen, 1975), according to which a behavior or an action is influenced by a person's attitude while attitude is defined as "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object" (p.6). To this end, some studies have been done on learners' attitudes towards the use of computers in English language learning and the effect of background variables including age and gender on their attitudes toward CALL.

Warschauer (1996) aimed to find out second/foreign language students' attitudes towards using computers for writing and communication in the target language as well as the differences among these attitudes based on students' different backgrounds. To this end, a 30-question survey was administered to 167 ESL and EFL students enrolled in 12 university academic writing courses in Hong Kong, Taiwan, and the U.S to elicit their attitudes toward using computers for writing and communication. It was found that the students' overall attitudes toward using computers were positive, and that these attitudes were not different in terms of

number of variables, including gender, typing skill, access to computer at home, experience with PC, and computer use.

Liu (1996) investigated attitudes toward computers in a sample of 250 Chinese students at an American university. Liu also explored the possible effects of age and computer experience on these students' attitudes toward computers. A questionnaire was used to achieve this aim. The findings showed that Chinese students' attitudes were quite positive toward computers which were consistent with their computer experience. However, age was not found to be a significant factor in this sample.

Min (1998) examined the attitudes of 603 Korean high school students toward the use of computers in learning English as a foreign language. The instrument used was a questionnaire which consisted of 45 Likert items. The findings revealed that Korean adult language learners mostly did not express a positive attitude toward the use of computers in English-language learning. It was also found that there were no significant differences in attitudes toward English language learning with computers based on age differences.

Rossetti (1998) investigated the differences among the attitudes of 187 university students toward using e-mail in learning English as a foreign language based on their genders. The findings of interviews indicated a significant difference between males and females in terms of their attitudes toward e-mail.

A study conducted by Almahboub (2000) examined the attitudes of 264 sixth-grade Kuwaiti students toward using computers in language learning and the effect of gender on their beliefs through questionnaires. It was found that the participants held positive attitudes toward computer use; however, girls had significantly more positive attitudes toward computers than did boys.

The intent of a study by Ayres (2002) was to examine the attitudes of 278 students at UNITEC School of English and Applied Linguistic towards the use of CALL. It also attempted to determine whether there was any link between the perceived usefulness of CALL, and the student's nationality, gender, and age. A questionnaire concerning attitudes about computers was

administered to the participants. The findings demonstrated that language learners appreciated the language learning through computers. However, it was revealed that students' attitudes towards CALL were not different considering their age, gender, and nationality.

Akbulut (2008) attempted to study motivating aspects of computer assisted instruction in terms of writing and e-mailing through an exploratory factor analysis. The effect of several background variables on attitudes towards CALL was also explored through relevant parametric tests. The participants were 177 freshman foreign language students at a Turkish university. The results showed that learners had positive attitudes towards CALL due to computers' potential to provide independence, cooperation, comfort, communication, and instrumental benefits. Analyses also revealed that gender and age did not influence the attitude scores.

Fančovičová and Prokop (2008) aimed to determine the attitudes of 11 elementary students in Slovakia towards information and communication technology (ICT). They also attempted to find out how their attitudes would be affected by their age, gender, and computer access. The participants answered two questionnaires: (a) their attitudes toward ICT questionnaire (ATICTQ) and their utilization of computers questionnaire (UCQ). The attitudes toward ICT were positive and gender differences were weak. In addition, computer access and age were not found to affect participants' beliefs about ICT.

Mahfouz and Ihmeideh (2009) aimed to investigate Jordanian university students' attitudes towards using video and text chat discourse with anonymous native speakers of English to improve their English proficiency. To this end, a questionnaire was designed and administered to 320 university students enrolled in two Jordanian universities. Results revealed that students' attitudes towards using video and text chat with English native speakers for improving their English language skills were higher concerning speaking skills, followed by listening skills, reading skills and finally writing skills. Furthermore, results indicated that there were statistically significant differences amongst students in terms of their gender, the faculty they are enrolled in, and the chat messenger mode they use most frequently.

Rahimi and Yadollahi (2010) explored Iranian students' attitudes towards CALL and the effect of their age, level of education, computer ownership, and frequency of computer use on these

attitudes. One hundred and forty-two female students (50 junior high school students, 49 high school students, and 43 university students) participated in this study. They were asked to complete attitudes towards CALL (A-CALL) questionnaire. The findings showed that the sample had positive attitudes towards CALL. Furthermore, students' attitudes toward CALL in terms of their level of education were found to be significantly different and university students had the highest level of positive attitudes in this regard. Moreover, age, computer ownership, and frequency of computer use did not influence the participants' views on CALL.

Review of the available literature in CALL area showed that although there is some evidence on the effect of language learners' backgrounds, such as age and gender, on their views on CALL, some researchers disagree on how these variables can influence the students' perceptions of CALL. Furthermore, all these attitudinal studies have been conducted at schools and universities. Considering the significant role of language institutes in language learning in countries like Iran and their endeavors in implementing the most recent language learning and teaching methods to attract more learners, the students are more likely to get some experience and knowledge on CALL in such contexts. Therefore, the present study aimed to fill these gaps by examining the attitudes of Iranian EFL learners in language institutes towards CALL. It also attempted to find out whether their views on CALL would differ in terms of their age and gender.

## 3. Research questions and hypotheses

This study aimed to find answers to the following questions:

1. What are the attitudes of Iranian EFL learners in language institutes towards the implementation of CALL in EFL learning?

2. Are there any significant differences among the attitudes of Iranian EFL learners in language institutes towards CALL in terms of their age groups?

3. Is there any significant difference between the attitudes of Iranian EFL learners in language institutes towards CALL in terms of their gender?

The following null-hypotheses were proposed for the above research questions to be tested at the probability level of 0.05:

1. There are no significant differences among the attitudes of Iranian EFL learners in language institutes towards CALL in terms of their age groups.

2. There is no significant difference between the attitudes of Iranian EFL learners in language institutes towards CALL in terms of their genders.

## 4. Method

### 4.1 Design of the study

The current study was an attempt to explore how Iranian students studying English in EFL institutes conceive of CALL. Another aim of the study was to determine whether the attitudes towards CALL would vary when different backgrounds, including age and gender were taken into consideration. Attitude towards CALL was considered as the dependant variable while age and gender comprised the independent variables of the study. A survey was conducted in order to elicit the participants' attitudes towards CALL. Their answers to questionnaire items were analyzed quantitatively and compared in terms of the independent variables. Taking these facts into account, the design of the present study can be regarded as descriptive (survey research).

### 4.2 Participants

To accomplish the objectives of the study, 200 EFL learners (100 males and 100 females) were asked to take part in this research project. They were between the ages of 20 and 36 and were learning English at upper-intermediate and advanced levels in three language institutes in Urmia, Iran. The language institutes were selected randomly. Afterwards, to ensure that all the participants had adequate experience in learning English, they were randomly chosen from higher levels.

### 4.3 Instruments

Two questionnaires were used to elicit the required data.

#### 4.3.1 Personal information questionnaire

The first instrument was designed to make a profile of the participants' demographic information. It included two items, through which the participants were going to specify their age and gender.

#### 4.3.2 A-CALL questionnaire

The second instrument was adapted from Attitudes towards Computer-Assisted Language Learning (A-CALL) questionnaire (Vandewaetere & Desmet, 2009), the purpose of which was to elicit the participants' views on using computers in their language learning process. A-CALL includes 20 items, structured in the form of statements. Each item is rated on a 5-point Likert Scale, where 5 stands for strongly agree, 4 for agree, 3 for neutral, 2 for disagree, and 1 for strongly disagree.

All of the items of A-CALL questionnaire except items 2, 3, 4, 5, 19, and 20, have been written in a positive direction. It consists of four subsets of items: Factor 1 (Effectiveness of CALL vs. non CALL) has four items (2, 3, 4, 5), Factor 2 (Surplus Value of CALL) includes 10 items (1, 6, 7, 8, 9, 10, 11, 12, 16,17), Factor 3 (Teacher Influence) has three items (13, 14, 15) and Factor 4 (Degree of Exhibition to CALL) consists of three items (18, 19, 20).

In order to establish the construct validity of the instrument, Vandewaetere and Desmet (2009) used an exploratory factor analysis and determined the number of factors underlying the 20 questions. This resulted in four factors which explained 54.25% of the total variance. They reported the Cronbach's Alpha of 0.74, 0.80, 0.86, and 0.91 for these factors.

The questionnaire was translated into Persian to avoid any problems that might be caused by incomprehensibility of the English version. The translated and the original versions of the questionnaire were cross-checked to see whether the translated one could convey the meaning to the participants correctly.

In order to determine the reliability and validity of the translated version of the A-CALL questionnaire, it was piloted on 150 learners, similar to those taking part in the study. Before a factor analysis was carried out to check the construct validity of the questionnaire, the researchers checked the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity to verify that the data set was suitable for factor analysis (See Table 1).

Table 1. KMO and Bartlett's Test

| | |
|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .77 |

| | | |
|---|---|---|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 921.40 |
| | Df | 153 |
| | Sig. | .00 |

The findings demonstrated that KMO value was more than 0.6 (i.e. 0.77). In addition, the significance level for the Bartlett's Test of Sphericity was less than 0.05 (i.e. 0.00). These results showed that the data was qualified for factor analysis.

Then, the factor analysis was conducted, and the results were checked with Vandewaetere and Desmet (2009) (See Table 2).

Table 2. Factor analysis

| | Component | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| item 4 | .75 | | |
| item 5 | .68 | | |
| item10 | .64 | | |
| item16 | .62 | | |
| item 2 | .61 | | |
| item8 | .61 | | |
| item7 | .60 | | |
| item17 | .59 | | |
| item 3 | .53 | | |
| item11 | .52 | | |
| item 1 | .47 | | |
| item9 | .44 | | |
| item14 | | .85 | |
| item15 | | .68 | |
| item13 | | .67 | |
| item19 | | | .85 |

| | |
|---|---|
| item20 | .83 |
| item18 | .31 |

The results of the factor analysis showed that items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, and 17 all loaded on the first factor or component, Surplus Value of CALL. As can be observed in Table 3.2, all of the loadings were more than 0.3. One example item related to this factor is "computer assisted language learning gives more flexibility to language learning". The next factor of the questionnaire was Teacher Influence. The items loading on this factor were 13, 14, and 15. The above table shows that all of the loadings were more than 0.3. One example item related to this factor is "teachers' proficiency of using computer in language learning largely defines my attitude towards computer use in language learning". The third factor of the questionnaire, on which items 18, 19, and 20 loaded was Degree of Exhibition to CALL. The loadings again were more than 0.3. One example item related to this factor is "I feel less inhibited when communicating in the foreign language via computer (chat) than in a face to face situation". Unlike Vandewaetere and Desmet (2009), who claimed that items 2, 3, 4, and 5 loaded on another factor in this study, these factors loaded on Surplus Value of CALL. Therefore, the number of components reduced from four factors to three factors. In addition, since the loading of item 6 was less than 0.3, the item was omitted from the questionnaire. In addition, item 12 loaded on an unrelated factor, Teacher Influence; consequently, this item was also omitted. Therefore, the total number of items reduced from 20 to 18.

Afterwards, The Cronbach's Alpha was applied to the items, and the results showed that the total Alpha was 0.81. This indicated that the modified version of the questionnaire enjoyed a good degree of reliability. Moreover, the Cronbach's Alphas of the three subsets of the questionnaire were found to be 0.84, 0.67, and 0.51, respectively. Since the number of items in two of the subsets was just three, very high Alpha level could not be expected.

4.4 Procedure

At the first step, A-CALL questionnaire (Vandewaetere & Desmet, 2009) was translated into Persian, to make the items more intelligible for the participants. Then, for piloting purpose, 150

students, similar to those taking part in the study, were randomly chosen and asked to fill out the translated version of the questionnaire. Having determined the reliability and validity of the new version, it was administered to 200 EFL learners, selected as the participants of the study. The administration process was carried out during their normal class period. After giving a short introduction of the study, they were given clear instructions in Persian on how to complete the survey. First, the subjects were asked to specify their age and gender in the background information questionnaire. Next, they were invited to show their feelings about using computers in learning English through reading each statement in A-CALL questionnaire and identifying their level of agreement with each of them. To do so, they were going to rate each item on a 5-point Likert Scale, including 5 (strongly agree), 4 (agree), 3 (neutral), 2 (disagree), and 1 (strongly disagree).

The participants were given 10 minutes to fill out the questionnaire. Finally, their responses to the items were summed up based on the score assigned to each choice so that they could be considered as interval data.

4.5 Data analysis

In order to analyze the elicited data, the SPSS (Statistical Package for Social Sciences) software was used. To explore Iranian EFL learners' attitudes towards the implementation of CALL, their answers to the items of A-CALL questionnaire were substantiated through calculating the mean score and standard deviation for each item. To observe if there was any significant difference among Iranian EFL learners' attitudes towards CALL based on their gender an independent samples t-test was utilized. Moreover a one-way ANOVA was applied to compare the participants' beliefs about CALL in terms of their age groups.

## 5. Results

5.1 EFL learners' attitudes towards CALL

The first research question of the study dealt with Iranian EFL learners' attitudes towards CALL. To this end, 200 students studying English in EFL institutes in Urmia were asked to fill out A-CALL questionnaire. The mean score and standard deviation for each of the questionnaire items are presented in Table 3.

Table 3. Descriptive statistics

| | Mean | Std. Deviation |
|---|---|---|
| My language learning will proceed more when this is assisted by a computer. | 3.89 | .82 |
| Learning a foreign language assisted by computer is not as good as learning it by oral practice. | 2.86 | 1.05 |
| Computer-based language tests can never be as good as paper-and-pencil tests. | 3.03 | 1.16 |
| Computer-assisted language learning is less adequate as the traditional language learning. | 2.89 | 1.13 |
| People who learn a language by computer-assisted learning are less proficient in than traditional language learners | 2.87 | 1.08 |
| Computer-assisted language learning gives more flexibility to language learning. | 3.90 | .96 |
| Computer-assisted language learning is as valuable as the traditional language learning. | 3.35 | 1.02 |
| Computer-assisted language learning can stand alone. | 2.58 | 1.09 |
| Learning a foreign language by computer constitutes a more relaxed and stress free atmosphere. | 3.31 | 1.11 |
| Learning a foreign language by computer enhances your intelligence. | 3.09 | 1.05 |
| Teacher's attitude towards CALL largely defines my attitude towards the use of computers in language learning. | 2.86 | .95 |
| Teacher's enthusiasm towards CALL largely defines my motivation for using computers in language learning. | 3.37 | .97 |
| Teacher's proficiency of using computers in language learning largely defines my attitude towards computer use in language learning. | 3.40 | .93 |
| I have faith in computer-based language tests. | 3.25 | 1.08 |
| I have faith in computer-based language exercises. | 3.51 | .97 |

| | | |
|---|---|---|
| I feel less inhibited when communicating in the foreign language via computer (chat) than in a face-to-face situation. | 3.33 | 1.13 |
| In a face-to-face learning situation (classroom) I often experience anxiety when speaking in the foreign language. | 2.79 | 1.23 |
| For me, the threshold to start a face-to-face conversation is bigger than starting a virtual (computer-assisted) conversation. | 3.09 | 1.34 |
| total attitude score | 57.77 | 9.2 |

Looking at each item, we can see that most of the learners had neutral attitudes towards different statements in the questionnaire. The total attitude score was 57.77 out of 90 which showed their close to neutral attitudes.

5.2 The effect of age on EFL learners' attitude towards CALL

The second research question was whether there would be any significant differences among Iranian EFL learners' attitudes towards CALL in terms of their age groups. The participants were divided into three groups based on their ages. It was hypothesized that there were no significant differences among Iranian EFL learners' attitudes towards CALL in terms of their age groups. Tables 4 and 5 show the results of ANOVA analysis and descriptive statistics, respectively, for the three age groups taking part in the study.

Table 4. ANOVA for age groups

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 29.81 | 2 | 14.91 | .18 | .84 |
| Within Groups | 16807.61 | 197 | 85.32 | | |
| Total | 16837.42 | 199 | | | |

$$F(2, 197) = 0.18; p > 0.05.$$

The results of the ANOVA analysis showed that the attitudes of the three age groups towards CALL were not significantly different ($p > 0.05$). Therefore, the first null hypothesis is accepted at p-value more than 0.05.

Table 5. Descriptives for age groups

| | N | Mean | Std. Deviation | Std. Error | Minimum | Maximum |
|---|---|---|---|---|---|---|
| Age group 1 | 77 | 57.94 | 9.83 | 1.12 | 33 | 78 |
| Age group 2 | 68 | 57.25 | 7.94 | .96 | 42 | 78 |
| Age group 3 | 55 | 58.18 | 9.86 | 1.33 | 34 | 89 |
| Total | 200 | 57.77 | 9.20 | .65 | 33 | 89 |

The descriptive statistics showed that the total mean scores were very close to each other in the three groups. This means that the attitudes of the participants in these three age groups were close to each other.

5.3 The effect of gender on EFL learners' attitude towards CALL

The third objective of the present study was to determine whether there would be a significant difference between Iranian learners' attitudes towards CALL in terms of their gender. It was hypothesized that there was no significant difference between Iranian EFL learners' attitudes towards CALL in terms of their gender. The results of independent samples t-test and descriptive statistics for males and females are summarized in Tables 6 and 7, respectively.

Table 6. Independent samples t-test for gender

| | Levene's Test for Equality of Variances | t-test for Equality of Means |
|---|---|---|

| | | F | Sig. | T | df | Sig. (2-tailed) | Mean Difference |
|---|---|---|---|---|---|---|---|
| total attitude score | Equal variances assumed | 1.83 | .18 | 1.43 | 198 | .15 | 1.86 |
| | Equal variances not assumed | | | 1.43 | 196.89 | .15 | 1.86 |

The results of the independent samples t-test indicated that the two gender groups were not significantly different in terms of their attitudes toward CALL:

$$t\ (198) = 1.43;\ p > 0.05.$$

Consequently, the second null hypothesis is accepted.

Table 7. group statistics for gender

| | participants' sex | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| total attitude score | male | 100 | 58.70 | 9.51 | .95 |
| | female | 100 | 56.84 | 8.82 | .88 |

The group statistics showed that the mean scores were close to each other in the two groups. So the attitudes of males and females were close to each other.

## 6. Discussion

The findings of the present study accord with those of a number of similar studies. For example, in a study conducted by Warschauer (1996) it was found that computer access and gender did not have any influence on attitudes towards CALL. Akbulut (2008) assessed the attitudes of Turkish university students with a high level of proficiency in English towards CALL and similarly found that gender and age did not have any effects on CALL attitudes. The results of a study by Ayres (2002) revealed that the participants' attitudes towards CALL were not different considering age, gender, and nationality. Rahimi and Yadollahi (2010) concluded that attitudes of junior high school, high school and university students towards CALL were not affected by computer ownership and age because of the ubiquity of technology in the 21st century.

Fančovičová and Prokop (2008) showed that elementary students' attitudes towards ICT were not influenced by their age, gender, and computer ownership. Min (1998) investigated Korean EFL students' beliefs about learning English with computers and found that their attitudes were not different with regard to their age groups. Similarly, the findings of a study by Liu (1996) on Chinese students' views on CALL demonstrated that age did not affect their attitudes.

The participants' average age was 20, for which the total mean score was about 60. This showed that they did not have positive attitudes toward CALL; however, most of the previous literature in this area has demonstrated language learners' positive attitudes towards the implementation of computers in language learning (Akbulut, 2008; Almahboub, 2000; Liu, 1996; Rahimi & Yadollahi, 2010; Warschauer, 1996). This discrepancy may be due to different purposes for which language learners use computers and the context where the learning process takes place in countries like Iran.

As one thing, most of the participants probably used computers for chatting in Persian, sending emails, and playing computer games, which are not related to learning English. Therefore, since the students did not have the experience of using computers in learning a language, they did not have positive attitudes towards this experience. There is no evidence supporting the assumption that students' attitudes towards using computers for educational aims can be improved by mere exposure to computer technology. Fishbein and Ajzen (1975) noted that attitudes are not innate they can be developed and "organized through experience" (p. 21). Technology alone does not influence teaching and learning; the crucial issue is how to use it (Barron & Orwig, 1997; Proctor & Burnett, 1996). As Tognozzi (2001) claimed, "The mere availability of technologies like the internet does not automatically translate into the enhanced learning experiences, particularly when student and teacher training are lacking" (p. 487). McKinnon, Nolan, and Sinclair (2000) also maintained,

A key message for educators is that even though modern computer technology may be both fascinating and compelling to teachers and students alike, it is the quality of the curriculum programs in which the technology is used that makes the real differences to students' attitudes, motivation, and performance. (p. 326)

Another reason for the neutral attitudes towards CALL can be the fact that in most of the language institutes in Iran, computers are not utilized for teaching purposes, which may result from insufficient support on the part of the institutes, financial problems, lack of time, and

unsatisfactory knowledge on the implementation of technology for educational purposes among teachers and learners. So, the learners may not be aware of the ways they can use computers in their language learning. Lee (2000) stated, "engaging in computer-assisted language learning is a continuous challenge that requires time and commitment" (p. 5). Chen (1996) asserted that computers cannot be fully integrated into teaching and learning, unless teachers and learners get a complete picture of their benefits and applications. Bangs and Cantos (2004) indicated that knowledge of foreign language pedagogy, computer literacy, and teaching experience are essential to apply CALL. According to Roblyer (2003), most teachers and students cannot take advantage of computer technology due to unfamiliarity with it. Furthermore, the application of CALL technology results in high educational expenses (Gips, DiMattia, & Gips, 2004). It may not be possible for some institutes to afford CALL software and hardware.

## 6. Conclusion

The results provided evidence on the participants' neutral attitudes towards CALL. Moreover, it was revealed that background variables, such as the students' age and gender did not influence their views.

In the light of the results of the study, it can be suggested that the use of the computer and its varieties should be integrated into the language teaching in institutes at all levels, especially at higher levels. Besides, some recommendations can be proposed in order to take advantage of the benefits of the implementation of CALL technology. Language institutes should allocate more financial resources to improve facilities, including computers. They should raise students' awareness about the purpose of CALL programs. Some useful educational software can be devised for learners or introduced to them according to their needs and preferences, and essential instructions should be given to the students so that they can use the software. Learners' utilization of CALL can be encouraged if they are assigned out-of-class activities. The institutes should train students on how to do research on the Internet and encourage them to use websites other than Google to find reliable information. Useful websites can be designed to help learners improve their target language.

It is crucial for teachers to get theoretical and methodological knowledge about using computers and available programs and gain experience in this area in order to help students have more opportunities to communicate via computers and be more motivated toward language learning.

Language institutes can help the teachers in this regard by making a long-term plan to encourage them to integrate technology into the curriculum and training them on how to manage this. Moreover, teachers should be involved in the syllabus design process of CALL programs because they know what works out well for student

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