The Effect of Virtual Language Learning Method on Writing Ability of Iranian Intermediate EFL Learners

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Abstract
This study aimed at investigating the effect of virtual language learning method on Iranian intermediate EFL learners writing ability. The study was conducted with 20 English Translation students at Chabahar Maritime University who were assigned into two groups, control and experimental, after ensuring of their homogeneity by administering a TOEFL proficiency. The participants of the experimental group received virtual learning i.e. sending PowerPoint through their e-mails. The participants of the experimental group did not have to attend the classes, however they had to study the PowerPoint and send the assigned task on the mentioned deadline. A writing posttest was administered to find the impacts of both methods. A paired sample t-test and an independent sample t-test were run to analyze the posttest scores using SPSS. The findings of the study indicated that both groups showed some improvements in terms of their writing ability since the obtained p value of both groups were 0.000 which is smaller than 0.05. However using virtual method appeared to be a more fruitful tool since the mean score of the experimental group (12.75) was much higher than the mean score of the control group (9.8).

Keywords: writing ability; virtual learning; product approach; process approach; virtual environment

1. Introduction
Being able to speak an international language is a must in 21st century. English, as an international language, is taught as the foreign language in Iran, and the students will learn this language in high school and through their academic courses. Writing is a means of communication and represents an essential function in academic environments and personal lives of human being. Messages, forms, invitations, letters, and instructions are types of writing that anyone might have to do at some time or other. People will learn how to speak by being exposed to the environment, but even native speakers of a language find it difficult to write accurately. As students cannot just “pick up” writing as they learn other skills in English as a foreign language classes, instructors have to teach writing skills (Raimes, 1983). Out of four fundamental language skills in the language learning process “competent writing is frequently accepted as being the last language skill to be acquired by native speakers of the language as well as for foreign/second language learners.” (Hamp and Heasley, 2006, p.36). Most students, both in their native language and in the second language, have received minimal or no instruction in learning how to write (Chastain, 1988). So, learning writing is an important goal both in the first and the second language. Bell and Burnaby (1984) assume that writing, as a complicated cognitive activity requires the writer to control different variables concurrently. These variables can include grammar, content, mechanics, and vocabulary.

Writing effectively is a procedure, which takes time; moreover, it needs considerable practice and occasionally even proper instruction (Dastjerdi and Samian, 2011). The traditional approach for developing writing skill was first to teach language forms to the students. Later, teachers assigned composition topics with the assumption that the students had received sufficient preparation to turn in a satisfactory product (Chastain, 1988). Historically, there were two approaches for teaching writing skills namely, product, and process writing. In regular methods of teaching, the schedule is fixed and pre-decided, and traditional teaching tools are used. In many colleges around the world, writing is taught as a collaborative exchange between student and the teacher. The teacher assigns a writing task, the student produces one draft, the teacher provides a corrective feedback on it, and the student redrafts the text and submits it for the evaluation.

However, rapid development of technology in the past 20 years has created a new dimension of teaching process, which is named virtual learning. The development of network technology has caused traditional methods to be replaced by the virtual-based methods. The flourishing of information technology and distance learning by mass communication has resulted in the development of new instrument and teaching methods for knowledge transfer (McKenzie, McRae, & Toia, 2010). Accompanied by the rapid development of multimedia systems and network technologies; the internet-
based teachings, and e-learning methods, as a new paradigm in the field, have developed resulting in traditional teaching to also expand to the virtual learning environments (Wu, Kuo, Wu, and Wu, 2006). Besides, this virtual learning system has influenced teaching the four skills of English. Among these four skills writing seems to be the most difficult one. This opinion was supported by Langan (1987), and Gunning (1998) who stated that writing is both complex and more abstract than speaking. Parker (1993) confirms this statement when he assumed writing to be a torment to students. So, writing skill can have a new dimension of teaching by expansion of the virtual language learning. Teachers may use virtual methods to teach writing ability in order to see the different effects of regular and virtual methods on this ability. Since virtual methods are new in the field of teaching, there are few books about this field; the most reliable sources for virtual methods of writing are the articles, researches, and projects that have been published in this field.

1.1 statement of the problem
Nowadays, being able to talk into a foreign language has become a vital goal in our lives. So, people have to learn the foreign language as well as they can, and be experts in four skills to communicate to other people around the world, and use language in their real lives. The conversational skills are being disregarded intensely in Iranian high schools whereas reading skill is considered more important (Khajavi & Abbasian, 2011). However, most of the Iranian students think that the most difficult skill is writing, and they find it difficult to write accurately and correctly after seven years of studying English. According to Mousavi and Kashefian-Naeini (2011) the students believe that the root of these difficulties is basically not having sufficient practice in English writing while studying English. Despite the arrival of virtual language learning in the last few years, those teaching in Iranian high schools, institutes and even most of the colleges still use the regular method of teaching writing ability. Therefore, investigating the comparison of different methods of teaching writing skills, regular and virtual, seems unavoidable in order to find the effect of both methods on writing ability of students.

1.2 The purpose of the study
The purpose of this study was to find the effectiveness of virtual learning system on writing ability of Iranian intermediate EFL learners. Additionally, this study aimed to find the effects of regular methods as well. All in all, the current study aims to provide experimental evidence about the fact that if virtual language learning can enhance intermediate writing skill in English more effectively than the regular method of teaching or not. This study can help teachers to find the more proper method of teaching writing.

1.3 Research questions
Q1. Does virtual language learning method have a significant effect on writing ability of Iranian intermediate EFL learners?
Q2. Do regular and virtual language-learning method have significantly different effects on writing ability of Iranian intermediate EFL learners?

1.4 Research hypotheses
H01. Virtual learning method has no significant effect on writing ability of Iranian intermediate EFL learners.
H02. Regular and virtual language learning methods have similar effects on writing ability of Iranian intermediate EFL learners.

2. Review of literature
Writing as one of the four basic language skills, is given a unique significance. It is a valuable way for sharing one’s thoughts to other people. Writing not only helps people to encourage their self-respect, but also it’s a way of conveying one’s thoughts and feelings. An appropriate and a good writing can be comparable with that prim and proper person, since most of the time we write to make a good impression about ourselves, and a brilliant writing will create a good impression about its writer (Raimies, 1983). One can say writing is the most difficult skill for foreign language learners to master; according to Richards and Renandya (2002, p.43) “the difficulty lies not only in generating and organizing ideas, but also in translating these ideas into a readable text”. They state that the skills involved in writing are highly complex; second language writers have to pay attention to higher level skills of planning and organizing as well as lower level skills of spelling, punctuation, word choice, and so on. Richards (1990, p. 101) claims that “whereas the rules of speaking skills are acquired through conversation and do not need instruction, the rules of written discourse are largely learned through instruction and practice, which seems difficult to people”. Ramies (1983) states, there are different approaches toward teaching of writing that can lead people to safer ground both in planning writing courses and in helping teachers to plan writing. Both in virtual and regular methods of teaching writing these approaches can be used, although they are different in materials and activates, which are discussed as follows.

2.1 Regular methods of teaching writing
Language teachers not only should be aware of the purpose of their students for learning, but also they should be able to prepare them to learn how to write appropriately. To find an appropriate approach to teach writing is not an easy task to accomplish. There isn’t just one way and method because teaching writing depends on the role and objectives of writing and what features of writing processes English teachers emphasize. As Raimies (1983) states there is no one answer for teachers to the question of how to teach writing in EFL and ESL classes, one may say that there are as many answers to
how to teach writing as there are teaching styles and teachers or learners and learning environments. However, two of these skills have been more common in ESL and EFL classes, namely product approach and process approach.

Teachers using the *product approach* normally give a pattern to students, and the students are told to imitate the given pattern. Actually the emphasis of this approach is on the product, which is a written text, most of the time and the processes each student goes through is not taken into account (Clark & Ivanic, 1997). This approach is mostly teacher-centered, as the teacher becomes the master of the models used (Brakus, Bernd, and Zhang, 2008). Arndt (1987) suggests that this approach is not only important because of the fact of imitation, but also for exploration and analysis. According to Mastuda (2003) product approach can be referred to as the current-traditional rhetoric, however, this approach suffers from some limitations and borders that made the experts to think about other approaches as well.

The process approach as Hyland (2003) suggests has a major influence on realizing the nature of writing, and the way it can be taught. This approach can be called recursive and complex, and emphasize that writing is not a linear task. Therefore, the process approach indicates the significance of recursive procedure in writing, which includes prewriting, drafting, evaluating and revising (Williams, 1989). The teacher in a process-approach classroom becomes the facilitator. In such classrooms, writing is essentially learnt, not taught. Providing input or pattern for learners is perceived as unimportant, since the teacher’s task is only to facilitate the exercise of writing skills and draw out the learners’ capacity. Therefore, just opposite the product approach, process approach can be called learner-centered.

### 2.2 Virtual learning approaches

The development of virtual learning revolution caused a new dimension in teaching. As Billings and Moursund state (1988) there was a revolution in teaching of writing and reading based on development of e-learning and virtual teaching. Well-designed presentation outlines and syllabus, along with the traditional college textbook and in some cases audio or videotapes are the way of delivery. In recent years, Internet has increased the speed of development in virtual learning and teaching, since Internet has made it possible to use on-line libraries, classrooms, conferences, and meetings. Choosing the most appropriate strategy for the instruction of virtual environment particularly depends on the dominant knowledge of virtual forms and styles (Christensen, 2009).

**Electronic mail:** It is a text sent through a computer network to a specified individual or group. E-mail messages can also carry attached files. E-mail may be utilized as one method of asynchronous distance communication between faculty and students and among classmates to facilitate learning (Susan, 2002).

**Video and audio option:** In which radios can be a part of educational system by wide spreading of the audio through broadcast and podcast. Video technology can be a part of virtual learning, too. Some of the countries, including our country, use pre-recorded television broadcast to spread the virtual learning. Some of the television channels were particularly designed to manifest and display these kinds of pre-recorded videos. Video technology also can include VHS tapes, DVDs, and streamed video from Skype, Teacher Tube, You Tube, Webcams, and Adobe Connect (Diecker, Lane, Allsopp, O’Brie, Kyg, & Butler, 2009). Interactive video games can be used as a teaching tool in higher education institutes as well (White, 2009). Podcasting is another category of virtual learning, which allows everyone to publish his or her files to the Internet (Robinson & Ritzko, 2009).

**Computers, tablets, and mobile devices:** Computers, laptops, and tablets enjoy some applications, which are considered as important and critical tools of virtual interaction and communication such as PDF files, PowerPoint, Microsoft Word, and Images (Reeves, 1998). Recently, most of the mobile phones and smartphones can be used for interactive feedback, since they support the mentioned applications and programs (Tremblay, 2010).

**Social networks:** Using some social networks, recently, has become wide spread all over the world. Most of the people join at least one of these social networks, such as Twitter, Facebook, Instagram, Slide Wiki and so on. Students can post their thoughts, ideas, and feelings on these social networking through blogs, chats, clips, and conferences. Nowadays, using such networks as a means of communication has been increased and has created a new approach in virtual learning system. They are daily chats, conversions, interactions, and informational sharing between learners that are called hashtags (Pilgrim & Bledsoe, 2011; Curran & McCarroll, 2013; Murray & Waller, 2007).

Fletcher and Atkinson (1972) performed one of the earliest studies related to virtual learning. Despite the fact that, Fletcher and Atkinson were among the pioneers of examining this new instrument, their results showed the effectiveness of virtual instruments. Cook (1985) found that the students who received computer-assisted writing showed better performance than those who did not. Avent and Harmon (1994) stated that the language learning achievement is more significant in students using computer-assisted language learning coursework than students using the traditional approaches. In another study, the researchers stated that using virtual learning environment does not guarantee effectiveness by its very nature, and it must integrate with rich pedagogical scenarios (Dillenbourg, Schneider, & Synteta, 2001).

Al-Menei (2008) states that computer-assisted approach has a significant effect on EFL Saudi students’ writing ability in two major areas namely, paragraph writing and correcting grammar. However, he added that computer-assisted writing couldn’t improve all parts of writing skill.

Although much of the literature emphasized the positive influence of virtual learning, some of the researchers showed the drawbacks of this instrument as well. As Brown (1996) investigated, students in virtual classrooms may experience feeling of isolation. Braine (1997) stated that the regular and traditional setting establishes more improvements in writing than using the network, but since technology has a rapid improvement the results may change if the same study...
is conducted at the present time. Russell (1999) suggested that there is generally no significant difference between technology-supported environments and traditional face-to-face instruction. Also there are researches that show students had some feelings of isolation, frustration, anxiety, and confusion (Hara & Kling, 2000), and even sometimes virtual-learning environments had reduced the interest of the students in the subject matter (Maki, Maki, Patterson, & Whittaker, 2000). Esmaiali (2012) conducted a study with 70 participants in Iran and used Kumaravadivelu’s framework to use technology in writing classes. The results of his study state that technology is not a beneficial tool per se, and it should be used as a complementary tool for teachers. Nezam Hashemi (2014) stated, in a recent study, that teaching writing in virtual way is not significantly more effective than teaching it in actual conventional classes, and virtual classes turned out to be fruitful if used as an addition to the actual class to boost whatever in the class.

3. Methodology

3.1 Design of the study

This is an experimental research in nature. Since random selection of the subjects was impossible for the researcher, so the researcher made use of intact groups; therefore, the design, which could fit, was quasi-experimental design with the help of pretest-posttest patterns. Two kinds of tests have been administered, which are a pretest and a posttest. The pretest included two parts, the first part was a proficiency test in order to prove the homogeneity of the students, and the second part is a writing test in order to check their writing ability. The participants were divided into two groups beforehand; they have been divided into two groups by rank ordering. The control group received traditional way of teaching writing, and the experimental group received virtual method. The participants of the experimental group had to have access to the network in order to accomplish their task. Both groups received the same topics, but by using different tools. The researcher wanted to work with both groups, but because of the limitations of the university the control group was in the hand of the related professor. The gender of students was not important in this research. So, the formula, which was applied as a pattern is as follows.

G1 (Experimental) \( O_1 \times O_2 \)

G2 (Control) \( O_3 \times O_4 \)

3.2 Participants

An essential goal of this study was to understand the effects of regular and virtual language learning method on writing ability of Iranian Intermediate EFL learners. The study took place at Chabahar Maritime University, a large state university in Iran. The university offers various bachelors, masters, and doctoral program in several fields of study. Because of having no access to random selection of students, this available writing class was chosen. Twenty students of English Translation, studying at the department of humanities and management at Chabahar Maritime University, were present in that writing class. All of them were native speakers of Persian. They had comparable competence in English and most of them were student-teachers. Their ages varied from 18 to 22, 12 females and 6 males. All the students were studying academic English for one year and a half, and most of them taught English in language institutes or high schools. They all entered the B.A program in Fall 2013 and all of them have had passed 2-credit paragraph writing course.

3.3 INSTRUMENTS

3.3.1 TOEFL proficiency test

In order to fulfill the requirements of an experimental study, all the subjects of the study must be homogenous. So, a pretest, namely a TOEFL test has been administered before the beginning of the study. This test was chosen from the book Longman Preparation Course for the TOEFL Test: The Paper Test (Phillips, 2004). All the students had to achieve the required score to participate in this study. This test includes three parts, listening, vocabulary, and grammar.

3.3.2 Writing pre and posttest

After administration of the TOEFL proficiency test (Phillips, 2004), the researcher administered a writing test, again taken from the TOEFL test (Phillips, 2004). All the students were asked to participate in this test in order to check their writing skill ability. To gather the scores of this writing test, the scores were presented by the criterion of ESL Composition Profile (Jacobs, Zinkgraf, Wormouth, Hartfiel, & Hughey, 1981), which shows that the complete score of writing is 15 based on this criterion. After the students received the treatment of the study, the researcher administered a writing test, the same topic, to see whether the treatment had any effects on the students or not.

3.3.3 Instructional materials

Since this study had two groups, the researcher used two different instructional materials. The first group received the traditional instruction and regular books. The experimental group received virtual materials, and in spite of many approaches and instruments virtual language learning has, the researcher decided to use Power Points for each lesson and deliver those lessons using network. So, the experimental group received virtual instruction, including network-based, and online instruction. Although the topics were similar due to using the book, Academic Writing Course (Jordan, 1999) for both groups but the tools and instruments of instruction were different.

3.4 Procedure

At the beginning of the study a TOEFL proficiency test taken from TOEFL book (Phillips, 2004) was administered to submit the homogeneity of the students. The test included 60 reading items, 50 listening items, and 40 written expression and structure items. After scoring the papers, the homogeneity of the students had been submitted; since all
the students scored 420 to 450 it can be said that all the students were at intermediate level. The researcher developed a writing test to measure the students’ writing ability before and after participating in the study. The participants were given a composition topic to write on in onset of the study. The test was developed depending on the general guidelines and curriculum outcomes for EFL learners, and it was corrected according to the ESL composition profile criteria for evaluating the composition (Jacobs, Zinkgraf, Wormouth, Hartfiel, and Hughey, 1981). A time limit of 40 minutes was instructed to students in both groups in order to follow TOEFL originality way of taking writing exam. Two raters, the researcher, and the related course professor, marked the scores of the students. The students were divided into two groups by rank ordering based on the scores of the TOEFL test each group included 10 students. The first group was called the control group, and the next group was called the experimental one. After the administration of the second pretest, writing skill test, the treatment of the classes had to be decided. There were two different instructions for the class, which each class received a different one while both groups had the same material, a book entitled Academic Writing Course written by Jordan (Jordan, 1999). The groups were taught by two different teachers due to academic limitations, however both groups received writing instruction for 13 weeks. Participants in both groups were given writing tasks to produce paragraph writing. The tasks in both groups focused on the same writing modes and grammatical points. The control group included 10 students. They received writing instruction for 13 weeks, one day a week, one hour and a half each writing class. The control group received regular classroom instruction and met in a regular classroom the entire time. The lessons adopted and modified for the regular classroom writing instruction were originally compiled by the teaching staff of the English department. These lessons, in the form of printed materials, were handouts designed mainly for traditional classroom instruction, these handouts were designed according to the book of Academic Writing Course (Jordan, 1999). The regular writing instruction lessons taught in the control group provided students with vocabulary, outline formats, and samples written passages to familiarize them with the content and organization for the writing assignments. Internet access was not a necessary option in this group. The experimental group included 10 students as well. Having an access to the Internet was a must in this group. In the experimental group the researcher chose to prepare PowerPoint for each lesson, again choosing the topics from the same material namely Academic Writing Course (Jordan, 1999). All the topics, grammar and even the use of vocabularies were just alike. However, the instruction was different for each group. Each week the researcher, prepared the PowerPoint of the same lesson as the control group, and sent it to the e-mails of the students of experimental group each Sunday. Sending the task on their e-mails, the researcher texted all the 10 students to remind them that they got their lesson on their e-mail. The message included the time of deadline for completing their tasks. The students had to download, read, and have their tasks done before the deadline, which was each Thursday. The experimental group received the instruction for 13 weeks as well; all the students could have asked their problems by sending their questions through the researcher’s e-mail. It goes without saying that all the students had to buy the paper version of the mentioned book, despite of getting the on-line version of each lesson, in order to share the same material with the control group. By the end of the study, all the students both experimental and control group were given a posttest. The posttest was chosen from the TOEFL book (Phillips, 2004).

4. Results and discussion

The researcher used quasi-experimental design for this study. To find the appropriate answers to the research questions, and to figure out whether research hypotheses were to be accepted or rejected a set of statistical analyses needed to be done. The following sections illustrate the quantitative findings and provide answers to the research questions. Both the control and the experimental groups were given the same test before and after the study to measure the differences in the achievement of the students’ writing.

As Field (2009) suggests that some features should be met before one decides to run parametric test, one of them is that the groups should have homogeneous variances. This assumption was fulfilled when the researcher administered a TOEFL test to all the students before put them into experimental and control groups.

<table>
<thead>
<tr>
<th>Table 4.1 Results of TOEFL Proficiency Test</th>
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<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>TOEFL Scores</td>
</tr>
</tbody>
</table>

All the students proved to be at the intermediate level, since the mean score of the TOEFL proficiency test of the students proved to be between 420 and 450.

4.1 Data analysis of the writing pretest

Assigning all the students as intermediate learners, the researcher divided them into two groups, control and experimental groups. Since the main focus of this study was on the writing ability of the students, the test examined their writing ability and was chosen from Longman Preparation Course for TOEFL Test (Phillips, 2004). Administering the writing pretest and scoring the papers, the scores were analyzed by an independent samples t-test. The following tables will illustrate the data more accurately.
Table 4.2 illustrates the statistics of both groups clearly. The first row of the table indicates the data related to the experimental group. As is obvious both groups include 10 students. The total score of the test was 15 based on the ESL composition profile criteria for evaluating the composition (Jacobs, Zinkgraf, Wormouth, Hartfiel, & Hughey, 1981). The mean score of the experimental group was 7.8000, and the mean score of the control group was 7.9250 as it is shown in Table 4.2 clearly. Although, the control group got the higher mean score, but the significance of the groups is not as much different as it seems.

Table 4.3 Independent Samples T-Test of Writing Skill

As Table 4.3 shows the p value is 0.842, and F = 0.060. Since the significance of this test is 0.842 and it is obviously higher than 0.05 that is to say ($p = 0.842 >0.05$), consequently it indicates that there is no significant difference between these two groups in terms of their writing ability. That is to say, both groups are homogenous, and they can go through the requirements of this study, in other terms these groups are comparable and ready to receive the treatments.

4.2 Data analysis for the research question one

First question of this study dealt with the impact of virtual learning method on writing ability of Iranian intermediate EFL learners. It was hypothesized that virtual learning system has no significant effects on writing ability of Iranian intermediate EFL learners. The students participated in this group received a special treatment. In order to see whether this group has improved or not, and to see if virtual learning system is an effective factor; the researcher applied a paired samples t-test between the performance of the participants on the pretest and their performance on the post test. The following tables show the results of the paired samples t-test.

Table 4.4 Group Statistics Paired sampless t-test of Experimental Group

The group statistics of paired samples t-test of the experimental group are shown in Table 4.4, and as it is obvious the mean score of the posttest ($\text{mean}_{\text{posttest}}=12.85$) is higher than the mean score of the pretest ($\text{mean}_{\text{pretest}}=7.8$).

Table 4.5 Paired samples Test of Performance of Experimental Group on the Posttest and Pretest

The group statistics of paired samples t-test of the experimental group are shown in Table 4.4, and as it is obvious the mean score of the posttest ($\text{mean}_{\text{posttest}}=12.85$) is higher than the mean score of the pretest ($\text{mean}_{\text{pretest}}=7.8$).

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>10</td>
<td>7.8000</td>
<td>1.33749</td>
<td>.42295</td>
</tr>
<tr>
<td>Control</td>
<td>10</td>
<td>7.9250</td>
<td>1.42424</td>
<td>.45039</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>---</td>
<td>-----</td>
</tr>
<tr>
<td>Writing Pretest Equal variances assumed</td>
<td>.060</td>
</tr>
</tbody>
</table>

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Results of the paired samples t-test of the experimental group, who received virtual learning method, are shown in the above table. The $p$ value mentioned in this table is 0.000, which is lower than 0.05 (that is $p = 0.000 < 0.05$). The mentioned $p$ value, which was lower than 0.05 indicates that there was a significant difference between the performance of students on their writing pretest and their performance on the same posttest. Consequently, the null hypothesis of the first question is rejected was well, and clearly the analysis of the paired samples t-test for the experimental group shows that virtual learning method, which was applied in this group was an effective factor in writing ability of Iranian intermediate EFL learners.

4.3 Data analysis for the research question two

The concern of the second research question of this study was the comparison of the effects of regular and virtual learning method on writing ability of the Iranian intermediate EFL learners. Based on this question it was hypothesized that regular and virtual learning methods have a similar effect on writing ability of Iranian intermediate EFL learners, in other words they do not have different effects on the participants of this study. In order to either reject or accept this null hypothesis, the posttests of both groups were compared using the independent samples t-test as it is shown in the following tables.

Table 4.6 Group statistics of Writing Posttest

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>10</td>
<td>12.7500</td>
<td>1.41912</td>
<td>.44876</td>
</tr>
<tr>
<td>Control</td>
<td>10</td>
<td>9.8000</td>
<td>1.29529</td>
<td>.40961</td>
</tr>
</tbody>
</table>

As the above table suggests the mean score of the experimental group is 12.7500, and the mean score of the control group is 9.8000, respectively. Based on the group statistics of the writing pretest, the mean score of the experimental group was 7.8000, and the mean score of the control group was 7.9250. Not to forget that both groups had 10 participants, and the experimental group received virtual learning method as their treatment through this study. Obviously, the mean score of both groups have improved as well. Although, in order to reject or accept the second research question’s hypothesis the researcher analyzed both groups mean scores to see which factor has the better effect on writing ability of the Iranian intermediate EFL learners. Since the experimental group got the higher mean score it seems that the virtual learning method has had much fruitful effect on writing ability of participants. However, to prove this more accurately the $p$ and $t$ value was checked as well, which is mentioned in the following table.

Table 4.7 Independent Samples t-test of Writing Posttest

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing Posttest Equal variances assumed</td>
<td>.028</td>
</tr>
</tbody>
</table>

The positive form of the $t$ value is 4.855, which is bigger than 2. Besides, the significance level is 0.000, which is smaller than 0.05 (that is $p$ value $0.000 < 0.05$). It can be summarized that the null hypothesis is rejected by the samples, and these groups do not have similar effects on writing ability of Iranian intermediate EFL learners, and there is a meaningful difference between the populations.

4.4 Discussion

The main goal of this study was to investigate the impacts of virtual learning method and regular method of teaching writing on writing ability of Iranian intermediate EFL learners.

The first research question had to probe the effect of virtual learning method on the participants of experimental group, and as its hypothesis suggested virtual learning method has no significant effect on writing ability of Iranian intermediate EFL learners. Considering the results obtained from the paired samples t-test of this group, the second null hypothesis is rejected. Since, the mean score of the posttest of the experimental group is much higher than their mean score on the pretest. Also the $p$ value of the paired samples test was 0.000, which is smaller than 0.05 and it shows that there is a significant difference between the performance of the participants on the pretest and the posttest.
Consequently, it can be said that virtual learning method is an effective factor on writing ability of Iranian intermediate EFL learners, and the null hypothesis is rejected.

The second research question of this study dealt with the comparison of both methods. The null hypothesis of this question suggested that there is no significant difference between the effects of these methods. As it was proved, both groups were homogenous on the writing skill pretest and they were comparable. Since, both methods have shown some improvements on the posttest, the researcher used an independent samples t-test in order to reject or accept the null hypothesis of the research question. The p value of the independent samples t-test that was 0.000, which is lower than 0.05, shows that the difference between these groups is meaningful. Besides, based on the group statistics of this test it can be proved that the group, which underwent the treatment and received virtual learning method showed much more improvement. Based on the obtained data the mean score of the control group’s posttest, which is 9.800, is lower than the mean score of the experimental group’s posttest, which is 12.750. Therefore, the virtual language learning methods are more effective to boost the writing ability of the students.

Unfortunately, referring to the small size of the samples of the present study, the results obtained cannot be generalized to large populations, however there exist some researches that do not agree with the results of the present study. As Brown (1996) investigated, students in virtual classrooms may experience feeling of isolation. Braine (1997) stated that the regular and traditional setting establishes more improvements in writing than using the network. Russell (1999) suggested that there is generally no significant difference between technology supported environments and traditional face-to-face instruction. Also there are researches that show students had some feelings of isolation, frustration, anxiety, and confusion (Hara & Kling, 2000), and even sometimes virtual-learning environments had reduced the interest of the students in the subject matter (Maki, Maki, Patterson, & Whittaker, 2000). Sattar and Naharkhalaji (2013) investigated the role of E-mail activities in EFL writing classes. The results indicated that using e-mail as an independent method for teaching writing does not have a positive effect on the improvement of writing ability. They add that these new method can be used as a supplementary tool to traditional ways of teaching writing to have positive effects. Nezam Hashemi (2014) reported, in a recent study, that teaching writing in virtual way is not significantly more effective than teaching it in actual conventional classes, and virtual classes turned out to be fruitful if used as an addition to the actual class to boost whatever in the class.

Despite these disagreements, the results of this study are in line with some previous researches as well. White (1994) reported that the performance of the students was much better in their experimental group after using technology for learning writing. Gousseva (1998) in her study stated that students attitude towards technology were usually positive because they could see different viewpoints and improve the skill of writing. Goldber, Russell, and Cook (2003) analyzed the effect of computers on student writing. Their analysis showed that on average, students who use computers to enhance their writing ability are not only more motivated, but also they produce better written work that is of greater length and higher quality. Al-Jamal and O’beidat (2004) probed the effect of computer chatting on developing tenth graders’ reading and writing skills. These researchers suggested that chatting techniques should be introduced as a major tool for teaching reading and writing skills based on the positive results their experimental group showed. Yang (2004) also found that the experimental group who underwent the treatment and received one of the methods of virtual learning had a better performance. Chou (2007) investigated the effects of web quest writing instruction program on EFL learners; performance, and the results showed that web quest instruction model was an effective model for enhancing students’ writing performance and provided a positive learning experience. Al-Menei (2008) reported that the experimental group of his study largely benefited from using computers in learning writing, and his results showed that computer seemed to be a helpful instructional means in EFL writing assignments and tasks. Tushyeh and Farrah (2010) investigated the effect of using computer and technology on reading and writing ability of the students in Palestine. The results of their study showed the same results as the current study, which proves the positive effects of technology on writing ability of the students. However, their results showed that using computer-based methods would improve the self-confidence and motivation of students.

Ghahari and Ameri-Golestan (2013) studied the effect of blended learning versus classroom learning techniques on Iranian EFL learners’ writing. The results of the study showed that the blended learning group significantly outperformed the ones in the classroom-learning group in their writing performance. Additionally, the results showed that applying a blended teaching method can create a more desirable condition to enhance the EFL learners’ writing performance. Purceel, Buchanan, and Friedrich (2013) probed the impact of digital tools on students writing. The results showed that using internet and digital technologies generally facilitate personal expression and creativity, broadening the audience for their written material, and encouraging teens to write more often in more formats than may have been the case in prior generations. However, the results also showed that by using technologies the teachers have to better educate the students about some new issues like fair use and plagiarism. Ababneh and Lababneh (2013) explored the effect of using Internet on EFL elementary school students’, and the results showed that using Internet had a positive effect on Jordanian elementary students’ writing ability. Liu (2013) conducted a research on blended learning in a university EFL writing course, and the results showed that using virtual and blended learning will improve the student-student and students-teacher interactions. Moreover, the results showed that using blended learning would reduce or sometime eliminate communication anxiety, and help them become independent learners and improve their writing ability. Davoudi, Gorjian, and Pazhakh (2013) investigated the effect of post-task CALL approach on advanced Iranian learners’ writing accuracy. The results of their study showed that the group with the post-task CALL was more successful and using virtual methods have a positive effect on the participants of the study. Another study was conducted at the same year in the same country by Niazi and Pourgharib (2013). The study investigated the effect of...
using E-mail on enhancing Iranian intermediate EFL learners writing proficiency. The results were in line with the results of the current study and the participants of the experimental group showed positive improvements, and it was proved that using technology has great effects on the writing ability of the students. As Gooran and Hayati (2014) found out on their research, there is a significantly positive relationship between using email and students’ writing performance.

5. Conclusion and pedagogical implications

The participants of this study underwent the treatment in order to deal with the two mentioned null hypotheses. So, one can say that despite timeworn nature of regular methods they are still effective and may improve the writing ability of the students. The first hypothesis assumed that virtual learning method has no effect on writing ability of the students. A paired samples t-test was used to compare the mean score of the experimental group posttest and pretest. The results showed that there was a meaningful difference between their performances, and that the experimental group writing ability has improved. So, the first null hypothesis was rejected. These results along with using an independent samples t-test results for posttest of experimental group and their counterparts in control group rejected the second null hypothesis as well. It other words there was a meaningful difference between the impact of regular method and virtual method of teaching on writing ability of Iranian intermediate EFL learners. In addition, the mean score of the posttest of the experimental group is much higher than their counterparts in the control group, so it can be concluded that the virtual learning method has been much fruitful in this study.

The present study suggests some pedagogical implication based on the results, which were obtained at the end of the study. Despite the fact that the population of the participants in this study was not that large, the results of this study can be applicable to teachers and instructors, students, institutions, and material designers.

The results of this study are beneficial for teachers in many ways. So, they can choose which method is more applicable based on the circumstances of their classes. Using the results of this study namely, using the virtual learning method, which is based on distance learning, teachers can handle different classes at the same time. Students, especially shy ones, will be interested in using such a way of learning since they do not have to attend classes, and they can communicate with the related course teacher and other students. Some of the students who have to work at the same time can attend schools and universities, which have virtual learning environments to save money and time. The results can be applicable to institutions and universities, in a way that they can use the findings of this study to train instructors and teachers to teach writing courses via virtual methods. Material designers also can benefit from the findings to establish virtual materials as same as handbooks. They can prepare videos, 3D-environments of old books, and even prepare the lessons in formats such as Power Points, documents, and PDFs.

This study could offer some suggestions for further studies as well. The virtual method was used to teach writing in this study, so other researchers may investigate the effect of virtual learning on other skills, respectively. The gender of participants was not an important factor; therefore future studies may probe the effect of virtual learning on different genders and compare their results.

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