



The Effect of Content-Based Multimodal Instructive Animations on EFL Students' Listening Skill: A Gender Study

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Abstract

Inspired by the tenets of the scenario based instruction, the present study focused on the effect of content-based multimodal instructive animations on Iranian EFL students' listening skill. The selected participants were 240 male and female elementary students, in the 8-11 age range. The experimental group members were assigned to two sub-groups: animation and ordinary. The sub-groups were exposed to instructive topic-based video clips in animation and ordinary forms, respectively. The control group, however, received only audio CD instruction. TOEFL Primary tests were administered as both pre- and post-tests. The results indicated that animation exposure group significantly outperformed the ordinary exposure group and the control group, and that ordinary exposure had more vigorous performance than the control group. Independent sample t-tests showed that gender had no significant effect on both animation and ordinary groups' listening skill. The obtained results can provide a deeper pedagogical insight into the way we expose learners to English language listening skill.

Keywords: content based, multimodal instructive video clips, animation/ordinary exposure, listening skill

INTRODUCTION

One of the ways to apply the Whole Language Approach to the ESL/EFL classroom is through content-based instruction. The main goal of content based or, in a way, topic-based instruction is for students to acquire second language competence by working on certain topic areas (Brinton, Snow, & Wesche, 1989). Moreover, the move in language teaching from the sheer skills-training to whole language applied in virtual learning environment has provided a good platform for the implementation of more communicative use of language. Relatively, on the one hand, there has been growing interest in the use of multimedia as audio-visual aids to convey information, and on the other hand, to facilitate skill-training using content-based teaching materials and present them to English as foreign language (EFL) students. It is a well-known fact that

audio-visual materials are a great help in stimulating and facilitating skill learning in a foreign language (Cakir, 2006). Moreover, the introduction of English language into primary classrooms has brought about the need for methods and techniques that are appropriate for young learners (YLS). Among all the English language learner groups, YLS are assumed to be a special group since they are in a period of their lives in which they go through a constant cognitive, emotional, and social change, and therefore, think and learn in different ways compared to older learners (Cameron, 2001; Slatterly & Willis, 2001; Halliwell, 1992).

Animations are believed to help such learners understand complex ideas more easily. Animations are motivating and they help reduce the cognitive load whereby learners can form mental images of the presented materials more easily (Ainworth, 2008). Particularly, animations have two positive functions in learning. First, they enable learners to perform more cognitive processing by providing additional information that cannot be displayed through static pictures. Second, they help learners build a dynamic mental representation by providing through external support for simulating the behavior of the system depicted (Schnotz & Rasch, 2005).

Video implementation

Many educators (e.g. Bodemer et al., 2005; Postosi, Loaiza, & Garcia, 2008) seem to have recognized the power of audio-visuals and more specifically video-aided instruction to capture learners' attention, increase their motivations and, enhance their learning experiences. Visual implementation of language, such as topic-based video clips containing conversations can be a learning alternative because they contain dialogues from highly proficient English speakers, which could contribute to an easier understanding of their pronunciation. As Van Duzer (1997) claims videos containing selected English TV series, movies, advertising, etc., could arouse student's motivation. This mental arousal may be supplemented if accompanied with the relevant and interesting animations in a topic-based syllabus. According to Flynn (1998) compared with a textbook, video helps the students to understand the instruction more efficiently because "video brings language in the context of life in realistic settings to the classroom" (p. 67). When a person watches a piece of movie or TV program, superficial and even deep feelings and emotions such as excitement, anger, laughter, relaxation, love, whimsy, or even boredom are elicited (Berk, 2009). Furthermore, they can relate more closely to learners' needs and hence provide a link between the classroom and students' needs in the real world. Through video, students are also encouraged to practice the listening skill. According to Calverley, Childs, and Schnieders (2007) the videos which are "commercial breaks and documentary films make the students be curious and stimulated in joining listening activity" (p. 100). Videos can attract students' attention to become more enthusiastic in joining the pre- or post-discussions. Calverley et al. (2007) also believe that through the use of video technique, as an aid, learners can "fully engage and effectively become interested in developing their level in English listening and speaking skills via using real discussion inside classroom also

supporting shy students to participate since we make environment as real as possible”(p. 100).

As stated above, although the effects of audio and visual aids on language learning are very complex and researchers as well as language teachers cannot agree with each other on the specific processes and details of how visual aids can facilitate language learning (Baltova, 1994; Canning-Wilson, 2000), there seem to be an agreement that English videos as audio and visual aids have positive effects on the enhancement of EFL learners' listening and speaking skills.

However, as an independent course, teaching English through videos do not seem to have well-established methodology and recognized patterns. As a result, teachers do not have clear goals in mind in their classroom activities and their attentions are often not focused. Classroom activities and teaching methods are often monotonous, random and improvised, which frequently gives rise to the inefficiency in the use of video materials in EFL classrooms (Wang, 2015).

However, during the time, audio-visual delivery techniques not only in technology, but in exposure, have also advanced. With the advent of digital technology, the ever-greater potentials of adaptability in delivery have also been achieved (Abrams, Cruse, & Kunze, 2008).

Statement of the problem

During the years, as we have experienced, in assorted Iranian language learning settings such as in high schools, language schools, and in even in some universities, there seems to be an intense emphasis on classical ways of presenting teaching-learning materials such as only teacher-oriented paper-pencil materials, and at most, audio presentation void of getting authentic environment into language learning. In particular, when it comes to listening skill, language learners seem to have been left in total disarray. During school years, there appears to be less competent schemes to present and teach listening skill. The only worthy of note official way to expose students to listening is mostly through audio CDs prepared for English textbooks. However, in language schools, YLs seem to be exposed to listening via both audio and visual channels. This audiovisual modality, though expedient in scope, might not have been specifically devised to target YLs. Hence, inherent in Iranian official educational system, the fundamental problem is lack of reliable sources for practicing listening skill and, moreover, in language schools, the problem may reside in the fact that listening exposing tools are less purposeful in nature for YLs.

Objectives of the study

It can be claimed that the type of instruction appropriate for young learners (YLs) needs to “include indirect processes that offer meaningful and contextualized language” (Yildirim & Torun, 2014, p. 47). To this end, YLs need to be provided with opportunities that allow for the subconscious acquisition of language skills while their minds are

engaged with the task itself (Halliwell, 1992). With their fun and interesting content and multimodal nature, content-based video animations can be used to tackle the job.

It is our belief that, in general, in a way or another, listening skill teaching and learning to YLs in Iran, has been held aloof from its true purpose. To this end, the main intent of this study, with an experimental design, is to investigate the effect of content based multimodal instructive animations on the EFL students' listening skill. A genuine comparison will be raised between the potential effect of exposing to video animations and ordinary videos on YLs listening skill. Having the same topics, video animation are those featuring topics through animation and cartoons while ordinary videos are the sort of non-animated videos to which the subjects are exposed. We will also keep a close eye on the effect of gender discrepancies, if any, between males and females taking part in our inquiry.

In the current study, the researchers try to know what effects video technique and its exposure type (animation/ordinary) has on students' listening skill while using it inside the classroom. The main idea for this study is conceived through students' reaction to the use of video animations provided for males and females in the classroom.

RESEARCH QUESTIONS AND HYPOTHESES

To achieve the purpose of the study, the following two questions are formulated:

- Do content-based multimodal instructive animations have any significant effect on the EFL students' listening skill?
- Does gender make any significant difference between subjects on using content-based multimodal instructive animations to improve listening skill?

To pursue answers to the above-mentioned research questions, the following null hypotheses are formulated:

- Content-based multimodal instructive animations have no significant effect on the learners' English listening skill.
- Gender makes no significant difference between subjects on using content-based multimodal instructive animations to improve listening skill.

METHODOLOGY

Setting and participants

A number of 240 elementary language learners in the 8-12 age range took part in this investigation. They were selected randomly from among all language learners in elementary levels (according to their language school proficiency placement) studying English as a foreign language in Gachsaran's language schools (a Southern city in Iran). The subjects were both males and females (120 of each gender). In a stratified random selection, the students, both males and females, were assigned to control and experimental groups -with 120 for each. Stratified random selection was used "to make

sure that the sample is representative of the population in every possible way, here, in gender (Hatch & Farhady, 1981, p.9). For this reason the students (males and females) were separately randomized according to their enrollments in Gachsaran's language schools. Finally, to accomplish the objective of the study, the experimental group was randomized into two sub-groups, namely: video animation exposure experimental group and ordinary video exposure experimental group (animation/ordinary, succinctly stated) –with 60 individuals for each.

Table 1. Grouping for Subjects Taking Part in the Study

Groups	No.	Gender
Animation	60	Male/Female
Experimental Ordinary	60	Male/Female
Control	120	Male/Female

Instruments

Pre-test

In order to carry out the study, first, a version of TOEFL Primary test (version 2013, only the listening section) was adapted for all the subjects participating in the study. It must be noted that TOEFL Primary test of listening is believed to be an appropriate listening assessment for our subjects on the ground that it is officially devised to assess the English-language communication skills of young students ages 8+ (see <https://www.ets.org>). The test taps varied communicative skills and includes 3 levels of questions in difficulty. Level one contains questions testing basic expressions, request, phrases and directions in short dialogues. In level two, simple short stories and conversations on topics beyond every day experiences are tested. In level three, unfamiliar words and simple content based conversations are tested. In general, for calculation convenience, the test was purposefully devised to hold about 36 items. The total score was tallied to be a number achieved through a division of 36 by 4. The total time allotted to answer the questions was 46 minutes- 36 minutes to listen and 10 minutes to convey their answers to their answer sheets. There were assorted formats of questions in the listening section such as matching, directing, multiple choices, and completion. Thanks to the standardization done in the content, purpose, and construction of TOEFL Primary test, the researchers were fairly confident of the validity of the test which was administered in our study. Moreover, after a pilot version of the test carried out on members of relevant population in advance, Kuder-Richardson 21 (KR-21) coefficient inspired us confidence on the estimation of reliability of the test.

Video animations

Given the fact that in Content Based Instruction (CBI), learning is somehow contextualized, that is, learners are taught useful language “embedded within relevant discourse context rather than an isolated language fragments” (Kasper, 2000, p.22), attempt was made to less laboriously reiterate language points through strategically

exposure to intrinsically motivating content-based video animations. The animation contents were selected according to the YLs' usual interests, e.g. space, weather, animals, etc. However, the contents were tried to be neutral or unbiased to any specific gender.

Post-test

Another instrument was another reliable and a valid version TOEFL Primary test as a post-test whose content and structure was reshuffled in order not to be identical with the one for the pre-test. This version of TOEFL Primary test was administered after the treatment sessions.

Procedure

Done by the researchers, the treatment of the study generally involved two main phases. In the first phase, which was an introductory stage, all experimental groups (see table 1) received relevant explanatory instructions on the purpose and the procedure of the study. They were fully informed about some useful tips on how to listen during watching videos. For example, they were asked to actively listen to make a conscious effort to hear not only the words that another person is saying but, more importantly, try to understand the complete message being sent. In addition, they got some points on the difference between listening and hearing. In this regard, the participants were let known that hearing refers to the sounds that they hear, whereas listening requires focus, avoiding being distracted by environmental factors. For example, side conversations in the classroom. And that, listening meant paying attention not only to the story, but to how it is told, the use of language and voice, and how the other person uses his or her body. In other words, it meant being aware of both verbal and non-verbal messages. They also got to know that their ability to listen effectively depends on the degree to which they perceive and understand the messages. They were given instructions on what the listening micro-skills are and how to deal with them during time allotted to answer in listening tests.

In order to make the participants more enthusiastic (at least instrumentally) about their participation in the task, they were warned to take the course more seriously, since a definite portion of their English final exam in their language schools would depend on the quality of the mark they acquire in the final listening test (the post-test).

As the second phase, students (both males and females) in two separate experimental groups were exposed to their specified video clips at each class session. Ordinary video experimental groups were exposed to sorts of non-animation videos. They were prompted to watch video clips similar in topic and content to that of the animation group. The only difference was that videos were not in animation and cartoon forms. It goes without saying that students in video animation experimental groups received content-based animations and cartoon form videos. The topics and contents, as well, for both types of videos were tried to be unbiased, not in favor of any specific gender. Each watching and listening class session took about 90 minutes. The whole course consisted

of 20 sessions in 10 weeks, two sessions per week. In every watching videos phase (both animation and ordinary videos) different listening activities, in three interrelated stages, namely, pre-while-and post activities, were exercised in turn. Every session, about 20 minutes were devoted to pre-listening activities. Routine pre-listening activities included setting the context, generating interest, activating students' prior knowledge about the topic the video clips were about, activating vocabulary and grammar necessary for a better comprehension, etc.

In a while-listening stage, taking about 25 minutes, an amalgamation of two interrelated strategies in skill learning, bottom-up and top-down were tried to be practiced. The students were encouraged to listen both holistically (the whole message comprehension) and segmentally (paying close attention to details) (Harmer, 2001). In order to proceed on to bottom-up strategies, the students were allowed to watch each video three times. They were motivated to make assumptions after the first listening and verify them after the second and third listening. As an important while listening activity students were asked to take notes about the points they think may be questioned later. To do that, the students were helped learn how to outline predictable sequences in which information may be presented in every context, e.g. who-what-when-where (in news and stories); who-flight number-arriving/departing-gate number (in airport announcements).

They were asked to focus on the speaker and to look at him or her because facial expressions and body language can communicate as much as language. In this way, they were required to be more engaged with the speaker(s) in making eye contact and use of hand gestures. Through an active modeling, the participants were trained to listen for key words, key phrases and markers in every context. They got to know that certain words and phrases signal importance. To practice this, for every clip, some words and phrases were given in print, but some others were intentionally kept for the participants to help them learn to guess. As top-down strategy practices, the students received training to rely on their prior knowledge and experiences to build the meaning of the listening practices using the information provided by sounds, pictures, words, and general context.

Post-listening stage in our study was the main stage where subjects should be prepared to encounter and practice answering assorted questions given post-adjunct to every video watching. As stated previously, the questions could vary in form and content. This stage took about 45 minutes. After watching and listening to every video clip, the students were provided with the questions. To fairly simulate the final and the main test (post-test) of the study, the number of questions was 36 items. They were given one minute for every item to answer and ten minutes to convey their answers to the answer sheets.

It must be noted that the control groups in our study received no specific instruction on listening through video clips. Nonetheless, other than video exposure, they took their own ordinary CD audio clips as their routine listening practices. In particular, like other traditional material presentations for listening classes, audio CDs from the English

series they study in the language schools (e.g. Top Notch and American English Files) were used to teach listening. After introductory explanations, three assorted phases for listening instruction (pre-while -and post listening stages), like our experimental groups, were practiced. The subjects were made to listen to the audio CDs in the classrooms. Two main techniques were utilized to evaluate if they have grasped the contents. First, the audio CD scripts were segmented into short sentences and even phrases and played. The subjects were asked to repeat the sentences or phrases they recently heard. In this way, the whole audio CD scripts were practiced. Second, the subjects were given fill in the blanks, completion, and multiple choice questions for each CD scripts.

DATA ANALYSIS

To collect the data, two types of test, a pretest and a posttest, was run in the current study. To delve into the purpose of the study, we utilized certain statistical procedures to analyze and interpret the data elicited by the study. Test of ANOVA was used to compare the means of different experimental and control groups. Moreover, Independent sample t-test was also run to determine the effect of gender and various video exposures (animation/ordinary) on the subjects' listening skill.

RESULTS

Before analysis, the normal distributions of the groups' scores on the tests were checked.

Table 2. The Normal Distribution of Animation Group's Scores on Tests

		pretest	posttest
N		60	60
Normal Parameters ^{a,b}	Mean	3.67	5.80
	Std. Deviation	1.117	1.015
Most Extreme Differences	Absolute	.258	.237
	Positive	.258	.196
	Negative	-.142	-.237
Kolmogorov-Smirnov Z		1.414	1.298
Asymp. Sig. (2-tailed)		.073	.069

a. Test distribution is Normal.

b. Calculated from data.

c. group = animation

As it is evident in Table 2, the animation group's scores on tests were distributed normally, that is, $p > 0.05$ in any case.

Table 3. The Normal Distribution of Ordinary Group's Scores on tests

		pretest	posttest
N		60	60
Normal Parameters ^{a,b}	Mean	3.76	4.51
	Std. Deviation	1.159	1.006
Most Extreme Differences	Absolute	.165	.213
	Positive	.147	.167
	Negative	-.165	-.213
Kolmogorov-Smirnov Z		.901	1.168
Asymp. Sig. (2-tailed)		.391	.130

a. Test distribution is Normal.

b. Calculated from data.

c. group = ordinary

Table 3 shows that the ordinary group's scores on tests were normally distributed, that is, $p > 0.05$ in any case.

Table 4. The Normal Distribution of Control Group's Scores on Tests

		pretest	posttest
N		120	120
Normal Parameters ^{a,b}	Mean	3.12	3.25
	Std. Deviation	1.066	1.048
Most Extreme Differences	Absolute	.221	.225
	Positive	.221	.153
	Negative	-.179	-.225
Kolmogorov-Smirnov Z		1.210	1.230
Asymp. Sig. (2-tailed)		.107	.097

a. Test distribution is Normal.

b. Calculated from data.

c. group = control

Table 4 displays the normal distribution of the control group's scores on tests, that is $p > 0.05$.

Table 5 clearly shows different statistical parameters (mean, standard deviation, minimum, and maximum scores, skewness and kurtosis) of the groups. As it is displayed in the table, compared to pretest performances, all groups have improved in their performances in the post tests.

Table 5. Descriptive Statistics Showing Different Statistical Parameters of the Groups

group		pretest	posttest
animation	Mean	3.67	5.80
	N	60	60
	Std. Deviation	1.117	1.015
	Minimum	2	4
	Maximum	6	8
	Skewness	.505	-.054
	Kurtosis	-.528	-.239
ordinary	Mean	4.03	4.51
	N	60	60
	Std. Deviation	1.159	1.006
	Minimum	2	3
	Maximum	6	7
	Skewness	-.069	-.349
	Kurtosis	-.726	-.130
control	Mean	3.12	3.25
	N	120	120
	Std. Deviation	1.066	1.048
	Minimum	2	2
	Maximum	6	6
	Skewness	.253	-.194
	Kurtosis	-.255	-.712

Therefore, in order to check whether the differences among groups in posttest performances were statistically significant or not, a one-way ANOVA was run. When the requirements of ANOVA were fulfilled, the researchers ran one-way ANOVA and other related Post Hoc comparisons the results of which are presented in Tables 6, 7, 8, and 9.

Table 6. Descriptive Statistics of the Groups in the Posttest

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Animation	60	5.8083	1.28581	.16600	5.4762	6.1405	2.00	8.00
Ordinary	60	4.5167	1.43198	.18487	4.1467	4.8866	1.00	7.50
Control	120	3.2500	1.27725	.16489	2.9201	3.5799	1.00	6.00
Total	240	4.5250	1.68983	.12595	4.2765	4.7735	1.00	8.00

Table 6 vividly shows the general descriptive statistics needed for ANOVA calculation.

Table 7. One way ANOVA for the Posttest

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	196.358	2	98.179	55.206	.000
Within Groups	314.779	177	1.778		
Total	511.138	179			

p-value <.05

Table 7 indicates that the difference among the three groups' means is significant (P-value (0.05) >.000). Since the difference between the groups' means in ANOVA test was significant, different combinations of the groups were compared. This comparison

pinpoints where the difference exactly exists. Scheffe test was used for post hoc comparisons.

Table 9. Post Hoc Comparison with Scheffe Test

	(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Scheffe	animation	ordinary	1.29167*	.24348	.000	.6906	1.8927
		control	2.55833*	.24348	.000	1.9573	3.1594
	ordinary	animation	-1.29167*	.24348	.000	-1.8927	-.6906
		control	1.26667*	.24348	.000	.6656	1.8677
	control	animation	-2.55833*	.24348	.000	-3.1594	-1.9573
		ordinary	-1.26667*	.24348	.000	-1.8677	-.6656

*. The mean difference is significant at the 0.05 level.

According to the results gleaned from the Scheffe test, the differences between the groups' means are clearly located. Some requisite pairwise comparisons in groups' means (at the 0.05 level) could be inferred as follows:

- Animation mean > ordinary mean (the difference is 1.29)
- Ordinary mean > control mean (the difference is 1.26)
- Animation mean > control mean (the difference is 2.55)

Both animation and ordinary groups outperformed the control group and animation experimental group performed significantly better than the ordinary control group in the posttest. Regarding such results, the first null hypothesis asserting that content-based multimodal instructive animations have no significant effect on the learners' English listening skill is rejected.

In order to pinpoint the potential effect of gender between the subjects in each experimental group, independent t-tests were run. As mentioned previously, each experimental group was consisted of 60 members, 30 from each gender. Male and female participants' performances in every experimental group were compared distinctively. In each case the grouping variable was biological sex. Tables 10 and 11, 12, and 13 depict the related descriptive and inferential statistical analysis.

Table 10. Descriptive Statistics of the Animation Experimental Group

Groups	sex	N	Mean	Std. Deviation	Std. Error Mean
animation	male	30	30.0000	17.60682	3.21455
	female	30	31.0000	17.60682	3.21455
posttest	male	30	4.1000	1.24152	.22667
	female	30	4.2333	1.31131	.23941

Table 11. Independent Sample T-Test for Gender Differences for Animation Group in the Posttest

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
animation	Equal variances assumed	.000	1.000	.220	58	.827	-1.00000	4.54606	-10.09993	8.09993
	Equal variances not assumed			.220	58.000	.827	-1.00000	4.54606	-10.09993	8.09993
posttest	Equal variances assumed	.076	.783	.404	58	.687	-.13333	.32969	-.79329	.52662
	Equal variances not assumed			.404	57.827	.687	-.13333	.32969	-.79333	.52666

As the statistics show, t observed value in the above table does not exceed the value of the critical t. For animation group the t-observed value, 0.404, is lower than the t-critical value, 2.021, at 0.05 level ($0.404 < 2.021$). Therefore, in animation group, as statistics indicate, gender had no significant effect.

Table 12. Descriptive Statistics of the Ordinary Experimental Group

	sex	N	Mean	Std. Deviation	Std. Error Mean
ordinary	male	30	30.0000	17.60682	3.21455
	female	30	31.0000	17.60682	3.21455
posttest	male	30	4.0667	1.11211	.20304
	female	30	3.8667	1.14420	.20890

As the statistics show, t observed value in none of the tables exceeded the value of the critical t. For the ordinary group, the observed t value, 0.678, is lower than the t-critical, 2.021, at 0.05 level ($0.678 < 2.021$). These inferential calculations could give the researchers enough confidence to wittingly hold the assertion that gender had no significant effect on the listening comprehension of the participants under experimentation in this study.

Table 13. Independent Sample T-Test for Gender Differences for Ordinary Group in the Posttest

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ordinary	Equal variances assumed	.000	1.000	.220	58	.827	-1.00000	4.54606	-10.09993	8.09993
	Equal variances not assumed			.220	58.000	.827	-1.00000	4.54606	-10.09993	8.09993
Posttest	Equal variances assumed	.290	.593	.687	58	.495	.20000	.29132	-.38314	.78314
	Equal variances not assumed			.687	57.953	.495	.20000	.29132	-.38315	.78315

Summary of findings

The results of ANOVA showed that the main effect of the treatment was significant [$F_o(55.20) > F_c(3.11)$]. The significance observed in the ANOVA legitimized other Post Hoc analyses such as Scheffe test. Table 9 depicted pairwise comparisons between the three groups using Scheffe. It was observed that animation group outperformed the other two groups and the ordinary group outperformed the control group. Hence, exposure to animation videos was more effective than ordinary exposure and the routine or traditional instruction, and ordinary exposure had more vigorous effect than the traditional method of teaching as far as the participants' listening improvement was concerned. According to these results, the answer to the first research questions is that content-based multimodal instructive animations had significant effect on the EFL students' listening skill. The results, in turn, rejected the first null hypotheses; 'content-based multimodal instructive animations have no significant effect on the learners' English listening skill'.

On the other hand, to provide an answer to the second research question, as independent sample t-test analysis depicted (see tables 10, 11, 12, and 13), for both experimental groups, it can be statistically asserted that gender made no significant difference between subjects on using content-based multimodal instructive ordinary and animation videos to improve listening skill. Subsequently, the second null hypothesis expressing that; 'gender makes no significant difference between subjects on using content-based multimodal instructive animations to improve listening skill' is verified.

DISCUSSION

The results in the current study can affirm positively apropos of the following potential interrelated estimations: 1) combined or multimodal quality in the paradigmatic content-based manipulation of the input might have guaranteed the prosperity in terms of the experimental groups' better performance and in particular, animation video group's general outperformance, and 2) the affective saliency resided in the content of the input materials could have eventuated in such outcomes.

Pertinent to the first estimation, specified in the current study is a contribution to a discussion for analyzing arbitrary input/output modality types and their multimodal combinations and their capabilities of information representation and exchange. In particular, types of exposing students (as types of modalities) to language input in two assorted types of representation (animation and ordinary) and their achieved output in terms of listening skill may justify the results gleaned from the experimentations. One possible reason for the results achieved can reside in the notion making up the main tenet of the Dual Coding Theory (DCT) asserting that learning is generally richer when information is processed through both verbal and non-verbal channels rather than just one (Clark & Paivio, 1991). In this sense, one underlying supposition for the DCT appears to be the fact that duality or multimodality of the input can result in a more quantitative or qualitative output. In the same way, the results of the current study which gained a multimodal representation of input (auditory/ visual/ kinesthetic) can substantiate DCT in that the byproduct or the ultimate output –performance in listening- had been significantly improved. Also, consistent with DCT, attention should be focused on the cognitive demands, proposed in Cognitive Load Theory (CLT), that the training exercise imposes in order to ensure that an overload situation does not result. Subordinately, for the possible instructional efficiency of the training demand, one more suggestive theory supporting the modality design of this study can be the CLT. Moreover, positive modality effect, as emerged in the duality or multimodality of input in the current study, one way or another, might have effectively expanded the limited memory capacity of the under experimentation subjects and have justified the achieved results. Output superiority of participants in listening in both types of exposures over the control group in pre and post tests can be justified the alleged effects arisen via this multi-channel presentation.

Another probable reason can be conceived through the notion of input/output saliency. That is, to facilitate the ideal condition for learning to take place, there is a need to expose learners to input that is both enhanced to make it noticed and modified in some ways in order to make it comprehensible. Regarding that, the input should be stimulating enough as to be resource for learners to push output. In the case of viewing video materials, there is a need to process different modes of communication: a visual mode, a verbal one, and sound to convey meaning. In addition, these materials can be used as focus for learners' interaction and thus productive skills can be practiced alongside receptive skills. The collaboration of such training activities might have led to saliency in both input and output and, in turn, as the results reveal, to foster

performance in listening skills among experimental groups. Theoretically, the collaborative presentation of materials and its potential fostering effects can also be traced in the tentative Gardner's (2006) multiple intelligences theory. In his view, these "multiple entry points into the content are especially valuable in making the input and consequently output be more salient, as they offer greater accommodation to the multiple intelligences of a diverse group of students" (p. 7). While traditional material presentation methods such as textbooks often take a primarily linguistic approach to learning, video's multiple modes can take a variety of approaches, such as aesthetic, logical, inter and intrapersonal in addition to linguistic, thus addressing the needs of a broader range of learners.

Concerting the second abovementioned estimation, the media's affective effects can be mentioned. Interest in and enthusiasm for materials used in class; persistence with the learning task, as indicated by level of attention and action for an extended duration, and levels of concentration and enjoyment seem to be the byproduct of potential affective factors in this study. Engaging in topic based video clips as media, the experimental groups' superiority in listening seemed to be related to the possible media effects on arousing the students' motive to receive, to learn better, and thereby, to listen significantly better. In addition, the abovementioned cognitive as well as affective input/output optimization might be additionally augmented if a physiological perspective of multimodality is also distinctly investigated. With this in mind, we can think of the circumstances under which memory can process input optimally. In this regard, Transfer Appropriate Processing theory (TAP) can best describe the conditions instructionally germane to the current study.

Here two notions can come into play; the notion of affective saliency in content and the notion which was supposed to add novelty to the current study, namely types of exposure (animation VS ordinary). Pertaining to affective saliency, the theory of Transfer Appropriate Processing (Morris, Bransford, & Franks, 1977) suggests that the "closer the training environment is to the operational environment in terms of promoting the learning of necessary skills, the more training transfer can be expected" (p.520). As the training environment provided by video clips is very close to the real environment (authentic environment), more training input might have been transferred and thereby this had led to more output (listening performance) in this study.

In addition to the all abovementioned merits video presentation might have, concerning the type of video exposure effect, animation group's outperformance in this study can be germane to what animations and cartoon my provide for children in particular. Psychologically speaking, cartoons provide children with an animated imaginary world to make their real world be less stressful and less serious (Ramadhika, 2012). In such an atmosphere, one can surmise that a stress free child might be more "competent for receiving the micro-skills needed to listening, e.g. retaining chunks of language, recognizing English stress patterns, processing speech flow, distinguishing word boundaries, etc." (Ramadhika, 2012, p. 24).

Concerning gender, at the outset, it must be reminded that any study on gender-related differences must acknowledge that the effect of the sex variable is dependent on the task performed and the circumstances under which the task is carried out (Nyikos, 1990). Therefore, the findings of gender studies in the field of skill comprehension can vary "depending on multiplicity of factors" (Phakiti, 2003, p. 652). A predominate feature in most of gender related studies is the effect of content type. Gender-related characteristics of the content have been confirmed to account for the superiority or inferiority of one sex to the other in some of these studies (e.g. Brantmeier, 2003; Phakiti, 2003; Pae, 2004). According to Shokouhi and Parvarersh (2010), the contribution of content and topic to such gender-related studies can be viewed psychologically and culturally. Psychological reader-response theories and cultural approaches to content interpretation alike assume that "skill receiving experience is shaped to some degree by patterns of identification or similarity between the receiver and the characters or experiences in the content of the learning material" (Griswold, 1987, p.1105). This leading effect of content characteristics can support the conclusion that gender-biased content may lead in gender differences and conversely, gender-unbiased content may result in no gender differences in comprehension. With this in mind, a possible explanation for the lack of gender differences in the present study in overall listening comprehension scores is that all the texts were sex-fair or gender-unbiased.

Gender-related preferences in topic have been also shown to have a determining factor in some gender related studies (e.g., Brantmeier, 2004). In these studies, patterns of preference (topic preferences) are reflected in the performance on the tests of skill comprehension. The assumption that there is "better memory for stimuli that is consistent with societal stereotypes about males and females" (Bigler & Liben, 1990, p.141) can be exploited in order to lend credibility to this fact. As stated formerly, sex-fair topics, topics which are not bound up with a particular sex, were utilized in the present study. Thus, the incongruity of topics to the gender-stereotyped patterns could counteract or diminish the sex-oriented effects.

The results from a bulk of research articles, particularly those mentioned in literature, (e.g. Rahimy & Asaei, 2012; Al-Yaari, 2013; Sigrist, Rauter, Riener & Wolf, 2013) give straight evidence to findings of this study. In terms of multimodality effects on skill learning, in general, the results of the current study can be in consistent with that of Mustafa (1999). He concluded how learning styles theory was related to multisensory approaches to teaching, described a multisensory approach in skill training method, and discussed how educational programs using these approaches had been effective in improving student achievement (ERIC, para.8) In the same line, the overall results of the current study can offer evidence to substantiate the theoretical claims by Gordon and Rosenblum (2005) in that the modal flexibility may provide some saliency in output comparing to that of using a modality-neutral strategy. The Liu's (2010) investigation on the effect of multi-sensory (auditory and visual senses) role play videos on arousing students' motivation for speaking and listening , in a way, backed up our study in that both studies have exploited somehow analogous material presentation. In conformity

with Ali, Naseer Khan, and Farridullah (2011), our study confirms using topic based audio visual aids frequently while teaching skills as the use of audio visual aids can create a lot of interest and make teaching-learning process more effective.

However, to be honest, in the literature, extremely few counter studies could be found to be flatly inconsistent with our study in using video clips as treatment to listening skill learning. In whatever degree, one apparent rudimentary form of discrepancy might be ascribed to the sort of exposure to videos. For instance, in the study done by Iwaski (2008), video games could not facilitate speaking and listening skills. This might be due to the fact that, unlike us, she presented teaching materials void of any scheduled set up –full of aggressive cartoons and in the somewhat haphazard fashion. Besides, content of video clips seems to be a good ground for conflict in the study by Arsenault (2009). He used only games with violence in content.

CONCLUSION

The current study, though limited in scope, generated a large amount of data touching on important issues in the designing, instruction, material presentation. Succinctly stated, the findings of this study suggest that scenario based exposure to topic-based and animation video clips as comprehensible input can bring about more statistically efficient output (significant performance in listening). In particular, the study can propose that: multimodality of input may theoretically give full account of the quality manipulation of output (listening). Cognitively, the input/output saliency transpires to be prognosticated in the light of the broad Dual Coding Theory and its subsequent ramifications; Cognitive Load Theory and Transfer Appropriate Processing. In the same line, the findings tacitly conclude that input enhancement can take place under desirable circumstances in channel duality representation (audio and visual). In comparison to those of the ordinary videos, however, students who received animation mode of exposing significantly outperformed in listening ability; this could be justified through TAP theory. One more facet of modality-effect of input was to assign topic attribution. Also, as an affective factor, topic-based animation could possibly enhance the task concentration and enjoyment and led to performance superiority in the task.

PEDAGOGICAL IMPLICATIONS

The present findings have several implications for educators, syllabus developers, students, and researchers, so far as the quality of instruction is concerned.

Our strategic representation of materials is amenable for educators' control and intervention over the content and the mode of exposing students' to instructional subject matters. They can make strategic decision to leave behind the antiquated instructional materials by exposing students to more affective audio visuals. An exclusive phased rendering of exposure, as practiced in our inquiry, as a reliable source, can be modestly consulted. Using the results of the study may be beneficial to EFL teachers in that they gain a deeper insight into the many virtues of supplementary teaching aids. This way, teachers would be better able to adopt instructive animation

video clips as both cognitively and affectively determinative mediums to instruct and foster listening skill. Contemplating this alternative option available for them in our research, they may introduce a little but deserving change in the curriculum.

Inspired by our research outcomes, syllabus designers or curriculum developers, in the interim, should ponder ways to make the exposing modules in this study more appealing to the target audiences. To enrich the quality of the curriculum, animation video embedded text would be adequately advisable for them to offer in this regard. They can bedeck school children English textbook with video animation and cartoon illustrations, for instance. The college students' English courses can be coupled with pieces of motivating feature films and engrossing video clips. Overall, accompanying skill training with audio-visual aids must become an inalienable right for inside the classroom practice. This is conceived as a burden of responsibility for syllabus designers.

Students, the true intent of our study, assume great importance in this wise. For them, still extant scarcity of animation videos in Iranian formal English pedagogical methods and even syllabi, should no longer be a substantial complaint to keep criticizing about. In spite of the government's seemingly oblivious reluctance to introduce facilitative audio-visuals in formal language teaching settings, the time may have come for students themselves to adopt the animation video clips as the spur to a new insight in skill learning on their own.

In addition to implications that are directly related to the focus of this research, a few words must be said in favor of the use of qualitative methods for research in listening enhancement strategies. As was seen in this study, strategic presentation of materials was accompanied by manipulated audio-visual contents (topic-based instructive animation videos). This line of thinking might introduce an invigorated prospect to germane inquiries and might also replenish energies for renewal efforts in this domain. Researchers can incline to further synthetic forms of material representation in their investigations to see whether or not their devised combinations yield contributory results to skill learning in EFL settings.

LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

As is true of any inquiry, one attains clarity on some issues while others remain opaque. The extrapolations we will make from our results need to be placed in the context of several limitations. One possible limitation of the current study can reside in the fact that the participants were all EFL elementary learners. So, the study cannot be satisfactorily generalized beyond EFL elementary students. Another reason to limit the scope of the study is that the same experimenter ran both instructional activity phases. Although in some respects having the same teacher controls for variability between different teachers, it does raise the issue of possible experimenter's biasness. It reminds one of Labov's "observer paradox", cited in Nunan (1994, p. 63). This study could be replicated with various L2/FL proficiency levels over a longer period of time. Students with different levels might yield different treatment effects in terms of listening skill.

REFERENCES

- Abrams, S, Cruse, p, & Kunze, J. (2008). Preservation is not a place. *The International Journal of Digital Curation*, 1 (4), 8-21.
- Ainworth, S. (2008). How do animations influence learning? In D. Robinson & G. Schraw (Eds.) *Current Perspectives on Cognition, Learning and Instruction. Recent Innovations in Educational Technology that Facilitate Student Learning*, pp. 37-67. Charlotte, North Carolina: Information Age Publishing.
- Ali, M., Naseer, M, and Farridullah, M. (2011). Effects of audio-visual aids in students' learning at secondary levels in district Rawalpindi. *Interdisciplinary Journal of Contemporary Research in Business*, 2 (3), 439-452.
- Al-Yaari, S.A. (2013). Using audio-visual aids and computer –assisted language instruction (CALL) to overcome learning difficulties of speaking in students of special needs. *Journal for the Study of English Linguistics*, 1(2), 231-255.
- Arsenault, D. (2009). Video game genre, evolution and innovation. *Eludamos. Journal for Computer Game Culture*, 3(1), 149–176.
- Baltova, I. (1994). Impact of video on the comprehension skills of core French students. *Canadian Modern Language Review*, 50(3), 506-531.
- Berk, R. A. (2009). Multimedia teaching with video clips: TV, movies, YouTube, and MTVU in the college classroom. *International Journal of Technology in Teaching and Learning*, 5(1), 1–21.
- Bigler, R.S. & Liben, L.S. (1990). The role of attitudes and interventions in gender-schematic processing. *Child Development*, 61(12), 1440-1452.
- Bodemer, D. R., Ploetzner, R., Bruchmuller, K., & Hucker, S. (2005). Supporting learning with interactive multimedia through active integration of representations. *Instructional Science*, 33(1), 73–95.
- Brantmeier, C. (2003). Does gender make a difference? passage content and comprehension in second language reading. *Reading in a Foreign Language*, 15 (4), 1-14. <http://nflrc.hawaii.edu/rfl>
- Brantmeier, C. (2004). Gender, violence-oriented passage content and second language reading comprehension. *The Reading Matrix*, 4 (2), 1-19. <http://www.reading.org/pub/journals>
- Brinton, D., Snow, M., & Wesche, M. (1989). *Content-based second language instruction*. New York: Newbury House.
- Cakir, I. (2006). The use of video as an audio-visual material in foreign language teaching classroom. *The Turkish Online Journal of Educational Technology*, 2(3), 67-72.
- Calverley, G, Childs, M, & Schnieders, L. (2007). *Video for education: volume 1*. United Kingdom: Headington, Oxford.

- Cameron, L. (2001). *Teaching languages to young learners*. Cambridge: Cambridge University Press.
- Canning-Wilson, C., (2000). Role of Video in the F/SL Classroom, 69-76. In S. Riley, S. Troudi, & C. Coombe (Ed.), *Teaching, Learning and Technology*, TESOL Arabia 1999 Conference Proceedings, TESOL Arabia 1999 Conference March 8-10, 1999.
- Clark, J.M., & Paivio, A. (1991). Dual coding theory and education. *Educational Psychology Review*, 3 (1), 149-210.
- Gardner, H. (2006). *Multiple intelligences: a new horizon*. New York: Basic Books.
- Gordon, S. G., & Rosenblum, L. D. (2005). Effects of intrastimulus modality change on audiovisual time-to-arrival judgments. *Perception & Psychophysics*, 67 (4), 580-594.
- Griswold, W. (1987). The fabrication of meaning: literary interpretation in the United States, Great Britain, and the West Indies. *The American Journal of Sociology*, 92 (8), 1077-1117.
- Halliwell, S. (1992). *Teaching English in the primary classroom*. New York: Longman.
- Harmer, J. (2001). *The practice of English language teaching*. (3rd. Ed.). Essex: Pearson Education Limited.
- Hatch, E. and Farhady, H. (1981). *Research design and statistics for applied linguistics* (3rd ed.). Tehran: Rahnama Publications.
- Iwaski, I. (2008). Entertainment for the EFL classroom: exploring effective use of audiovisuals. *Chinese EFL Learning*, 45 (1), 1-18.
- Kasper, L.F. (2000). *Content-based college ESL instruction*. New Jersey: Lawrence Erlbaum Associates Publisher.
- Liu, X. (2010). Arousing the college students' motivation in speaking English through role-play. *International Education Studies*, 3 (1), 136-144.
- Morris, C. D., Bransford, J. D., & Franks, J. J. (1977). Levels of processing versus transfer appropriate processing. *Journal of Verbal Learning and Verbal Behavior*, 16 (2), 519-533.
- Mustafa, B. M. (1999). Multisensory approaches and learning styles theory in the elementary school: summary of reference papers. *ERIC*. Report Nom: ED 432388.
- Nyikos, M. (1990). Sex-related differences in adult language learning: socialization and memory factors. *The Modern Language Journal*, 74(2), 273-284.
- Pae, T. I. (2004). Gender effect on reading comprehension with Korean EFL learners. *System*, 32(8), 265-281.
- Phakiti, A. (2003). A closer look at gender and strategy use in L2 reading. *Language Learning*, 53, 649-702.
- Postosi, J.A., Loaiza, E.G., and Garcia, A.L. (2008). *Using video material as a teaching strategy for listening comprehension*. Unpublished doctoral dissertation, Reykjavík Island University, Colombia.
- Rahimy, R., & Asaei, S. M. (2012). Audio texts and English speaking ability: evidence from Iranian EFL learners. *Academic Research International*, 3(2), 607-616.

- Ramadhika, B. (2014). *Improving students' listening skills using animation videos for the eighth grade students of SMP 6 MAGELANG*. Unpublished MA Thesis, Yogyakarta State University, India.
- Schnotz, W, and Rasch, T. (2005). Enabling, facilitating and inhibiting effects of animations in multimedia learning: Why reduction of cognitive load can have negative results on learning. *Educational Technology; Research and Development*, 53 (1), 47-58.
- Shokouhi, H. & Parvaresh, M. N. (2010). Post-adjunct reading comprehension questions and meaning construction: a case of gender study. *Journal of Language Teaching and Research*, 1(1), 8-19.
- Sigrist, R., Rauter, G., Riener, R., & Wolf, P. (2013). Augmented visual, auditory, haptic, and multimodal feedback in motor learning: A review. *Psychonomic Bulletin & Review*, 20(1), 21-53.
- Slatterly, M., and Willis, J. (2001). *English for primary teachers*. Hong Kong: Oxford University Press.
- Van Duzer, D, (1997). Improving ESL listening skill: at the workplace and beyond. *Psychonomic Bulletin & Review*, 19(6), 1148-1153. Retrieved from: <http://www.cal.org/cae/a/esl>.
- Wang, Zh. (2015). An analysis on the use of video materials in college English teaching in China. *International Journal of English Language Teaching*, 2 (1), 23-28.
- Yildirim, R., and Torun, F.P. (2014). Exploring the value of animated stories with young English language learners. *TOJET*, 13 (4), 47-60.