



The Effect of Exposure to Cartoons on Language Proficiency

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ABSTRACT

Today, access to various audiovisual programs such as cartoons has become very easy through the development of audiovisual technologies such as CD and DVD players. In the same line, many studies have emphasized on the psychological values of utilizing cartoons in language learning. Accordingly, the present study aims at investigating the effect of exposure of cartoons on language proficiency at the intermediate level. To this end, a language proficiency test was administered to 90 language learners. Then, a smaller population of 40 language learners were selected as intermediate language learners and randomly divided into two groups, i.e. group one and group two. During the experiment, group one was instructed via the use of cartoons. In contrast, group two was instructed by a sample of selected audiovisual programs rather than cartoons. At the end of the study which lasted for 6 weeks, both groups took another sample language proficiency test to find out whether or not if any changes happened regarding their language proficiency. The results of the post-test showed that the first group participants who had exposure to cartoons had lesser language proficiency improvement in comparison to the second group of participants who had exposure to non-cartoons programs. This proved that the quality of the language input should be given initial importance.

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INTRODUCTION

There are many internal as well as external factors which influence second language acquisition (SLA). Among them, the language input that learners receive in SLA is one of the external factors which plays a fundamental role. According to Ellis (2008), "theories of SLA attach

different importance to the role of input in language acquisition process but they all acknowledge the need for language input” (Ellis, 2008, pg.243).. Considering the fact that some sort of language input is necessary to acquire the language, the ever-lasting developments in audiovisual technologies has proven to be very effective in providing the language learners with easy access to various audiovisual programs which can be incorporated in various language learning situations (Bahrani & Tam, 2012). In fact, various types of audiovisual mass media programs brought by different technologies have the potential to provide the necessary language input for language learning in both English as a Foreign Language (EFL) context and English as a Second Language (ESL) context. These types of programs are considered as sources of authentic language input which have the potential to indirectly involve the language learners in the language learning process.

The use of authentic language input through authentic materials in foreign/second language learning has a long history. For example, Henry Sweet (1899, cited in Gilmore, 2007) is considered as one of the first linguists who utilized authentic texts because he was aware of their potential advantages over contrived materials.

Taylor (1994) defined authentic language material as any material in English which has not been specifically produced for the purpose of language teaching. Gilmore (2007) considered authentic language materials as the language conveying a real message which is produced by a real

speaker or writer. In the same line, Nunan (1999) defined authentic language materials as spoken or written language material that has been produced in the course of real communication and not specifically produced for the very purpose of language teaching.

There are varieties of authentic teaching sources and materials available to EFL/ESL teachers to utilize different materials for different needs for various teaching situations in formal and in informal language learning settings. While social interaction as a source of authentic language input is not available in EFL context, other sources of authentic language input are available in both EFL and ESL contexts. In this relation, desktop technology such as computers and non-desktop technologies such as through the use of TV and radio can provide easy access to authentic audiovisual language input for SLA development in both EFL and ESL contexts.

The review of the literature on the integration of different audiovisual mass media programs that provide authentic language input for language learning highlight the pedagogical value of such materials. As Gebhard (1996), p. 183) put forth, there are “many sources of authentic language materials from various audiovisual sources such songs, cartoons, news broadcasts, movies, and documentaries that language teachers and learners can use for language learning purposes” (Gebhard 1996, p. 183).

In the same line, many studies have highlighted the pedagogical values of

employing various audiovisual mass media programs such as news broadcasts, movies, songs, and cartoons to provide authentic language input for language learning. Among them, news broadcasts have been observed to boost listening comprehension and speaking proficiency as well as help language learners build up their vocabulary over time (Bahrani & Tam, 2011; Baker, 1996; Brinton and Gaskill, 1978; Poon, 1992). Movies, songs, and cartoons, for example, have also been considered to be pedagogically valuable authentic audiovisual language materials for language learning because they reduce the affective filter and increase motivation (Aida, 1994; Chapple & Crutis, 2000; Clark, 2000; Doring, 2002; Heffernan, 2005; Lowe, 1995; Ryan, 1998; Schoepp, 2001; Trapp, 1991). However, more particularly, the studies that have considered cartoons as a source of authentic language input have focused on the psychological aspects of employing such materials in language learning (which source). Indeed, the effect of exposure to cartoons on language learning has not been investigated empirically.

In the view of the above, the present research aims at shedding light on the studies which highlight the use of different audiovisual programs, particularly cartoons, as authentic sources of language input for SLA. More specifically, the present research will provide empirical evidence on the effect of exposure to cartoons as a source of authentic language input on language proficiency.

CARTOONS IN LANGUAGE LEARNING

The application of various authentic programs such as news, movies, songs, and cartoons from a wide range of audiovisual technologies such as satellite or conventional TV to provide the necessary language input for SLA have attracted increased interest among researchers since the 1970s. Although, the review of the related literature indicates that most of the researches around the use of audiovisual news for SLA were anecdotal than experimental, a few researchers such as Brinton and Gaskill (1978), Baker (1996), and Poon (1992) provided empirical evidence of the role of exposure to news on improving listening skills. The results of these studies were based on the findings from pre-post tests which were administered to an experimental and a control group of language learners where the experimental group had exposure to news whereas the control group did not. More recently, Bahrani and Tam (2011) also found out that exposure to news as a genre specific listening material compared to miscellaneous listening materials reinforces speaking proficiency more.

Without providing empirical evidence, Ryan (1998), Chapple and Crutis (2000), Heffernan (2005) also considered movies as authentic and appropriate teaching materials which are intrinsically motivating for SLA. Aida (1994), Lowe (1995), Schoppe (2001), and Trapp (1991) have also proposed songs in the foreign/second language classroom to lower anxiety and increase motivation, provide physiological benefits, guide

lesson planning and practical classroom, familiarize the language learners with dialectal variations, and enhance cultural awareness and sensitivity.

The pedagogical value of cartoons as an authentic source of language input has been the focus of few studies. In an anecdotal study conducted by Clark (2000), it was underscored that cartoons can engage the attention of the learners and present information in a non-threatening atmosphere. Moreover, cartoons have the potential to push thinking processes and discussion skills (Clark, 2000). Another study was carried out by Doring (2002) focusing on the effect of exposure to cartoons on language learning. Reflecting on his own experience of utilizing cartoons, Doring (2002) underscored the point that cartoons can encourage thinking processes and discussion skills. Cartoons can also engage the attention of the learners and present information in a non-threatening atmosphere. To Doring (2002), the language learners who had exposure to cartoons could produce oral answers that were very proactive and interesting in various discussions held in the classes. In addition, the discussions were linguistically rich and the students had high confidence. It seems that the high confidence that the language learners acquired is due to exposure to the cartoons which create low affective filter atmosphere for learning.

In the same line, Rule and Ague (2005) carried out a research on students' preferences to use cartoons in language learning. Similar to songs, cartoons are preferred because they create low affective filter atmosphere which

cause high degree of motivation. The high motivation achieved through exposure to cartoons is claimed to improve the memory of the language learners when they try to make connection between the new materials and the prior knowledge through analogy in a comfortable atmosphere (Rule & Ague, 2005). Rule and Ague also claimed that students who use cartoons can improve different language skills and achieve higher test scores. However, they did not further clarify which language skill(s) can be enhanced through exposure to cartoons.

In short, the point to be highlighted is the lack of empirical evidence to support the pedagogical values of cartoons for language development. In fact, the limited number of studies on the use of cartoons in language learning classes has highlighted the pedagogical value of cartoons in an anecdotal manner. In other words, they have emphasized the psychological aspects of utilizing cartoons in language learning without providing empirical evidence of the effect of the pedagogical values of cartoons.

RESEARCH QUESTIONS

The present study was set to answer the following research questions:

1. To what extent does exposure to cartoons as a source of authentic language input improve intermediate language learners' language proficiency?
2. To what extent does exposure to miscellaneous programs as a source of authentic language input improve intermediate language learners' language proficiency?

METHODOLOGY

Participants

The participants involved in this research comprised 40 intermediate language learners, both males and females aged between 22 to 31 selected from the Islamic Azad University in Iran, which is an EFL context. The 40 intermediate participants were selected from a population of 90 language learners majoring in TEFL on the basis of the scores which they obtained from a sample language proficiency test.

Instruments and materials

The first instrument was a sample IELTS language proficiency test which was used as a pre-test. The second instrument which was used as a post-test was another sample language proficiency test from IELTS. Both sample IELTS language proficiency tests were verified to be parallel and reliable before the study was carried out.

Regarding the materials that were used, it should be noted that two kinds of different audiovisual materials in the form of CDs were prepared and utilized. The first material was a collection of 10 hours of various cartoons such as Shrek 1, 2, 3, Toys, and Ice Age. The second material was a collection of 10 hours authentic programs rather than cartoons including various segments of news, movies, documentaries and songs.

Procedure

This research was conducted based on pre-test and post-test design. The first step to take, before the participants were selected,

was to verify that the two sample IELTS tests were parallel. Parallel tests are two tests of the same ability that have the same statistical means and variances with the same psychometric indices such item difficulty, item discrimination, reliability, validity when administered to the same group with a short interval. Although we may never have strictly parallel tests, we treat the two tests as parallel if the differences between their means and variances are not statistically great (Bachman, 1990, p. 168).

In view of that, both sample IELTS language proficiency tests were administered to 10 trial language learners with an interval of 2 days. Then, the means and the variances of both tests were calculated separately. The results of the statistical analysis of the both tests are shown in the following table.

According to the statistical analysis of the data obtained from the administration of both tests, the mean score for the first test was 5.57 and the mean score of the second test was 5.43. Furthermore, the variance of the first test was 0.51 and the variance for the second test was 0.54. This implies that the means and the variances of both tests were almost the same. Accordingly, both tests were verified to be parallel.

The second step was to verify the reliability of the two parallel IELTS language proficiency tests. Utilizing the scores obtained from the administration of both IELTS tests in the first step of instruments verification process, the researchers employed parallel tests method to verify the reliability of the two sample parallel IELTS tests. The results of the statistical analysis of

the reliability coefficients of the two parallel tests are shown in the following table.

From the results of the statistical analysis, the correlation between the two parallel tests was positive and significant. Moreover, the reliability coefficients of the two tests were calculated as 0.73 and 0.80.

After verifying both tests to be parallel and reliable, one of them was administered to 90 language learners and 40 participants who scored 5 or 5.5 out of 9 were selected as intermediate language learners. The 40 language learners were then randomly assigned to group one and group two with equal number of participants.

Throughout the experiment which lasted for 6 weeks (4 hours a week) in two separate conversation classes run by the same instructor, the experimental group was instructed with cartoons, while the the control group was instructed with miscellaneous programs.

During the experiment and for every session, group one was asked to watch and listen to a sample from the cartoon collection which was selected by the instructor outside the classroom. Participants were required to write a summary of whatever was heard. Later, when the class met, the instructor played the selected part of the cartoon again and the participants were required to participate in a follow up discussion. The same was done with the second group with the miscellaneous programs.

After 6 weeks of exposure, all the participants took the second sample language proficiency test from IELTS as a post-test to find out whether there was any change in their language proficiency.

RESULTS AND DISCUSSION

To provide answers to the research questions, the data obtained from the administration of pre-post tests to group one and group two

TABLE 1
Descriptive statistics related to the administration of the two tests to the same group

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
First Test	20	4.00	6.00	5.57	0.758	0.51
Second Test	20	4.00	6.50	5.43	0.745	0.54
Valid N	20					

TABLE 2
Reliability Statistics related to the two parallel tests

Common Variance	0.46	
True Variance	0.49	
Error Variance	0.06	
Common Inter-Item Correlation	0.83	
Reliability of Test 1 (Cronbach's Alpha)	0.73	N=10
Reliability of Test 2 (Cronbach's Alpha)	0.80	N=10

were compared statistically by means of paired samples t-tests. The following tables show the statistical analysis of group one and group two participants' pre-post tests scores.

In relation to group one performance in the pre-post tests, it should be mentioned that the mean score of the participants in group one in the pre-test was 5.04 out of 9. This mean score rose to 5.09 in the post-test which indicates the fact that a minor progress was made in their performance. The t-test result obtained was not significant ($t=-0.754$, $df=19$, paired sample, one-tailed, ns.) which indicates that the improvement was not significant.

In relation to the data obtained from the pre-post tests for group two, the mean score in the pre-test was 5.03 out of 9 and in the post-test was 5.67 out of 9. This progress can be interpreted as improvement. However, in order to find out if this positive change in the mean score can be interpreted as a significant improvement or not, a statistical analysis of t-test should be conducted for

the scores of group two. The result of the t-test that was performed shows that the difference is significant ($t=-3.764$, $df=19$, paired sample, one-tailed, $p<0.01$).

The reason behind the difference in the language proficiency development of both groups may be related to the quality of the language input embedded in the type of audiovisual mass media programs which they had exposure to during the experiment. In relation to the first group of participants' insignificant improvement in language proficiency through exposure to cartoons, the point can be mentioned that although cartoons are considered to be pedagogically valuable sources of authentic language materials which have the potential to be utilized for language learning (Clark, 2000; Doring, 2002; Rule & Ague, 2005), the type of language input which is embedded in cartoons is largely modified or simplified to ease comprehension. However, while comprehending modified or simplified language input of cartoons requires less cognitive processing for intermediate

TABLE 3

Descriptive statistics related to group one pretest and posttest results

Groups	N	MEAN	SD	t-test
Group one pretest	20	5.04	0.43	_0.754*
Group one posttest	20	5.09	0.65	

*T-observed= -0.754 T-critical=1.729 T-observed is smaller than t-critical

TABLE 4

Descriptive statistics related to group two pretest and posttest results

Groups	N	MEAN	SD	t-test
Group two pretest	20	5.03	0.58	_3.764
Group two posttest	20	5.67	0.49	

T-observed=-3.764 T-critical=1.729 T-observed is bigger than t-critical

language learners because of the type of data which is presented in a way to facilitate comprehension, it does not contribute a lot to SLA.

According to the observations of the researchers from both groups, the participants in the first group showed great interest in watching the selected cartoons and participated in the follow up discussions about the content. Moreover, they had fewer problems in comprehending the language embedded in the dialogues of the cartoons. This could be due to the fact that the language, and more particularly the vocabulary items, which are used in cartoons are not specialized. Nevertheless, the type of language input which the first group participants had exposure to might not have included much language data as opposed to the current level of the intermediate language learners to contribute to language proficiency development. According to White (1987), when an aspect of the language input is comprehensible, the acquisition of the missing structures would not occur. In fact, the incomprehensibility of some aspects of the given language input to the language learners draws their attention to specific features to be acquired.

In contrast, the participants in the second group who had exposure to various types of audiovisual programs, could improve their language proficiency to a significant level although they expressed some difficulties in relation to comprehending the language input which was presented to them. Non-cartoons materials such as news and movies include more unmodified language input

which required more input processing for comprehension. Cartoons, on the other hand, include more modified input which facilitates comprehension rather than causing language acquisition. As a matter of fact, comprehending other types of audiovisual programs rather than cartoons may require much more input processing. However, these types of materials include unmodified input which can contribute much more to SLA than modified input.

CONCLUSION

Various types of audiovisual programs such as cartoons, movies, songs, and documentaries have proved to be effective in increasing the motivation of the language learners. It is also believed that these types of programs are rich sources of authentic language input. However, some of these materials may not include the necessary or enough language input to contribute to language proficiency development.

In view of the above, the present research showed that intermediate language learners do not benefit a lot from exposure to cartoons. In contrast, they can benefit more from exposure to non-cartoon materials. One of the reasons behind the insignificant improvement of those intermediate participants who had merely exposure to cartoons may be related to the amount of language input which is embedded in cartoons. Cartoons include a type of language input which may not contribute to intermediate level language learners' language proficiency enhancement.

LIMITATIONS OF THE STUDY

This study examined the effect of exposure to cartoons as a source of authentic language input compared with the exposure to miscellaneous audiovisual programs rather than cartoons on language proficiency of intermediate language learners. Empirical evidence in the form of class observations in the two groups and student opinions on other types of audiovisual programs could be the investigations for future studies. In addition, the non-cartoons programs grouped together for this comparative study is movies, songs, news and documentaries. Other Studies which focus on other forms of non-cartoons programs may offer different results. The participants of the present research were intermediate language learners. Therefore, the findings cannot be generalized to low or advance levels language learners. In fact, the need to conduct the future studies with low or advanced levels language learners is warranted. Finally, another limitation of the study that should be highlighted is related to the language input of the two types of materials used. Although the instructor used the same methodology for both classes, first by watching the ‘input’, summarizing and then participating in the follow-up discussions, there was no control on the ‘input’ in terms of similarity of theme and level of difficulty. Accordingly, further studies can be conducted using various types of audiovisual programs which include almost the same difficulty level of language input.

REFERENCES

- Aida Y. (1994). Examination of Horowitz, Horowitz, & Cope’s construct of foreign language anxiety: The case of students in Japanese. *Modern Language Journal* 78, 155-168.
- Bachman, L. F. (1990). *Fundamental considerations in language testing*. Oxford University press, Oxford, London.
- Bahrani, T., & Tam, S. S. (2012). Informal Language Learning Setting: Technology or Social Interaction? *The Turkish Online Journal of Educational Technology* 11(2), 142-149.
- Bahrani, T., & Tam, S. S. (2011). Technology and language learning: Exposure to TV and radio news and speaking proficiency. *Kritika Kultura* 17, 144-160.
- Baker N. (1996). Using the TV news in the EFL classroom. *Zielsprache* 26(2), 30-33.
- Brinton, D., & Gaskill, W. (1987). Using news broadcasts in the ESL/EFL classroom. *TESOL Quarterly* 12(4), 403-413.
- Chapple, L., & Curtis, A. (2000). Content-based instruction in Hong Kong: Students responses to films. *System* 28, 419-433.
- Clark, C. (2000). Innovative strategy: Concept cartoons. *Instructional and learning strategies* 12, 34-45.
- Doring, A. (2002). The use of cartoons as a teaching and learning strategy with adult learners. *New Zealand Journal of adult learning*, 30, 56-62.
- Ellis, R. (2008). *The study of second language acquisition (second edition)*. Oxford: Oxford University Press.
- Gebhard, J. G. (1996). *Teaching English as a Foreign Language: A Teacher Self-Development and Methodology Guide*. Ann Arbor: The University of Michigan Press.

- Gilmore, A. (2007). Authentic materials and authenticity in foreign language learning. *Language Teaching*, 40, 97-118.
- Heffernan, N. (2005). Watching movie trailers in the ESL class. *The internet TESL journal* 9(3). Available at: [http://iTESLj.org/Lessons/Heffernan movie trailers.html](http://iTESLj.org/Lessons/Heffernan%20movie%20trailers.html). Retrieved February 23, 2006.
- Lowe, A. S. (1998). L'enseignement de la musique et de la langue seconde: pistes d'intégration et conséquences sur les apprentissages (The teaching of music and second languages: Text integration and consequences for learning). *The Canadian Modern Language Review* 54(2), 219-238.
- Nunan, D. (1999). *Second Language Teaching and Learning*. Boston: Heinle and Heinle Publishers.
- Poon, A. (1992). Action research: A study on using TV news to improve listening proficiency. *Research Report*, 14, 1-70.
- Rule, A. C., & Auge, J. (2005). Using humorous cartoons to teach mineral and rock concepts in sixth grade science class. *Journal of geosciences education* 53(3), 548-558.
- Ryan, S. (1998). Using films to develop learner motivation. *The internet TESL journal*, 13(11). Retrieved on February 3, 2006 from [http://iTESLj.org/articles/Rayan-Film.html](http://iTESLj.org/articles/Ryan-Film.html).
- Schoepp, K. (2001). Reasons for using songs in EFL/ESL classrooms. *The internet TESL Journal*, 7(2). Retrieved on February 3, 2006 from <http://iTESLj.org/articles/Schoepp-Songs.html>.
- Sweet, H. (1899). *The practical study of languages*. London: Oxford University Press.
- Taylor, D. (1994). Inauthentic authenticity or authentic inauthenticity? Teaching *English as a Second or Foreign Language*, 1, 1-10.
- Trapp, E. A. (1991). Break down inhibitions and build up understanding with music, music, music. *Hispania*, 74: 437-438.
- White, L. (1987). Against comprehensible input: The Input Hypothesis and the development of L2 competence. *Applied linguistics*, 8, 95-110.