

# Finding the Best Length of Video-Podcasts: Effects of Varied numbers of Video-Podcast Used on Listening Comprehension of Saudi Undergraduates

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**Abstract:** Integration of video-podcasts has effectively promoted listening comprehension but its suitable length is yet to be known. The main objective of the present study is to identify the difference between the varied number of video-podcasts used and students' performance in listening comprehension. The study investigated the effects of video-podcasts integration on listening comprehension from the perspective of varied number of Video-Podcasts used in instructions. The twelve-week quantitative study employed a quasi-experimental pre-test post-test design. A total of 120 samples included in a control and three experimental groups. ANOVA analysis revealed an overall significant difference amongst the four groups. All the three experimental groups outperformed the control group. However, no significant difference was found between the control group and the 5 video-podcast group; and between 10 and 15 video-podcasts groups. The significant difference, however, was noted when the control group was compared to 10 and 15 video-podcast groups. Similarly, the difference between 5 and 10 video-podcast groups; and between 5 and 15 video-podcast groups was also significant. The findings imply that video-podcasts are useful resource for enhancing EFL learners' listening comprehension. However, their appropriate length needs to be considered for the desired results.

**Keywords:** dual-coding, EFL learners, input, listening comprehension, multimedia, Saudi, video-podcasts.

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## I. INTRODUCTION

Video-Podcasts can play an important part in teaching and learning listening skill. Teachers may make use of this technology to motivate learners particularly the less proficient listeners for improving their interest in learning English and listening. In particular, the visual aspect of podcasts can make learning of listening experience more attractive, engaging and effective. Easy accessibility to video-podcasts allows students an opportunity to improve their listening comprehension anywhere such as at work; at home; or even while travelling. Watching the authentic listening material can reduce anxiety, frustration and boredom which is so common in traditional listening only environment. Relating to the benefits of video-technology in EFL, the development in technology, and particularly in the field of videos provides EFL learners more opportunities in language learning and in listening comprehension. The visual and body languages of speakers in videos enhance students' understanding and provide more clues for listening comprehension practice.

The use of podcasts, as a new channel to input knowledge, has effectively promoted listening comprehension and consequently increased the acquisition of a target language (McDermott, 2014; Meredith, 2013; Takeda, 2013; Viana, 2014). They are a good source of authentic linguistic input which serves as an effective substitute for native environment for language practice; and consequently, they can activate and enrich learners' background.

Listening is perceived as the most neglected skill and it mistakenly considered to be acquired automatically without any special efforts (Cheung, 2010). Teachers are assumed ignorant of teaching this skill by Rezaei and Hashim (2013); and they consider them as ignorant and unaware of the process of listening and learners' problems in listening comprehension. At present, though, the improvement in the EFL environment in Saudi Arabia has started, the development of teaching listening skill is still a challenge like in some parts of the EFL world (Shahid, Ali, & Mahmoud, 2016).

Meanwhile, a number of researchers have found positive effects of the use of video watching on learners' listening comprehension (Abdullah Saad Aldera, 2015; Safranji, 2015; Sarani, Behtash, & Arani, 2014). However, teachers are accused of laziness and inefficient teaching if DVDs or lengthy videos are used in the classroom (Kuo, 2009). In addition, several obstacles such as high cost on videos and technical issues with online multimedia resources have also been reported as the main hindrances for their successful integration in language teaching (Lebron-Lozada, 2012; Salmon & Edirisingha, 2008). In the meantime, the convenient availability of the shorter podcasts through the push system of RSS has encouraged more educational institutions to integrate podcasts in language teaching (Dalrymple, 2011; Wolfson & Neumayr, 2010). However, the best suitable length of the podcasts is yet to be known. Thus, the evaluation of pedagogical significance of podcasts in Saudi context seems imperative, and the present study aims to determine whether the integration of varied number of video-podcasts in listening comprehension affects Saudi EFL learners' listening performance differently? It is expected that the investigation of the topic will allow researchers and educators around the world to help EFL learners to improve their listening comprehension ability.

## II. LITERATURE REVIEW

Several scholars and researchers (Bilican, Kutlu, & Yildirim, 2012; Y. Chen, 2011; Coens, Degryse, Senecaut, & Clarebout, 2011; Cross, 2013; Harputlu & Ceylan, 2014; Jafari & Hashim, 2012) have devoted studies to find appropriate teaching strategies for developing listening comprehension. Bilican et al. (2012) found positive influence of using different strategies on listening comprehension. They found writing summary about reading texts in classroom; giving homework on reading texts; giving free reading time to students; and the frequency of students' using radio, MP3, CD player and computer have significant effect on students' listening comprehension. In the same way, Jafari and Hashim (2012) studied the effects of utilizing two kinds of written advance organizers- key sentences and key vocabulary on EFL learners' listening performance. ANCOVA results indicated the experimental group who received advance organizers showed significant improvement on the listening post-test but there was no significant improvement in the results of the control group. It is interesting to know that there was a significant effect of listening proficiency on listening performance, however, no interaction effect was found between the use of advance organizers and the listening proficiency level. Thus, it is evident that many elements influence this skill, and teaching EFL learners to use efficient listening skills which strengthen their abilities seems essential.

Harputlu and Ceylan (2014) assert that listening ability holds a vital place in language acquisition and everyday life. Many elements such as motivation and meta-cognitive strategies influence this ability in second language acquisition. They believe that learners usually possess these factors naturally and can also be developed by the teachers as well. Motivation, they add, is an element that determines efforts exerted into language learning by the learners. Chen (2011) investigated how technology integration can benefit motivation, course satisfaction and enhance social experiences. A total of 315 students of two Taiwanese universities, where new technology including audio and video clips was used in English language learning courses, participated in the study. Students with greater preference for learning with audio video technology gained a higher degree of course satisfaction, and learning with technology appeared to benefit motivation and course satisfaction.

The invention of podcasting is seen as a helping tool to learn anywhere and anytime. Related to this Bolliger et al. (2010) noted a moderate influence of podcasts on learners' motivation, and a strong positive relationship amongst attention, relevance confidence, and satisfaction. Moreover, an exploratory study by Madhumathi (2013) also confirmed that the utilization of technology in listening comprehension reduced the anxiety of the students in listening activities and it significantly improved their listening performance. Coens et al. (2011) conducted two experiments to identify the effect of performing a secondary task while learning with an iPod. The participants in the experimental groups combined a learning task (listening to an educational podcast) with a secondary task (walking or jogging). The control group was assigned to a learning task only. The results of the first experiment showed no significant difference between the learning performance

of the control and experimental groups. However, the findings of the second study revealed that the control group students performed significantly better than the experimental group students who were walking or jogging during their learning task. Though the effects of podcasts in this study were found effecting the performance of learners negatively in an odd-learning condition, it can still be inferred from this study that there are high expectations from this new learning tool and it is seen as a potential learning tool that can help learners beyond their classrooms in casual settings as well.

Cross (2013) reported on an exploratory case study of a Japanese EFL learner who was exposed to meta-textual skill and activities for meta-cognitive instructions to promote her use of BBC online podcasts outside classroom for enhancing her listening ability. The data obtained from journal entries and weekly interviews information over nine (9) weeks indicated that with regular guidance and feedback, the learner successfully employed aspects of meta-cognitive instruction and developed the meta-textual skill for utilizing the podcasts for improving listening comprehension.

#### **Effectiveness of Podcasts' Length in EFL:**

Several studies suggest that the length and quantity of podcast material used is an influential factor that can affect its efficacy in language learning both positively and negatively. Li (2010) recommends 3-5 minutes and no longer than 5-10 minutes as the ideal length of podcasts to be integrated in EFL learning. Though, 3 to 5 minutes duration is insufficient time, still, it can help learners to understand the main idea of the topic and some of the vocabulary which they can discuss with each other or ask the teacher before the start of the main lesson. This can be a good warm-up activity that can connect learners to the lesson sharply and effectively. However, if the video-podcast is longer than the students' absorbing capacity, it can be broken into parts and intervals between them can be filled in by relevant activities to the content presented in them. Shorter video-podcasts may also promote the use of video-podcasts into listening classes because of their time as well as space efficiency. Short video-podcasts may not need students' focus for a longer time. Moreover, they cover a low space on their devices. Thus, the students can delete smaller files easily after using them and give space to the upcoming episodes to download on their devices. This arrival of fresh content can help to maintain their interest and motivation in using podcasts or rather increase it which might result in increased learning.

Supanakorn-Davila (2013) noted positive impact of podcasts' length on the participants' motivation. The study examined instructors' methods of using podcasts in delivering instructional materials in online courses and their perceptions about podcast use in instructions. The findings revealed that majority of instructors employed six to fifteen minutes long two to four podcasts per unit of study. The feedback and discussion topics of the podcasts assisted raise students' motivation, attention, satisfaction, and perceived relevance. The length of podcasts indicated significant differences in students' motivation. The students' who received longer podcasts exhibited higher level of motivation which ultimately tended to lead to higher outcome of the learning objectives.

A descriptive study by Lombardo (2011) suggested that short podcasts serve the pedagogical and pragmatic objective of instructions and it is important to keep educational podcasts relatively short for their effective implication in the instructions. Lombardo argues that a podcast shorter than ten minutes can briefly cover a topic without overwhelming the students. And if the topic is large, that can be divided into small podcasts in order to help students find and organize information easily. He further adds that the creation and downloading of shorter podcasts is comparatively easier and faster than the longer ones.

Coens, Degryse, Senecaut, and Clarebout (2011) conducted two studies in which participants of the two experimental groups were asked to walk or jog while listening to an educational podcast. The control group had to do the learning task in sitting condition. Both the studies indicated different results. No significant difference was found in the first study between the learning performance of students in the jogging condition; walking condition; and stationary condition. However, the second study indicated different results. Here, the students in the group who studied while sitting outperformed the other two groups who were moving while studying. The study argues that the difference in the results of both the studies could have been caused by the different number of podcasts used in the study. In the first study, students were given four minutes podcasts which they had to listen twice. Whereas, a twelve minutes podcast was used in the second study in which students had to listen to it once only. Thus, it can be concluded from the findings that the length of the podcasts used in the first study was too short to influence students' performance. The difference of the results of the both of these studies can be used as indication that the length of podcasts is very important for a successful integration of podcasts in ELF learning.

On the other hand, the length of podcasts shed no effects on learners' performance in Takeda's study. Takeda (2013) examined the impact of podcasts tasks (PTs) on learners' engagement and performance in a beginning level Japanese course. Based on the treatment conditions, findings revealed a negative correlation between the podcasts use and learners' performance. The study employed student produced series of PTs as a treatment material in three groups: Early Semester (ES), Late Semester (LS), and Entire Semester (ENT). ES worked on the PTs during the first half, LS during the last half, and ENT during the whole semester. In addition, the study also compared engagement and performance of high achieving (HA) group and low achieving (LA) group determined by their GPA. Findings revealed that more than 60 % participants enjoyed working with podcasts as a learning tool, but surprisingly, it did not make any statistically significant effect on their engagement or performance. LS exhibited the highest mean score on motivation and self-regulation but that was probably due to the influence of outliers in this small group. ENT scored the lowest on both the self-regulation and motivation scales. The sample size was found too small to determine any statistically significant difference among HA and LA. However, the HA group outperformed the LA group. This study recommended replication of the study with a much larger size of sample and use of video podcasts (vodcasts) instead of enhanced podcast as a task. Hence, the employment of varied number of video-podcasts in the present study may address the literature gap recommended by this study.

Similarly, Vogt, Schaffner, Ribar, and Chavez (2010) found no significant difference amongst the three groups using different number of podcasts. They examined the impact of podcasting on students' learning and satisfaction. Though, the participants were satisfied with the overall experience to podcasting and exhibited a positive attitude towards the portability and flexibility of podcasting, no significant difference amongst the three groups using different number of podcasts for learning was revealed.

Collectively, these studies outline a critical role of podcasts' length in EFL education. Apart from the positive effects, some studies also showed no impact of the podcasts' length on students' learning. However, it has been found influencing learners' motivation, learning, satisfaction and self-regulation which are important pedagogical elements in language learning. This indicates the need of further probe into the role of podcasts length in learning environment. Since, the present study examines the influence of varied number of podcasts on students' listening comprehension, the findings may be a valuable addition to the current literature in the field of teaching listening skill, and they can assist EFL teachers in deciding the most appropriate amount of input material for the best outcome from the listening courses taught to the target learners.

### **Cognitive Load Theory:**

The present study is based on 'Cognitive Load Theory'. Chikatla and Ismail (2009) state that human working memory has limitations in holding and retaining information therefore the working memory must be used effectively by learners during learning process. The total amount of mental efforts used in the working memory is referred to cognitive load. This theory was derived from the study of problem solving by John Sweller in the late 80s (Sweller, 1988). According to him, cognitive loads in learners can be reduced through the use of instructional designs. The theory classifies cognitive load into three types: intrinsic, extraneous, and germane. Intrinsic cognitive load refers to the efforts connected with a specific topic, Extraneous cognitive load is associated to the way input is presented to a learner. And, germane cognitive load refers to the efforts made in creating a permanent store of knowledge – the schemata. Heavy cognitive load can affect the task achievement negatively, and it is essential to know that everyone has different experience of cognitive load as per their age and experiences (Sweller, 1988).

The major aim of cognitive load theory is to provide guidelines that could aid in the presentation of information in a manner that encourages learner activities that optimize intellectual performance (Sweller, van Merriënboer, & Paas, 1998). Thus, teachers and instructional designers, while developing instructions, should consider learners' working memory capacities, and design instructions helpful for learners in transferring information to long-term memory. Other cognitive theories such as multiple-modality theory and dual coding theory have also been developed to find solutions to the limitations of memory and enhance learners' learning memory by promoting the use of both the audio visual materials (Calandra, Barron, & Thompson-Sellers, 2008).

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A study by Antonenko & Niederhauser (2010) indicated that measuring overall cognitive load with self-reports may not be adequate. As a substitute, they propose that cognitive load should be seen as a dynamic process; and examined with EEG-based measures to show a clearer picture for explaining the causes and effects of cognitive load.

**Research Question and Hypothesis:**

One research question and a null hypothesis were formulated in the study.

**Research Question:** Is there any significant difference between the mean scores of the participating groups on the listening comprehension post-test when the varied numbers of Video-Podcasts were used in listening instructions?

**Hypothesis:** The use of varied number of video-podcasts as supplementary material in listening course will have no effect on Saudi EFL learners' listening comprehension.

**III. METHODOLOGY**

The aim of the current study is to investigate the effects of varied number of video-podcasts on listening comprehension. Three experimental groups received video-podcasts instructions and the control group was instructed without video-podcasts. All the groups were given a pre-test before the treatment and a post-test at the end of the experiment. Data were analyzed using ANOVA technique. This section presents the research design, treatment, and instrument used in the study.

**Research Design:**

The present study employed a quantitative method with a quasi-experimental pre-test post-test design to investigate the effects of video-podcasts as supplementary material in listening comprehension. Initial evaluation of the present study indicated that the quantitative design would be more appropriate than the qualitative for investigating the research question and testing hypothesis of the research. According to Robbins (2006), qualitative research method is suitable for investigating social or cultural phenomenon whereas quantitative research technique is appropriate for exploring research questions and answers. Moreover, Creswell (2002); and Simon (2011) are of the view that the quantitative approach is a more appropriate technique in the presence of predetermined independent and dependent variables in a research study.

In addition to that, the quasi-experimental method is more appropriate than the true experimental method if random selection is impossible or difficult (Creswell, 2002; Taylor, 2008; Wyre, 2007). Taylor (2008) believes quasi-experimental design as more effective because this approach permits inclusion of volunteers. The deanship of MU admission and registration enrolls students and does not allow any change in the groups allotted by the office. Hence, the difficulty in random selection of participants at the study location resulted in the absence of random selection which makes true experimental research method inappropriate for the present study. However, the quasi experimental design is appropriate because it allows using volunteer subjects in the absence of random selection (Creswell, 2002).

**Population and Sampling:**

The target samples for the study are male aged 18 to 25 years English major undergraduates registered in the 2nd semester of Academic Year 2105/ 2016. They are first year level one students in college of Education, Majmaah University where they study all four language skills including listening, reading, speaking and writing for three semesters in either a language laboratory or a smart classroom before embarking on their major language and literature courses. All the listening classes are taught in well-equipped high-tech language labs. Students from four classes studying at MU were involved in the research. Three of the classes were randomly assigned to experimental groups and one class was treated as the control group. In this regard, section 1 was treated as the control group which was taught in traditional settings based on teacher-centred methods of instructions whereas, section 2 was assigned to 5 video-podcasts, section 3 to 10 video-podcasts, and section 4 to 15 video-podcasts groups to form the experimental group.

In a quasi-experimental research, the number of sampling according to Creswell (2002) is 15 participants in each of the control and experimental groups of an experimental research are sufficient. Moreover, the sampling was based on convenience and availability. Fraenkel, Wallen, and Hyun (1993) define convenience sampling as groups of individuals who are conveniently available for the study. They believe that in case of extreme difficulty or impossibility in selecting random or systematic non-random sampling, a researcher may use convenience sampling. Due to availability of pre-

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existing intact groups only, all students in those particular classes were included as subjects (Sytsma, 2009). Intact group sampling is one of the typical techniques of convenience sampling in which already formed groups are used to represent a larger population (Watt & Van den Berg, 1995).

**Material Development:**

'Interactions-1 Listening and Speaking' (Diamond Edition) is one of the most widely used text books for listening in the universities in Saudi Arabia. MU has assigned this book for teaching of listening skill for level one in College of Education (COE). This text book accompanied by an audio CD was used as the text book for the experiment in the present study. The text book contains 10 chapters, each one covering a particular topic. Of those ten chapters, the selected five topics are on 'Academic Life', 'Experiencing Nature', 'Foods', 'Community', and 'Home' to provide real-life English conversations and enhance students' performance in the skill through the most familiar input materials. The first five chapters contain the most basic vocabulary that helps level one students to achieve their course objectives conveniently. Moreover, the text is not too difficult and therefore, a chapter can easily be completed in the allocated four (4) hours in two weeks for one chapter. Thus, a total of five chapters were included in the study.

There were three video-podcasts about each of the five chapters. The first experimental group received one video-podcasts per chapter; the second group received two video-podcasts per chapter; and the third one received three video-podcasts per chapter across the treatment period. The content of the video-podcasts covers the vocabulary and information closely related to the five topics included in the experiment. To obtain the research objectives and to provide a clear description of the instructions of the four participant groups, the researcher prepared a carefully designed two Lesson Frameworks which guided the lesson plans and other supplementary materials for both the experimental and control groups. The lesson plans for the experimental group followed the Lesson Framework in Appendix-A; and the control group lesson plans followed the Lesson Framework in Appendix-B.

**Research Instruments:**

A listening comprehension test was employed to collect data for the present study. Taylor (2008) asserts that quasi-experimental design allows researchers using a pre-test and a post-test to investigate learning outcomes and test theories by analyzing changes in post-test scores. He further emphasizes that the pre-test post-test design can help researchers controlling threats to internal validity caused by lack of random selection of subjects in a quasi-experimental design study.

A listening comprehension test was employed to measure participants' pre-test and post-test listening comprehension performance in the first week and the 12th week of the experiment respectively. A researcher-made test contains 40 questions in six sections. Each of the sections measures a specific objective or skill of the listening course at the study location. Section one contains 6 questions to test students' competency in listening for specific information. It requires students to complete the spaces with maximum up to two words. A set of six True/ False questions in Section two evaluates inferring skill of the students. Section three tests the focusing ability of students in listening comprehension. It contains eight (8) multiple choice questions with three options for each of questions. The fourth section tests students' skill in listening for detail in which they are required to complete the information with only one word. Questions 29 to 32 in the fifth sections assess students' comprehension in recognizing the main idea of the audio. Here they choose one answer from the four options given. And the last section of the test identifies students' scanning skill in recognizing the numbers or the text relevant to those numbers.

In order to minimize students' reliance on guessing, distracters or fillers are added to multiple choice questions in the LCT (Folse, 2006). There are three and four alternative answers in the multiple choice questions. Osterlind (2002) asserts that higher numbers of alternatives make test items more reliable. Hence, the questions on the test are set to measure students' competency in the major components of listening comprehension including listening for specific information; inferring and guessing meaning from the context; main ideas; and listening for numbers etc.

**Data Collection Procedure:**

After obtaining participants' consent on a consent form in the first week of the experiment, a demographic questionnaire was administered. In addition, a listening comprehension pre-test was also given to all the participants to collect baseline data before the start of treatment.

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In the experimental period, all the experimental and control groups used the same text books; receiving instructions by the same instructor under nearly identical lesson plans for two hours per week. The only difference between the experimental and the control groups' teaching methods and materials was the inclusion of video-podcasts watching to the lesson plans of the experimental group. However, the control group's lesson plans were limited only to the text book and the audio CD attached to it.

In order to obtain the second group of data, a post-test was given to all the participant groups including the control group in the twelfth week of the experiment.

**Data Analysis Techniques:**

Statistical Package for Social Sciences (SPSS) version 20.0 was used to analyze the data obtained from the instruments. Participants' demographic information is described through descriptive statistics. Descriptive statistics is a useful method that helps researchers to summarize, describe and present research studies data (Trochim, 2006). One-way analysis of variance (ANOVA) technique was employed to identify disparities in pre-test post-test score differences of the control and three experimental groups.

**IV. RESULTS AND DISCUSSION**

**Results:**

ANOVA analysis for group difference on the Post-test was employed to explore disparities in post test scores differences amongst all the four - the control group and three experimental groups. A research question and a null hypothesis were formed in this regard.

- Research Question 1 : Is there any significant difference between the mean scores on the post-test of the participating groups when varied numbers of Video-Podcasts were used in listening instructions?
- H<sub>0</sub>1 : The use of varied number of video-podcasts as supplementary material in listening course will have no effect on Saudi EFL learners' listening comprehension.

Data in table I demonstrate that during the treatment period, each of the three experimental groups improved significantly better in listening comprehension as compared to the control group (M= 3.56, SD = 3.09). All the three experimental groups: 5 video-podcast group (M= 5.03, SD = 3.66); 10 video-podcast group (M= 9.43, SD = 4.23); and 15 video-podcasts group (M= 8.83, SD = 2.60) revealed significantly higher improvement in the mean score difference.

**Table I: Descriptive statistics of the differences between pre- and post-test scores based on the use of different number of video-podcasts in listening**

| Groups        | N  | Mean | Std. Deviation |
|---------------|----|------|----------------|
| Control Group | 30 | 3.56 | 3.09           |
| 5 VP Group    | 30 | 5.03 | 3.66           |
| 10 VP Group   | 30 | 9.43 | 4.23           |
| 15 VP Group   | 30 | 8.83 | 2.60           |

Table II illustrates the data analysis of group difference on the post-test. As hypothesized, significant differences were identified in the ANOVA analysis (F [3,116] = 20.664, p < .001). The effect size calculated using eta squared ( $\eta^2$ ) was 0.348.

**Table II: ANOVA Analysis for Group Difference on the Post-test**

|                       |                | Sum of Squares     | df  | Mean Square | F      | Sig. | $\eta^2$ |
|-----------------------|----------------|--------------------|-----|-------------|--------|------|----------|
| Difference *<br>Group | Between Groups | (Combined) 738.500 | 3   | 246.167     | 20.664 | .000 | .348     |
|                       | Within Groups  | 1381.867           | 116 | 11.913      |        |      |          |
|                       | Total          | 2120.367           | 119 |             |        |      |          |

Since the overall F test demonstrated a significant difference in the means and the second hypothesis was rejected, a post hoc LSD analysis was conducted to test pair-wise differences among the group means - to explore which group differed from the other groups. The findings revealed that four out of six groups had a significant difference and the remaining two groups had no significant difference.

The post-hoc result in Table III indicates significant differences between students who received five video-podcasts and those who received ten video-podcasts; who received no video-podcasts and who received 10 video-podcasts; no video-podcasts and 15 video-podcasts; five video-podcasts and 10 video-podcasts; five video-podcasts and those who received fifteen video-podcasts ( $p < .05$ ). However, no significant statistical differences were found between students who received no video-podcasts and who received five video podcasts; and ten video-podcasts and those who received fifteen video-podcasts ( $p > .05$ ). Figure 1 shows the group difference in students' post-test scores based on the number of video-podcasts they received in their listening classes.

Table III: Post hoc LSD Test for Difference in Pre and Post-test Scores

| (I) GROUP     | (J) GROUP     | Mean Difference (I-J) | Std. Error | Sig. |
|---------------|---------------|-----------------------|------------|------|
| Control Group | 5 VP Group    | -1.46667              | .89117     | .103 |
|               | 10 VP Group   | -5.86667*             | .89117     | .000 |
|               | 15 VP Group   | -5.26667*             | .89117     | .000 |
| 15 VP Group   | Control Group | 5.26667*              | .89117     | .000 |
|               | 5 VP Group    | 3.80000*              | .89117     | .000 |
|               | 10 VP Group   | -.60000               | .89117     | .502 |

\*. The mean difference is significant at the 0.05 level. Dependent Variable: Difference

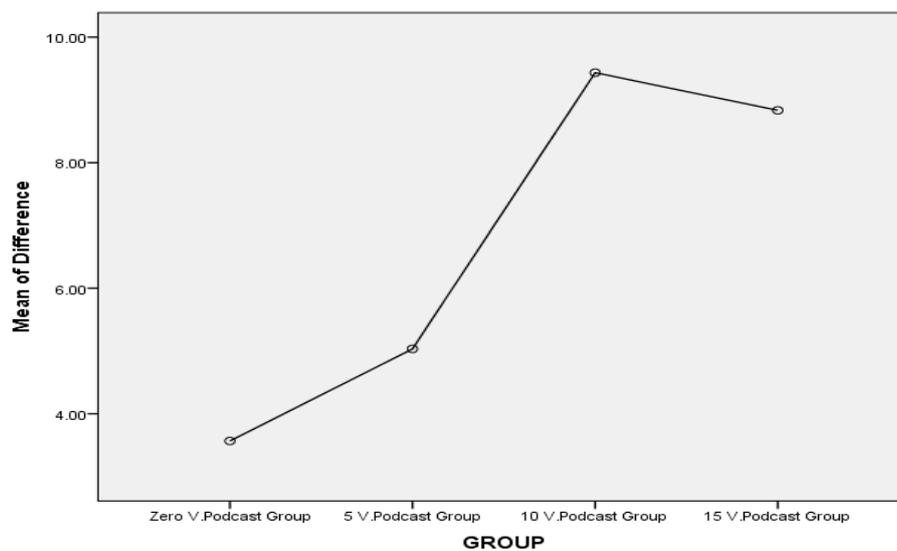


Figure 1: Means of students' group difference on the Post-test

**Discussion:**

The length of video material in instructions is a vital factor that can influence its effects on learning output. According to Rahmatian and Armiun (2011), a longer video content would tire the participants and a short one would not be sufficient for meaningful effects on listening comprehension. In the present study, difference in the performance of the four participating groups was evaluated. Data analysis revealed an overall significant difference amongst the four groups. All the three experimental groups outperformed the control group. However, no significant difference was found between the control group and the 5 video-podcast group; and between 10 and 15 video-podcasts groups. The significant difference, however, was noted when the control group was compared to 10 and 15 video-podcast groups. Similarly, the difference between 5 and 10 video-podcast groups; and between 5 and 15 video-podcast groups was also significant.

The improvement of all the video-podcast groups over the non-user group testifies the positive impact of this learning tool on listening comprehension. The findings in the present study discovered several important elements related to maximize its effectiveness. The group using 5 video-podcasts performed better than the control group; nevertheless, they failed to improve significantly better than the participants with no video-podcast in the control group. On the other hand, group with 10 and 15 video-podcasts significantly outperformed the control as well as the 5 video-podcast groups. This may assume that the use of 5 video-podcasts in the course enhanced listening comprehension but this number of podcasts was not sufficient enough to help learners make statistically significant improvement in their listening performance. This finding agrees with the input hypothesis by Krashen (1985) which demonstrates that comprehensible input is a part of a natural process to develop learners' level from their present level of the target language; and if the input is too easy, no progress is made. Availability of sufficient comprehensible input makes  $i+1$  occurs automatically. Here, 'i' as motioned in Chapter 2, refers to students' current level in the target language and '1' denotes to a step forward from that current level. Hence, insufficient amount of comprehensible input in the group with five video-podcasts may have caused students' lower performance in the listening comprehension post-test.

Statistically significant difference existed between the comparison of 5 video-podcasts with 10 video-podcasts group. This implies that 10 video-podcasts are an appropriate amount of supplementary material that can significantly enhance students' listening comprehension. This is testified by Torrente, Del Blanco, Marchiori, Moreno-Ger, and Fernández-Manjón (2010), who suggests that as much as a student is engaged in the learning process via hands-on activities, better he remembers the instructional content. According to Lippitt-Seibert (2011) eight to ten minutes long podcasts as supplementary material is the most suitable length for significant results of technology integration. That length agrees to the length used in the 10 Video-Podcast group in the present study and the effects of this length on students' listening performance confirmed Lippitt-Seibert's claim.

The result also agrees with the findings of the study by Coens, Degryse, Senecaut, and Clarebout (2011). They examined the effects of using two different numbers of video-podcasts. In one condition, use of four (4) minutes podcasts was found to be insufficient to enhance students' learning and yielded no significant results. However, use of twelve minutes podcasts produced significant positive results. Thus, the difference in the results can be referred to the different number of podcasts used in the study. Thus, it is quite obvious from the discussion that the appropriate length of the podcasts is very important for a successful integration of podcasts in ELF.

Though the 15 video-podcasts group was exposed to five more video-podcasts than the 10 video-podcast group, the results did not indicate significant difference between the two groups on their listening comprehension post-test; rather it indicated negative influence as compare to 10 video-podcasts. In other words, increase in the number of video-podcasts did not essentially make significantly greater effects on listening. This finding testifies the claim of Tuzi (2001) that the longer learners practice at one sitting, the weaker their listening skill becomes during that sitting. The duration of podcast watching is important, and therefore, the superfluous video-podcasts at one time in the present study might have hindered improvement in the listening comprehension.

The finding can also be justified by Cognitive Load theory (CTL). CTL specifically provides guidelines that could aid in the presentation of information in a manner which encourages the learner activities that boost intellectual performance (Sweller, van Merriënboer, & Paas, 1998). According to Chikatla and Ismail (2009) that human working memory has limitations in holding and in retaining information. The total amounts of mental efforts used in the working memory are referred to cognitive load. Heavy cognitive load can affect the task achievement negatively, and it is essential to know that everyone has different experience of cognitive load as per their age and experiences (Sweller, 1988). Thus, the insignificant impact of 15 video-podcasts as compare to 10 video-podcasts is quite understandable. For this reason, teachers and instructional designers, while developing instructions, should consider learners' working memory capacities; and design instructions that are helpful for learners in transferring information to long-term memory.

Furthermore, this finding can also be connected to Sousa's (2004) findings pertaining to memory. According to him Long-term Memory (LTM) and Short-term Memory (STM) play different roles in a learning process. The STM keeps immediate information and transfers the message input to LTM after some time, but only if reinforced or reviewed in some way. On the other hand, as Tuzi (2001) states that if the learners are loaded with too much knowledge at one time, their success in listening may be very limited due to longer period of time. It cannot be ignored that the human brain gets

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tired and responds negatively to the additional input material in one class period which ultimately blocks storage of the hearing/ viewing input in Long-Term Memory (LTM).

To a great extent, the input hypothesis of Krashen (1985) can also give good reason for the findings of the second hypothesis in the current study. One of the main concepts of the theory is to utilize the current knowledge of learners and add new information to acquire second language. The recommended new information is one step advance than the current level of the students, which is considered as 'comprehensible input'. The theory further states that if the input is too easy, no progress is made, and if it is too difficult the progress is blocked. Therefore, surplus amount of video-podcasts in the fifteen (15) Video-Podcast group might have made the input material too difficult for students to comprehend which resulted in insignificant achievement of the students who received higher number of podcasts.

### V. CONCLUSION

Although the current EFL settings see video-podcasts as a valuable teaching tool for listening comprehension, the findings of the present research indicate that the most effective number of video-podcasts as input material and the amount of time needed for video-podcast aided instructions should be considered cautiously in order to maximize the successful acquisition of the target skill. Significant difference made by using ten (10) video-podcasts rather than 15 video-podcasts may be because of the extra time spent on the five extra video-podcasts. That extra time may have narrowed the efficacy of the input. According to Li (2010), overly long podcasts strongly decrease students' interest to them. This remark appear partially in line with Wagner (2007) who opines that EFL learners receiving for longer instructional time may perform poorer than the ones receiving shorter instruction time. In other words, the use of too many video-podcasts at a time may be inefficient and problem producing such as loss of attention from the language learning process (VanPatten, 1989; Wagner, 2007). Determining the most adequate number of video-podcasts seems to be fundamental element for EFL teachers who long to enhance their students' listening skill with video-podcasts. Thus, the education authorities are recommended to establish a mechanism that can assist EFL teachers in deciding the most appropriate amount of supplementary multimedia resources such as video-podcasts to achieve the desired course objectives.

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**APPENDIX – A**
**Lesson Framework for the Experimental Group**

|                            |  |
|----------------------------|--|
| <b>Duration</b>            | 50 minutes   |
| <b>Topic</b>               | .....  |
| <b>Learning Objectives</b> | .....  |
| <b>Teaching Aids</b>       | Smartborad, PowerPoint slides, video-podcast(s), speakers, desktop computer, text book, audio CD |

| <b>Lesson Stage</b>            | <b>Objectives</b>  | <b>Activities</b>   | <b>Timing</b> |
|--------------------------------|--|---|---------------|
| Lead-in                        | To generate students interest in the topic   | Teacher involves students in a talk around the topic with the help of relevant picture(s) or question(s).   | 3             |
| Video orientation to the topic | To prepare students for the main lesson<br>To provide students a broader exposure to the topic | Teacher plays relevant video-podcast(s) and students watch carefully.<br>Teacher helps students to understand difficult vocabulary during and / or at the end of the video-podcast.<br>Teacher sets a short task to assess the general understanding of the content in video-podcasts in the form of two types of activities:<br>First, the teacher asks students to complete the given sentences with the missing information from the video-podcast presented.<br>Then teacher gives students three (3) to five (5) multiple choice | 15            |

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|                                    |  |   |    |
|------------------------------------|--|---|----|
|                                    |  | questions about the same video-podcast.<br>Students compare their answers in pairs/groups.<br>Teacher provides feedback.  |    |
| Blocking vocabulary                | To teach students any vocabulary needed for the listening activities in the lesson.<br>To teach students pronunciation of the blocking vocabulary. | Teacher introduces ‘blocking vocabulary’ – new vocabulary items including words, expression and idioms they would later face during the listening activity.<br>Teacher plays a recording of a native speaker from the CD attached to the text book.<br>Students listen to the recording up to three times and imitate and repeat the words after the speaker.<br>Teacher helps students with the correct pronunciation. | 7  |
| Gist Task                          | To give students practice for listening for main idea of the text  | Teacher explains and writes the main idea question on the board and plays the audio<br>Students listen to the audio and take notes for the main idea.<br>Students compare their answers in pairs/groups.<br>Teacher provides feedback.  | 5  |
| Listening for specific information | To enhance students’ skill in listening for details  | Teacher presents the question for specific information and plays the audio.<br>Students listen to the audio and complete the exercise(s) for the task.<br>Students compare their answers in pairs/groups.<br>Feedback.  | 12 |
| Follow-up activity                 | To provide students opportunity to demonstrate their comprehension about the content listened in the lesson.                                       | Students talk to each other on the topic of the lesson by using the learned vocabulary and information.<br><br>Teacher moves around the class and helps students with the task.   | 8  |

**APPENDIX – B**

**Lesson Framework for the Control Group**

|                            |  |
|----------------------------|--|
| <b>Duration</b>            | 50 minutes   |
| <b>Topic</b>               | .....  |
| <b>Learning Objectives</b> | .....  |
| <b>Teaching Aids</b>       | Smartborad, PowerPoint slides, speakers, desktop computer, text book, audio CD |

| Lesson Stage             | Objectives  | Activities   | Timing |
|--------------------------|---|--|--------|
| Lead-in                  | To generate students interest in the topic  | Teacher involves students in a talk around the topic with the help of relevant picture(s) or question(s).  | 5      |
| Orientation to the topic | To prepare students for the main lesson   | Teacher provides students information about the content of the listening text that is helpful for them in the following listening activities.<br>The information may include:<br>- text type – conversation, lecture etc.<br>- text source<br>- number of speakers<br>- accents – British, American, Australian etc. | 10     |
| Blocking vocabulary      | To teach students any vocabulary needed for the listening activities in the lesson.<br>To teach students pronunciation of the | Teacher introduces ‘blocking vocabulary’ – new vocabulary items including words, expression and idioms they would later face during the listening activity.<br><br>Teacher plays a recording of a native speaker from the CD attached to the text book.  | 7      |

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|                                    |  |  |    |
|------------------------------------|--|--|----|
|                                    | blocking vocabulary.   | Students listen to the recording up to three times and imitate and repeat the words after the speaker.<br>Teacher helps students with the correct pronunciation.   |    |
| Gist Task                          | To give students practice for listening for main idea of the text  | Teacher explains and writes the main idea question on the board and plays the audio<br>Students listen to the audio and take notes for the main idea.<br>Students compare their answers in pairs/groups.<br>Teacher provides feedback. | 5  |
| Listening for specific information | To enhance students' skill in listening for details  | Teacher presents the question for specific information and plays the audio.<br>Students listen to the audio and complete the exercise(s) for the task.<br>Students compare their answers in pairs/groups.<br>Feedback.                 | 15 |
| Follow-up activity                 | To provide students opportunity to demonstrate their comprehension about the content listened in the lesson. | Students talk to each other on the topic of the lesson by using the learned vocabulary and information.<br>Teacher moves around the class and helps students with the task.  | 8  |