# The Impact of using TED-Ed as Learning Instrument on enhancing Undergraduate ESL Learners Listening Skill

# Sana Muneer Bhurt\*<sup>1</sup>, Sadia Aftab Memon<sup>2</sup> and Bakhtawar Bhurt<sup>3</sup>

- 1. MS Scholar, CELL, Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan
- 2. Assistant professor, CELL, Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan
- 3. MBA Scholar, MUISTD, Mehran University of Engineering and Technology, Jamshoro, Sindh Pakistan

\*Corresponding Author: sanabhurt51@gmail.com

## **ABSTRACT**

This study aims to know and to show the effect TED Talk Video as medium to enhance or improve the listening skills of students. Specifically, it explores whether using TED-Ed videos as media of learning to improve listening skills of students than using audio media on second year university students. The design of this research was quasi-experimental. In testing the hypothesis that TED-Ed videos increase students listening skills, the pre-test and post-test were distributed to the second-year students at Sindh university and SBBU. The participants were assigned to two groups, experimental and control, and each group has 30 students. Each group got a different treatment. For the experimental class, they were taught using TED-Ed videos, while for the control class, they were taught using audio-only media. There were ten sessions over three months. The post test result in experimental class has mean value five times greater than the average value of post test in the control class. It shows that the increase in the experimental class is quite significant. The results showed a large effect in using TED-Ed videos, listening skills of students increased significantly. These results recommend that using TED-Ed videos can improve listening skills of students.

Keywords: ESL, Listening Improvement, Listening Skills, Teaching Listening, TED-Ed Videos

## Introduction

The initial action taken by students before learning the new language is listening. They would learn the sounds of words and proper pronunciation from listening. Humans are able to communicate because they can recognize spoken words by listening; this is shown in children's ability to listen from birth to age five years (Robinshaw, 2007). Toddlers learn new words through their listening abilities as a result of their interactions with their family members or other nearby adults. According to research, during the first five months of pregnancy, the fetus actively processes incoming acoustic input, is capable of responding to sound stimuli (Shahidullah & Hepper, 1993, pp. 135–142), and can tell music from other sounds (Chorna et al., 2019, pp. 1-9).

There is a connection concerning reading and listening comprehension (Ahn & Kang, 2016, pp. 3–24). According to Wallace, the ability to listen is a key skill since it enables people to obtain understanding, knowledge, and information as well as to be successful communicators (Wallace et al., 2014, p. 13). Listening is a difficult cognitive talent that listeners must employ to absorb what they listen to in real-time effectively while simultaneously receiving new-found data. It is an essential skill for human social interaction.

Nowadays, technology has had an important impact on world developments, such as in education. It can be an instrument for conveying knowledge or information in new ways, such as when teaching listening techniques. As we all know, audio media are typically used to teach listening skills, but they are not communicating and do not include the visual components that many students desire. The use of video learning media can support a positive response from learners. Students are more encouraged to learn and develop their understanding of the subject matter delivered (Bajrami & Ismaili, 2016, pp. 502–506).

Realistic video resources can help students develop English listening skills by enhancing their listening abilities and lowering their anxiety while doing so. These things occur because using videos

to develop English listening skill allows for the delivery of information that is not only audio but also visualized via the use of graphics or animations, making it simpler for students to comprehend what is being said by speakers of the language. There are many websites that offer different instructional animations; TED-Ed is one of them. Thus, research should be done to determine whether this medium helps undergraduates acquire listening skills. (Polat and Erişti's research 2019, pp. 135–154).

An instructional website called TED-Ed offers a variety of explanations about knowledge based on a variety of subjects, including history, psychology, language, art, and more. English is the primary language used in this media to describe various concepts. Also, this media illustrates the knowledge it conveys via animated videos. This media is also straightforward to access; everyone can access it, whether teachers, learners, or even parents. This media can also be accessed everywhere, not only at school, but students can also access it from home. Then the chance to practice listening skills is getting easier. Therefore, the researcher chose this medium to train learners' listening skills. Finally, from the problems that have been stated in the paragraph above, the researcher wants to study the result of using TED-Ed videos on learners' listening skills. This research will be conducted under the title "The impact of using TED-Ed as learning instrument on enhancing undergraduate ESL learners listening skill."

## **Literature Review**

In this research, a number of studies have been considered which have provided the relatable references which provide the foundation for analyzing besides vindicating the usage of TED Talk for the technique and skills of listening (ESL).

There is a lot of research being done right now on listening. Even though it may seem late compared to other abilities, research on listening skill instruction is still evolving. The focus of teaching tactics, teaching philosophies, and teaching methodologies is on developing listening skills. However other people prefer social linguistics, psycholinguistics, etc. (Rost, 2011, pp. 233–234). There has been numerous other research that looked at media use in enhancing listening abilities, hence the author's research is not the first to look at this topic. The author's current research is related to a number of studies.

The first is a study on the efficacy of employing animated movies to teach narrative listening skills by Mustikanthi (2014, pp. 57–61). In a junior high school, a research sample of eighth graders was used for the study. The sample was split into two groups using quantitative approaches and experimental investigations as the research methodology. The primary group is the group of experimental students, and in that group, video animation is utilized. The second group, however, nevertheless received direction from the researcher while not using the media understudy. She demonstrated in this study that teaching students how to listen to narrative stories was successful when animated videos were used, along with English subtitles. Moreover, video animation engages pupils and facilitates their comprehension of the plot.

The research on TED Talks as a teaching tool for improving students listening skills of students is presented next by Abdulrahman (2018, pp. 60–80). He studied the desire of learners to gain listening skills and the acquisition of new language in addition to his studies on expanding abilities. A sample of 39 students from a university participated in this study. In this study, evaluation is done through exams that are administered both before and after media use. According to the findings of his study, using TED Talks to teach listening skills has an effect on how well those abilities are learned. Also, the students claim that using these media is more intriguing than using traditional media since it allows them to learn about other cultures and languages.

# **TED-Ed videos and Listening Skill**

Due to the rapid advancement of technology, teachers and even students may now easily access instructional resources online from anywhere at any time, making it possible to teach listening skills outside of the traditional classroom setting. Everyone can acquire and teach listening skills because they are neither time nor location-based; anyone can use this convenience to get better at listening to English.

TED-Ed is one of the many learning platforms available online now. It is a platform for audio-visual learning on the internet. There are no fees associated with using this website for teachers or students.

This platform is an extension of TED (Technology, Entertainment, and Design, a nonprofit organization committed to spreading thoughts which Wurman founded in 1984 (TED, n.d.). These concepts are characteristically presented in brief lectures and motivational presentations (TED-Ed, n.d.-b). Anyone can use the instructional movies, which are typically animated, on the TED-Ed website, and teachers can also build courses specific to their location (TED-Ed, n.d.-a). Collaboration between educators and animators results in the creation of TED-Ed lessons. The lessons there contain forums where users from around the world can discuss topics, a number of exercises that assess viewers' comprehension of the films they've viewed, and supplemental information offered in each video's content, such as journals, books, websites, Despite the fact that TED-Ed films are meant to be educational materials that broaden students' horizons. Additionally, the movies are produced in English and can be used as real material of learning the language, they can also be used for learning English, particularly abilities of listening.

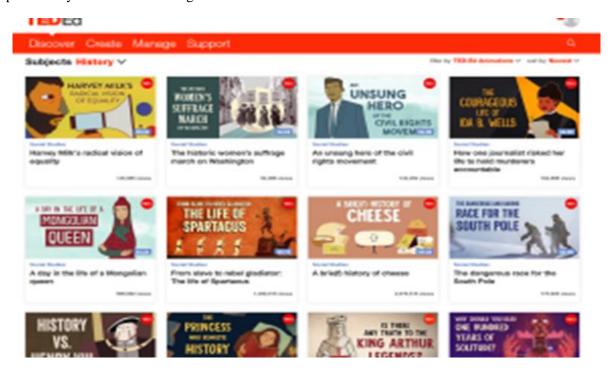


Fig no:1 TEd education website

In 1984, the Sapling Foundation formed TED as a conference and non-profit organization. TED proposals speeches and ideas from world inspirational figures in a variety of fields with variety of interesting topics. TED has been translated into more than one hundred different dialects. With the maxim "Ideas Worth Spreading," TED Talk videos is designed to transform the world via the powerful opinions of leading global scholars (Rubenstein, 2012).

The Value of these videos so he role of audiovisual aids in listening activities. When TED-ED videos were shown during listening exercises, listening comprehension levels were higher than when other videos were shown. It is encouraged by the outcome of this research which showed a statistically substantial difference in the students' listening post-test results, corroborate it between control group and experimental group. Uncovering TED-ED talk videos got favorable opinion from undergraduates where they think that these videos may be useful for every student who would like to learn new ideas and discuss present issues, especially learning a new language. The students learn more by concentrating on benefits of TED-ED talk videos, the students would experience new-found cutting-edge atmosphere of learning, broaden terminology, and build students communication abilities. TED-ED videos drive students' interest and motivation for ongoing participation in listening activities. (Damayant and Sumarniningsih, 2022).

The tests of with TED Talk videos as reliable material of theoretical listening for English foreign language undergraduates. Use of lectures from TED Talk videos, the exhibit study's purpose is to explain the problems faced by EFL students in the educational course of listening. This research was revealed that there are three challenges that undergraduates face when watching TED Talks in class: pronunciation, vocabulary, and speed. (Astika and Kurniawan 2020).

Using TED Talk videos in English Language Teaching (ELT): Supplementary Sources for (ELT). This study represent that TED Talk videos can help learners to learn different kinds of skills. TED Talk videos permit the learners to listen to a best example of talks/lecturers and to determine how they are organized and prepared. (Fitria, 2022).

Investigating the students' perceptions about use of ted talks videos to improve the speaking skills of ESL learners. TED Talks platform is one of the very useful sources of teaching language skills, particularly teaching speaking skills. In this regard, present study aimed at knowing the perceptions of teachers as well as students regarding utilization of TED Talks videos to improve speaking skills of ESL learners at department of English SBBU SBA. The five-point Likert scale questionnaires were distributed among 200 students by using random sampling. The collected data were analyzed by using descriptive statistics through SPSS 26th version. The findings confirmed that teachers as well as the students believed that TED Talks videos are really helpful and must be applied while teaching and learning speaking skills in the language classrooms. The study opens the door of some suggestions that TED Talks platform must be taken into consideration while teaching other language skills. The TED Talks videos provide not just straightforward stimulus to enhance any language skills but offering knowledge, motivation, information, and TED talks videos completely unlock many academic advantages. (Chandio, 2022).

Using TED Talk videos for extensive Listening. The findings demonstrate that students' choice of TED Talk videos was presented by a different element, with the speakers' backgrounds, rate of speaking, complexity of vocabulary, themes, accents, and length of videos. As for the perceived advantages of watching TED talks most learners reported that regular viewing of TED videos helped them increase their motivation, learn new vocabulary enhance their listening fluency and comprehension. Moreover, they reported that two key factors that encouraged students to watch more TED talks were ease of gain access to TED Talks and their extremely encouraging content. One of finest ways to improve listening is by engaging learners listening/viewing of authentic and interesting contents. TED videos are a great resource for interesting viewing material. (Gavinela, Wulandari, and Renandya 2021).

## **Hypothesis**

A researcher's tentative remark is called a hypothesis. Wherein the claims stated were followed by experiments or testing. The writer uses comparative hypothesis, the comparative hypothesis is a conjecture in the value of two or more samples. A comparative hypothesis constitutes one of the various hypotheses. There are 2 kinds of hypotheses:

# Working Hypothesis (Ha)

The first hypothesis stated that there is a substantial difference of students listening achievement between learners who are taught by using TED-Ed videos and the learners who are not taught by TED-Ed videos.

## **Null Hypothesis (Ho)**

The second hypothesis stated that there is a no substantial difference of the student's listening achievement between the students who are taught by TED-Ed videos and students who are not taught by TED-Ed videos.

## **Material and Methods**

In this research the writer used quasi-experimental research design to explore the research questions of the study. It is used "to test descriptive unplanned hypothesis about manipulable reasons to sustenance a counterfactual interfering about what have happened in the absence of treatment" (cook et al., 2019 p-14).

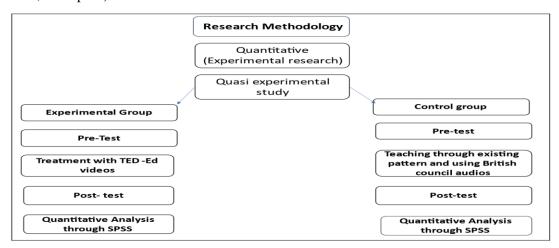


Fig 2. Procedure of research methodology and analysis

The figure 2 demonstrates the procedure of research methodology and analysis. The researcher uses the quasi-experimental research which is quantitative. Moreover, the researcher collect data from both groups experimental and control group. The instrument of collecting data was pre and post test. After collecting pretest, the researcher uses the treatment on experimental group and teaching through existing pattern and using British council audios on control group. After collecting data from both groups, researcher analyze the data through a software SPSS 20, and then find out the difference between two groups.

## The research instruments

This section gives a brief introduction to all the tools that will be used to collect the data in the current research.

First tool was a pre-test that undertake from the Preliminary English Test (PET). The main purpose of giving a pre-test is to find out the students' initial skill about the lesson to be given. The 20-item test comprise of listening will use as the pretest to make sure that there will no alteration among the groups before the study. The allocation of pre-test will 40 minutes and will monitor by the scholar. The content validity of the test will be confirmed by students through Cronbach's alpha. Another instrument will be a 20-item listening posttest, which will be adopted from Longman research course for TOFEL iBT test (Philips, 2015).

The second tool was post-test given after the undergraduates conduct treatment. A generic listening test will prepare and conducted because the material uses in the two study groups. The idea will that after receiving instruction and practice, learners listening skills might improve. Therefore, the researchers will give attention not to prepare for a test that will too be simple for participants. The allocation post-test was 40 minutes and monitored by the researcher and conducted the test with 60 undergraduate learners whose demographic features (age, gender, and education) were like those of the participants of the study. The reliability of the test was calculated/score through Cronbach's alpha. The pre and post test consists of 20 multiple choice questions. The researcher was taking the contents of the questionnaire from the TED-Ed website, which in every video on the TED-Ed website have five questions in their lessons. Moreover, the researcher develops from her observations of the content in each video for getting the rest questions, and then the author produces questions.

## Variables

In this research study the researcher was taken two kinds of variables, which are.

Using the TED-Ed video as X variable

Undergraduates listening skills using as Y variable.

After that, the author attended two classes: an experiment class and a control class. Pre- and post-test results were used to collect the data. Following that, TED-Ed videos were used with the experimental class, and British Council audios were used with the control group as a traditional audio-based teaching method.

# The Independent Variable (X)

A variable that has no influence of another variable is called an independent (free) variable. In teaching students listening skills the impact of TED-Ed videos is considered as independent variable in this study.

## The Dependent Variable (Y)

A dependent (bound) variable is one that affect outcomes as a function of other variables. In this study the undergraduates' skills of listening have become dependent variable. The following indicators are present in this variable:

- a. Understanding the main idea.
- b. Implicit meaning
- c. Vocabulary

#### **Results and Discussion**

The findings is divided into two parts first part is based on Q1 to find out the substantial difference among the learners who are taught by using videos of TED-Ed and the learners who are not go through by using TED-Ed videos, and the second findings based on Q2 which is to find out the student's level of understanding the main idea, vocabulary, and implicit meaning will increase in listening through TED-Ed videos?

Research question: 1 What is the substantial difference among the learners who are taught by using videos of TED-Ed and the learners who are not go through by using TED-Ed videos?

Table 1
Presents the Demographic Data of the Participants

B.S English Second year Of KBSAS campus.	B.S English Second year Of SBBU campus	Total students	University	Grand total	Age of students
Male 19	Male 10	Male 29	1.KBSAS	60	18 to 25
Female 11	Female 2O	Female 31	2.BENAZIR		18 to 25

Table 01. Exposed the demographic information of second year student of the study at two university in the English department. However, data was collected from two active batches that are second year students. 30 learners were selected from each batch and total students were 60. Since, research employed the nonrandom sampling technique in which participants are being non randomly and equally

selected from the overall population. Nearly, there are many students in English department classes, but the researcher takes the two class which contain 30 students in each class. However, there are two active batches at department English which are being named as 22 batch in two different campuses. In Sindh university campus there are 19 male and 11 female students, and in Shaheed Benazir campus there was 10 male and 20 female students, which are present in the classes. Moreover, the age of students was 18 to 25

Table 2
Mean result of pretest of control and experimental group

		Pretest of control group	Pretest of experimental group	
N	Valid	30	30	
N	Missing	0	0	
]	Mean	8.4333	8.7333	
Std. Error of Mean		.55229	.45469	
Std. Deviation		3.02499	2.49044	

Table 2 expresses the mean result of pretest which was conducted from experimental and control group to find out the initial level of student's listening. The number of students in the pretest was 30. The mean result of control group was 8.433 and experimental group was 8.733. So, it shows that there is almost an equality of mean results of two groups in their pretest.

Table 3
Mean result of post test of control and experimental group

		Post test of control class	Post test of experimental class	
Valid		30	30	
N	Missing	0	0	
	Mean	11.5667	15.9333	
Std. Error of Mean		.52672	.56514	
Std. Deviation		2.88496	3.09542	

Table 3 demonstrates the mean result of post test which was conducted from experimental and control group. The treatment of TED-Ed videos applied on experimental class then researcher conducted post test, and British council audios is used on control class then conduct post test. The researcher observes the maximum difference between two groups which ae using TED-Ed videos and other which do not get this treatment. The mean result of control group was 11.566, and experimental group was 15.933 so it expresses the difference of 8 points. So, researcher proved from the outcomes that there is a large impact of TED-Ed videos on students regarding listening skill.

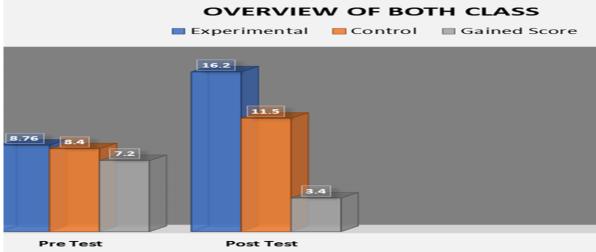


Fig no:2 Overview of mean results of control and experimental group

The fig no:2 shows, there is a difference between the experimental class's and the control class's pretest results, as the chart illustrates. According to the data, the pre-test mean value for the experimental class is 8.76, whereas the control class's pre-test mean value is 8.4. Additionally, the experimental class's gained score was 7.2, while the control class's was 3.4. From here, TED-Ed videos were used to teach listening skills to the experimental class, while audio media which is what teachers typically use in classrooms were used to teach the control class listening skills. The author assessed the students' listening comprehension in the two classes at the following meeting, following eight sessions of treatment. The two classes' increased scores, albeit in different amounts, are depicted in the above chart. As the control class, the second class also saw an increase; however, in contrast to the first class, the experimental class's increase was more notable, with an increased rate of 8.7 compared to the control class's 8.4. The experimental class's post-test average score of 15.90, compared to the control class's 11.56, indicates this increase in scores. It is known that watching TED-Ed videos helps students' listening skills because of this increase in score.

Table 4
Understanding the main idea

	•	Frequency	Percent	Valid Percent	Cumulative Percent
	Q1	30	25.0	25.0	25.0
	Q2	30	25.0	25.0	50.0
Valid	Q3	30	25.0	25.0	75.0
	Q4	30	25.0	25.0	100.0
	Total	120	100.0	100.0	

Above table expresses questions of the pretest and post test which was based on the variable of understanding the main idea. There are four questions in the test regarding this variable and the number of participants was 30 in pretest as well as in post test.

1 able 5 Score of understanding the main idea in pretest

Score of understanding the main idea in pretest						
		Frequency	Percent	Valid Percent	Cumulative Percent	
X7 1' 1	wrong	78	65.0	65.0	65.0	
Valid —	right	42	35.0	35.0	100.0	
	Total	120	100.0	100.0		

The above table demonstrates the score of students in experimental class conducting in the pretest. There are 30 participants from which researcher conduct pretest and the four questions express first variable which is understanding the main idea. The frequency of wrong answers was 78 and right answers was 42. Moreover, The percentage of wrong and right answers was 65 and 35 respectively. So, it was observed from the score of students in the pretest that there is a much lack of understanding the main idea of students listening in listening.

Table 6
Score of understanding the main idea in post test by using TED-Ed videos

500	score of anacistanting the main fact in post test of asing 122 24 viacos							
		Frequency	Percent	Valid Percent	Cumulative Percent			
	Wrong	_ 15	12.5	12.5	12.5			
Valid	Right	105	87.5	87.5	100.0			
	Total	120	100.0	100.0				

Table express the improvement of students in understanding the main idea through TED-Ed videos. Basically, the understanding the main idea is necessary for students when they listen some videos. It also helps learners to recall the information which is important. Moreover, it is the first step which is considered in the listening process. The aforementioned table indicate that the score of experimental class changed after they were assigned the TED Talk video treatment for teaching listening. The student's average percentage of right answers in pretest of first variable (understanding the main idea) was 35%, while in the post test was 87%. So, there is a big improvement among students

by using ted videos which was 52%. Hence, TED talks videos must be working in good manner while teaching the listening skills.

Table 7
Implicit meaning of pretest

	implicit meaning of pretest							
	Frequency		Percent	Valid Percent	Cumulative Percent			
	Q5	30	25.0	25.0	25.0			
	Q6	30	25.0	25.0	50.0			
Valid	Q7	30	25.0	25.0	75.0			
	Q8	30	25.0	25.0	100.0			
	Total	120	100.0	100.0				

Table express questions of the pretest and post test which was based on the variable of implicit meaning. There are four questions in the test regarding this variable and the number of participants was 30, in the pretest as well as in post test.

Table 8
Score of implicit meaning in pretest

Score of implicit meaning in precest						
		Frequency	Percent	Valid Percent	Cumulative Percent	
<b>37 1' 1</b>	wrong	53	55.8	44.2	44.2	
Valid	right	67	44.2	55.8	100.0	
	Total	120	100.0	100.0		

The above table no:8 demonstrates the score of students in implicit meaning of experimental class conducting the pretest. There are 30 participants from which researcher conduct pretest and the four questions express the second variable which is implicit meaning. The frequency of wrong answers in pretest was 53 and right answers was 67. Moreover, The percentage of wrong and right answers was 55 and 44 respectively. So, it was observed from the score of students in the pretest that there is a lack of understanding the implicit meaning of students listening in listening.

Table 9
Score of implicit meaning in of post test

				<del></del>	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Wrong	16	13.3	13.3	13.3
	Right	104	86.7	86.7	100.0
	Total	120	100.0	100.0	

Based on above table no:9, it is known that the score of experimental class changed after they were given the treatment of teaching listening using TED Talk videos. It shows the improvement of students in implicit meaning by use of ted videos. Implicit meaning plays an important role in language learning. When we do not understand words we focus on facial expression, gestures etc. To understanding the implicit meaning the listener think critically most of the time in ted videos things are not completely exposed but if listener implicit meaning regarding listening is strong than the learner can understand easily all the things in videos. Moreover, The student's average percentage of right answers in pretest of second variable (implicit meaning) was 44.2 %, while in the post test was 86.7%. So, it was proved that TED talks videos do good work and must be used for learners while teaching the listening skills, and the improvement of students in implicit meaning was 42%.

Table 10
Sore of vocabulary in pretest

	Bore or vocabalary in precest						
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	Wrong	46	38.3	38.3	38.3		
	Right	74	61.7	61.7	100.0		

Total	120	20	100.0	100.0

Above table express questions of the pretest and post test which was based on the variable of vocabulary. There are four questions in the test regarding this variable and the number of participants was 30, in the pretest as well as post test.

Table 11 Sore of vocabulary in pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
	Wrong	46	38.3	38.3	38.3
Valid	Right	74	61.7	61.7	100.0
	Total	120	100.0	100.0	

The above table demonstrates the score of student's vocabulary of experimental class conducting the pretest. There are 30 participants from which researcher conduct pretest and the four questions express the third variable which is vocabulary. The frequency of wrong answers in pretest was 46 and right answers was 74. Moreover, the percentage of wrong and right answers was 38 and 61 respectively. So, it was observed from the score of students in the pretest that there is a not much lack of vocabulary of students listening in listening, at some level they understand the meaning of words.

Table 12 Score in post test

		Frequency	Percent	Valid Percent 18.3	Cumulative Percent
Valid	Wrong	22			18.3
	Right	98	81.7	81.7	100.0
	Total	120	100.0	100.0	

Based on above table no:12, After the experimental class received the treatment of teaching listening using TED Talk videos, a difference in the class's highest score was observed. It shows the improvement of student's vocabulary by using ted videos. As in English linguistics vocabulary is foundation of language. If the students have good vocabulary they can learn language easily, especially listen videos and understanding its concept. The student's average percentage of right answers in pretest of third variable (vocabulary) was 61%, while in the post test was 81.7%. so, the results proved that TED-Ed videos play important role in students improving vocabulary.

Researchers observed from the results of students of all the variables that first variable understanding the main idea improves more as compared to others. In understanding the main idea, the score of right answers in pretest was 35% and in post test was 87% so the difference between them was 52%. So, based on results there is a big improvement in students by using TED-Ed videos they work good in improving students listening skills.

## **Data Analysis**

# The Normality Test

In order to determine whether the distribution of the data is normally distributed, a normality test assesses the data distribution within a set of variables or data. (Page 25 of Elliott & Woodward, 2007). Finding data that has been gathered in a normal distribution or drawn from a normal population can be accomplished with this. It is possible to employ a variety of statistical normality tests, including Shapiro Wilk, Jarque Bera, Lilliefors, Kolmogorov Smirnov, and Chi-Square. Using SPSS software, the authors of this study employed the Kolmogorov-Smirnov test.

The fundamental idea behind the Kolmogorov Smirnov normality test is to compare the appdata's distribution which is going to be checked for normality with the conventional normal distribution. A significant difference exists if the significance is less than 0.05; no significant difference exists if the significance is greater than 0.05.

The Kolmogorov-Smirnov test is employed to ascertain the normality of data. The test data differs significantly from standard normal data if the significance is less than 0.05. The data that the author tested were normal because they did not differ from standard normal, and if the significance is greater than 0.05, it indicates that there is no significant difference between the data to be tested and the standard normal data (A. Field, 2018, p. 347).

Table 13
Tests of Normality

	1 CSCS OF I (OF INCHIE)							
	Kolmo	gorov-Sm	irnova	Shapiro-Wilk				
	Statistic	df	Sig.	Statistic	df	Sig.		
Pre test of control and experimental group	.113	60	.053	.979	60	.372		
Post test of control and	.112	60	.061	.955	60	.027		
experimental group								

a. Lilliefors Significance Correction

The above shows the pre- and post-test significance values (Sig.) are displayed in the analysis test results. The pre-test significance value in the Kolmogorov-Smirnov column is 0.053 in the control class and the experimental class. These findings show that the pre-test data is distributed normally because both classes' significance values are greater than 0.05 (0.053 > 0.05). The post-test significance value is shown next, with the experimental class's significance and the control class's being 0.061. Given that both of the significance values are greater than 0.05 (0.053 > 0.05; 0.061 > 0.05), these results suggest that the distributed pre-test data is normal. Consequently, based on the data normalcy test results that have been gathered.

## Homogeneity test

To ascertain whether the variances of two or more distributions are equal, the homogeneity test is used. By comparing two or more variances, this test determines whether or not the distribution of data from two or more variants originates from a homogeneous population. In essence, the homogeneity test is meant to demonstrate that two or more sample data groups originate from populations with identical variances. Making sure that the number of populations to be measured is homogeneous is the main goal of the homogeneity test. Put differently, diversity does not differ all that much. Levene tests can be used for homogeneity tests in the following circumstances:

- 1. The data originates from a non-homogeneous (not same) variance if the significance value is less than 0.05.
- 2. The data originates from the homogenous variance (same) if the significance is greater than 005.

The following are the homogeneity test results based on the data processing:

Table 14
Test of Homogeneity of Variances

rest of Homogeneity of Variances								
	Levene	df1	df2	Sig.	_			
	Statistic							
Pretest	.803	1	58	.374				
Post-test	.027	1	58	.870				

Table 14 Express that there are pre-test and post-test significance values, as can be seen from the homogeneity test results above. The pre-test has a significance value of 0.374, and the post-test has a significance value of 0.870. This shows that both tests' significance values (0.374 > 0.05 and 0.870 > 0.05) are greater than 0.05. The number of populations measured in this study is homogeneous, according to the results of the homogeneity test. From the outcomes of the comparative test of prerequisites and post-requested test, it can be observed that the data is distributed normally and come from homogeneous population. So that further to determine to find out whether there is a difference in pretest and post-test scores in the control class and experimental class.

# Hypothesis test

The author can test her hypothesis by running the homogeneity and normality tests on the available research data. In order for the test results to be statistically significant, a hypothesis is tested using statistical techniques. A component of inferential statistics is hypothesis testing. The hypothesis is a claim with questionable veracity. Since the statement is therefore unquestionable, the author can gather data and statistically test it. By statistically testing the hypothesis, the author can decide whether it is acceptable (the data do not provide evidence to reject) or rejectable (the data provide evidence to reject the hypothesis). The purpose of this study is to test the hypothesis that using TED-Ed videos can improve students' listening skills.

In order to determine whether the means of two independent groups differ significantly on an interval or ratio data scale, the authors employed the Independent T-Test, a comparative test, or another test. Both experimental class data and control class data were used in this experiment. SPSS software is used to calculate this hypothesis test. The mean or average for each group is displayed in the following table.

Table 15
Group Statistics

Group Statistics								
	Group	N	Mean	Std. Deviation	Std. Error Mean			
Post-test	1	30	11.5667	2.88496	.52672			
	2	30	15.9333	3.09542	.56514			

The Table no:15 Group statistics shows the mean result for each class. Column N displays the total number of sample students from each class that are research subjects. The identical number of samples are present in both classes, with thirty students each. Meanwhile, the mean value per class column shows that the experimental class's post-test mean score is 15.93 and the control class's is 11.56. This suggests that the average result for the experimental class is higher than the control groups. The details of the T-Test results are as follows.

Table 16 Independent Samples Test

			e's Test for of Variances	t-test for Equality of Means						
		F	Sig.	ig. t	df	Sig. (2-tailed)	Mean Difference	Std. Error Dif	95% Confidence Interval of the Difference	
		•	516.						Lower	Upper
Score -	Equal variances assumed	.027	.870	-5.652	58	.000	-4.366 9067	.77254	-5.91308	-2.82026
	Equal variances not assumed	•		-5.652	57.715	.000	-4.36667	.77254	-5.91324	-2.82009

The table 16 shows the results of the Sig. Levene's Test for Equality of Variances indicate that there is homogeneity in the data variance between the experimental and control classes at 0.870 > 0.05 for the experimental and control classes. To determine whether to reject Ho and accept Ha, one can use the independent sample t-test based on the output table from the "Equal variances assumed" section, which shows that the Sig. (2-tailed) is 0.000 < 0.05. As a result, it can be said that the experimental group's mean post-test results differ significantly from those of the control group. Put another way, watching TED-Ed videos significantly increases learners' listening comprehension.

## **Discussion**

There are so many studies that survey how to improve learners' listening skills, ranging from using different methods to using different media of learning. In this case, the writer studies improvement of undergraduates' listening skills by using TED-Ed videos as a media of learning before carried her research, the researcher has conducted a pre-research or observation to ascertain the difficulties faced by undergraduates in learning English at second year of English department. It was found that students from two classes in the second level of that university had difficulty learning listening skills, which caused listening skills of learner to be at a low level. In addition, during the pre-research, the researcher detained a little experiment with by giving them whole lecture in English language to determine the students' abilities of listening. Afterwards, the students complained about their difficulty in listening

and understanding the lecture to English. In addition, learners are not much interested in learning listening skills. This happened as, in school and universities listening skills are hardly tested in every type of school or university, whether in daily learning, semester exams, or grade-up exams. Testing listening skills of learners is only carried out during the national exam. Using media of videos can improve listening skills of students because it would increase the motivation of students to learn the English language (Bajrami & Ismaili, 2016), and also it can decrease anxiety of learners when they face the activities of listening in the classrooms (Polat & Eristic, 2019, pp. 135-154). Consequently, this research work intended to determine the effect of using TED-Ed videos in enhancing listening skills of students.

The section of results illustrate that the use of this treatment is proven to improve listening skills of students observed from the difference in the average score of pre-test and post-test of each class. The pre-test means score results express that the experimental class had an average score one point above the control class. This shows that the two classes have almost the same average score. To find out the difference in the value of the control and experimental class the writer gave treatment to each class. The difference is the experimental class was taught listening by using TED-Ed videos, while the control class only used audios. This teaching is carried out within three months with eight to ten face-to-face sessions. After that, the researcher conducted a post-test to determine the difference in results of each class after being given the different treatments based on the average post-test results it can be observed that both classes have increased. However, the control class increases score was not as significant as the increase in the experimental class. The average value of the experimental class is eight times higher than the control class's average. This demonstrates how noteworthy the growth in the experimental class is. In line with the hypothesis proposed by the researcher that the use of TED-Ed videos can improve listening skills of students based on increasing in the post-test scores. From the findings, it can be seen that TED-Ed videos have a large impact on improving listening skills of students. Those results have supported the hypothesis that TED-Ed videos can help to improve listening skills of students.

# Conclusion

Overall outcomes of learners confirmed that learning and teaching process has been dived into some new-fangled era where new technologies facilitate the teachers to teach effectively and learners to learn according to their own desired styles. However, TED talks videos are really helpful and assist the process of teaching and learning language skills, especially listening skills. This research aims to ascertain the effect of using TED-Ed videos in improving listening skills of students. Based on analysis of research, this research found that the scores of undergraduates in the experimental class increased more than the scores of undergraduates in the control class. This finding supports the researcher's hypothesis that TED-Ed videos can improve the listening skills of second year students of English department it based on the improvement in the post-test scores. The quantitative method of research was used in this research which recognizes any fundamental relationship between the variables. When the author conducting the study, she used a quasi-experimental research design, in which the study was conducted at Sindh and Benazir campus N.F by taking subjects of research from their class. Two groups of research subjects were formed: namely the experimental and the control group. Before starting the treatment, the researcher taken a pre-test to determine the initial ability of undergraduates listening.

Subsequently, the researcher may administer a follow-up assessment to find out any variations between the pre- and post-treatment periods for the undergraduates in the experimental class. Based on the scientific explanation of the research, it can be concluded that TED-Ed videos can improve listening skills of students.

## **Future recommendations**

On the basis of findings of this study, some recommendations are presented below:

To carry out more experiments like this research. However, this study only focused on the listening skill of language but more experiments could be done on the other three skills of language including writing, reading speaking and so on and so forth in order to see whether how TED-Ed videos

helps teachers and the students to improve their language skills as the whole and specifically any specialized area of language. author can use TED-Ed videos to improve speaking skills of undergraduates students.

To provide awareness to the teachers and students regarding TED-Ed videos and modern tools of technology which have been under practice in the global educational structure.

TEDx and their videos must be integrated in our educational system so that students and teachers get more familiarity with the modern methods and tools of teaching and learning.

There must be kept some motivational lectures which enhance the students cognitive capability and raise motivation level of the students to use TED-Ed videos in their study programs to improve the language skills.

TED-Ed videos using in educational system in pedagogy it improves teaching methods of teachers and also improves the students interest regarding learning a language.

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