The Impact of Extensive Listening on Listening Anxiety, Listening Skills and Attitude towards English Courses

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Article Info	ABSTRACT
	This study aimed to explore the effects of extensive listening (EL) to podcasts on English as a foreign language (EFL) learners' listening anxiety, listening proficiency and attitudes towards English school lessons. Two intact classes with a total of 45 female tenth graders were assigned as the experimental and control groups of the study. At the outset of the study, the participants' level of listening competence was measured through the Key English Test (KET) developed by Cambridge University. The "Foreign Language Listening Anxiety Scale" (FLLAS) and the "Scale of Attitudes towards English Courses" (SATEC) were administered subsequently to both groups. The experimental group received the treatment including 15 podcasts for EL practice. All the quantitative measurements were repeated after the treatment. Quantitative data was triangulated through semi-structured interviews with a sub-sample of 10 students. The results demonstrated that the students in the experimental group significantly improved their listening comprehension skills. The treatment reduced students' listening anxiety while the reverse was true for the students in the control group receiving traditional second/foreign language (L2) instruction only. The findings of the study encourage L2 teachers to consider authentic input, namely podcasts, as a source of reducing students' listening anxiety and improving listening proficiency. The fact that students' attitudes remained stable in both groups provides guidance for future research.

Kapsamlı Dinlemenin Dinleme Kaygısı, Dinleme Becerisi ve İngilizce Dersine Yönelik Tutum Üzerindeki Etkisi

ÖZET

Bu çalışma, podcastleri kapsamlı dinleme olarak uygulamanın, yabancı dil olarak İngilizce öğrenen öğrencilerin dinleme kaygısı, dinleme yeterliliği ve İngilizce okul derslerine yönelik tutumları üzerindeki etkilerini araştırmayı amaçlamıştır. Araştırmanın deney ve kontrol grubuna toplam 45 onuncu sınıfta öğrenim gören kız öğrencinin bulunduğu iki sınıf atanmıştır. Araştırmanın başlangıcında katılımcıların dinleme yeterliliği düzeyi Cambridge Üniversitesi tarafından geliştirilen Key English Test ile ölçülmüştür. Daha sonra her iki gruba da "Yabancı Dil Dinleme Kaygısı Ölçeği" ve "İngilizce Derslerine Yönelik Tutum Ölçeği" uygulanmıştır. Deney grubundan okul dışında 15 podcast dinlemeleri istenmiştir. Uygulamadan sonar tüm nicel ölçümler tekrarlandı. Üçgenleme yöntemi nicel verilerin 10 öğrenciden oluşan bir alt örneklemle yapılan yarı yapılandırılmış görüşmeler yoluyla gerçekleştirildi. Sonuçlar, deney grubundaki öğrencilerin dinlediğini anlama becerilerini önemli ölçüde geliştirdiklerini gösterdi. Uygulama öğrencilerinin dinleme kaygısını azaltırken, yalnızca geleneksel ikinci / yabancı dil eğitimi alan kontrol grubundaki öğrenciler için bunun tersi geçerliydi. Araştırmanın bulguları ikinci dil öğretmenlerini, öğrencilerin dinleme kaygısını azaltacak ve dinleme yeterliliğini geliştirecek bir kaynak olarak podcastler gibi özgün girdileri dikkate almaya teşvik etmektedir. Öğrencilerin tutumlarının her iki grupta da sabit kalması gelecekteki araştırmalar için yol gösterici niteliktedir.

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INTRODUCTION

Acquiring a second language depends on how much language learners are exposed to the target language and what language learners are provided with in the language learning process. This process can be facilitated by the use of authentic materials not only during instruction but also outside the classroom. Having acknowledged its benefits in terms of confidence and motivation as a result of vocabulary acquisition and grasping grammatical rules implicitly (Reinders & Cho, 2010), as with extensive reading (Elley, 1991; Pigada & Schmitt, 2006), extensive listening (EL) has gained popularity in the last decade (Renandya & Jacobs, 2016). Ivone and Renandya (2019) defined EL as a method that facilitates listening to a high amount of comprehensible and enjoyable input in the target language. Since EL is listening practice beyond the school, it extends the time foreign language learners are exposed to the target language. EL can improve word recognition skills (Renandya & Jacobs, 2016), thereby developing listening fluency (Rodgers, 2016). The basic difference between intensive listening (IL) and EL is mainly implemented during language courses and involves a focus on details. Therefore, it not only provides rather restricted amount of input but also fails to encourage learner autonomy. EL, on the other hand, contributes to learner independence by providing language learning opportunities outside the classroom (Ivone & Renandya, 2019). Bearing in mind that anxiety can be related to the context (Kimura, 2017) language learners may be less anxious when listening to the foreign language in non-formal settings.

In tandem with advancing technology, language learning has gone beyond the classroom and language learners can easily get access to a great variety of digital materials for L2 practice (Vonkova et al., 2021). The use of digital sources such as podcasts (i.e., digital audio files) and vodcasts (i.e., podcasts with video content), classified as authentic support materials in educational contexts, has attracted considerable attention in non-native language learning contexts since then. As podcasts are the study materials of the current implementation, vodcasts are not relevant to this study. Podcasts as learning sources foster motivation by promoting learner autonomy (O'Bryan & Hegelheimer, 2007). Regarding repeated listening opportunities with no time and space constraints (Evans, 2008) and without feeling the stress encountered during face-to-face instruction (Buckingham, 2017), listening to podcasts outside school can be an enjoyable way to improve listening fluency and reduce listening anxiety.

Recently, numerous studies have employed EL as a source of improving listening skills in L2 teaching (e.g., Alm, 2013; Chang & Millett, 2016; Gavenila et al., 2021; Karlin & Karlin, 2021; Lee & Cha, 2017; Rahimi & Soleymani, 2015; Saeeddakhtar et al., 2021). Alm (2013), for example, examined the effects of using podcasts for EL practice. The study revealed positive student attitudes towards using podcasts for listening practice. Moreover, implementation was found to foster learners' listening strategy use. Similar conclusions were drawn by Lee and Cha (2017) investigating to what extent listening logs affected Korean university students' listening competence. As in Alm's study, writing listening logs performed as EL practice by students consisted of three phases: listening to materials, writing about the listening material and reflection on listening competence. According to the results, writing listening logs had a significant impact on listening skills. Likewise, students' self-confidence and attitudes towards listening practice were affected positively.

Furthermore, Chang and Millett (2016) investigated the effect of performing EL activities in Taiwanese university context. It was concluded that the more listening activities students completed the more they improved their listening competence in the target language. Another study yielding positive results related to EL in higher education contexts was conducted by Karlin and Karlin (2021) in Japan. The study compared the impact of IL and EL on listening comprehension skills. The study also showed that the use of audiobooks for EL practice significantly improved listening proficiency. Evidence supporting EL in terms of reducing listening anxiety was also reported from Iranian context. Rahimi and

Soleymani (2015) focused on the effect of mobile learning through podcasts on students' listening anxiety and listening comprehension skills. Their study indicated that, in comparison to desktop computers, the use of mobile devices for EL practice enhanced listening competence while reducing listening anxiety. Gavenila et al. (2021) similarly highlighted that feeling less anxious during EL activities had a positive impact on listening skills. Saeeddakhtar et al. (2021) also endorsed a positive relationship between EL practice and vocabulary learning. Additionally, they found that listening to podcasts, in particular outside the class, had a positive influence on listening skills and vocabulary learning.

Few studies reported conflicting results related to students' motivation or listening anxiety while performing EL (e,g., Chang, 2010; Şendağ et al., 2019). For instance, Chang (2010) examined in the Taiwanese context whether listening anxiety would decrease when listening skills improved and determined that the participants in the EL group outperformed the formal instruction group in listening comprehension tasks. Notably, their level of listening anxiety was higher after the treatment due to novelty and being exposed to a high quantity of listening practice for the first time. Similarly, a study revealing the challenges of implementing digital materials in EL practice in foreign language learning was undertaken in the Turkish context. Şendağ et al. (2019) conducted a quasi-experimental study exploring the impact of using podcasts in teacher-led IL, i.e., listening practice during instruction, and mobile-assisted EL in higher education. The study pointed out that the use of podcasts in instructor-led IL improved listening and speaking skills. However, participants in the EL group reported negative factors such as difficulty in arranging a quiet study place and lack of motivation fostered by an instructor.

On the other hand, evidence supporting the concept of using podcasts for listening practice was reported from a Turkish high-school context. Şengül (2014) examined whether the use of podcasts had an effect on 9th-grade students' listening skills and attitudes toward learning a foreign language and found a positive relationship. Furthermore, a study investigating the use of digital materials in terms of enhancing listening competence was conducted by Gönülal (2020). The study showed that while increasing motivation, listening to digital materials improved students' listening skills and pronunciation. Similarly, Polat (2019) compared the influence of employing podcasts and non-authentic videos on Turkish university students' listening proficiency and listening anxiety. The researcher found that students with a higher level of foreign language competence profited more from the implementation in terms of improving listening skills and experiencing reduced listening anxiety.

The review of the literature indicated that several studies examined the effect of EL on listening comprehension skills (e.g., Chang & Millett, 2016; Gönülal, 2020; Karlin & Karlin, 2021; Lee & Cha, 2017). However, the impact of listening to podcasts on students' listening anxiety and attitudes toward learning English is rather underexplored and further comparative studies are needed. Thus, the present mixed methods study attempted to examine the impact of EL using podcasts on Turkish EFL learners' listening anxiety, listening comprehension skills and attitudes towards English courses. To the best knowledge of the authors, no study has been conducted in this domain with 10th graders in Turkish context. Accordingly, the research questions below guided this study:

1. How does extensive listening to podcasts affect Turkish EFL students' listening comprehension skills?
2. How does extensive listening to podcasts affect Turkish EFL students' listening anxiety?
3. Does using podcasts impact students' attitudes towards English courses?
4. What are Turkish EFL students' perceptions of listening to podcasts?

METHOD

Research Design

This study involving a two-group pretest-posttest design followed a sequential mixed-methods research design. On the basis of quantitative data, qualitative data was collected subsequently (Cameron, 2009). The aim of using both quantitative and qualitative methods was to better understand the research problem and to shed light on the research questions (Creswell, 2012). The influence of listening to podcasts on students' listening anxiety, listening proficiency and attitudes toward learning English was explored by comparing the scores gathered before and after the intervention. Data was triangulated by using various data collection instruments in the present study (Dörnyei, 2007). Table 1 displays an outline for the research design.

Table 1
Outline of Research Design

	Experimental Group		Control Group	
	Pretest	Posttest	Pretest	Posttest
Attitude Scale	X	X	X	X
Listening Comprehension Test	X	X	X	X
Listening Anxiety Scale	X	X	X	X
Implementation	X			
Interview	X			

Participants

The present study included 45 female tenth graders attending a high school providing education, particularly for female students in Ordu, a city in Turkey. Of the participants selected through 'convenient sampling' (Dörnyei, 2007, p. 98), 23 were attained to the treatment group and 22 to the control group. The participants were sampled as they were easily accessible sources of data for the research on account of workplace and assignment and participation was voluntary.

Research Instruments

Prior to the study, students' past experiences and perceptions related to listening to podcasts were obtained through the following written close-ended questions involving 'yes' and 'no' choices:

1. Have you had any experiences related to listening to podcasts?

2. Do you think that listening to podcasts can be beneficial in improving listening skills?
    Information collected through this pre-study facilitated comparing students' perceptions before and after treatment.

Quantitative measures

In order to examine students' listening proficiency levels the listening part of the A2 Key Test, previously known as the Key English Test (KET) constructed by Cambridge University, was administered to both groups. The same test was administered after the treatment to answer the first research question examining the impact of listening to podcasts on listening comprehension skills. The A2 Key Test for Schools includes three sections for testing the four basic skills. The listening part, with a duration of 35 minutes, consists of 25 questions. A reliability value of .86 is reported on the website for the listening section of the test. Further quantitative data was collected through two questionnaires. In order to determine students' listening anxiety levels, the "Foreign Language Listening Anxiety Scale"

(FLLAS) developed by Polat and Erişti (2018) was employed to both of the groups before and after the treatment. The scale is composed of 18 items with answers based on a 5-point Likert scale. Polat and Erişti calculated an internal consistency coefficient of .90 (n= 215) which ensured an acceptable level for reliability. The "Scale of Attitudes towards English Courses" (SATEC) with an internal consistency coefficient of .73 (n= 844) designed by Kazazoğlu (2013) containing 27 items with Likert scaled responses was applied to both groups to explore the attitudes towards English courses before and after the treatment. In the present study, the reliability of the SATEC by means of students' pre-scores was found as $\alpha=0.91$ while it was $\alpha=0.85$ for the FLLAS. Regarding the post-scores, the reliabilities were $\alpha=0.89$ and $\alpha=0.91$ for the SATEC and the FLLAS, respectively. According to these results, the scales indicated a good internal consistency for students' both pre- and post-scores. Permission to use the scales in the present study was obtained from the researchers.

Reliability analysis and item statistics for scales

The present study applied two scales:

- The Scale of Attitudes Towards English Courses (SATEC)

- The Foreign Language Listening Anxiety Scale (FLLAS)

The item statistics and the reliability analysis for the two scales were conducted on the scores of pre- and post-tests separately and internal consistency results are given in Table 2.

Table 2
Internal Consistency Results as a Reliability Indicator

		Cronbach Alpha
Pre-Test	SATEC	0.914
	FLLAS	0.853
Post-Test	SATEC	0.888
	FLLAS	0.908

Qualitative measures

To answer the final research question and gain a comprehensive understanding of students' perspectives on the intervention, a semi-structured interview was held with 10 voluntary students who received the treatment. Relying on the data obtained from the questionnaires, students with rather different levels of anxiety (i.e., high and low) were individually included in the interview sessions. The interviews were conducted in Turkish, assuming that the students could express their thoughts better in their native language. The study researchers translated the utterances of the interviewed students. The following teacher-developed interview questions sought students' views about whether EL to podcasts had an effect on listening proficiency by enhancing listening skills:

1. How did you feel while listening to podcast activities?

2. What do you think about the difficulty or ease of the podcasts you listened to?

3. How do you define the effect of listening to podcasts on listening anxiety?

4. How do you describe the level of anxiety you felt before and after listening to podcasts? (high, medium, low)

5. How do you define the impact of listening to podcasts on listening comprehension?

6. Are you planning to continue listening to podcasts in the future?

7.   Do you think you will recommend your friends to listen to podcasts?

8.   Has listening to podcasts affected your attitudes towards English courses?

Procedure

The study applied a listening comprehension test before the treatment to determine the participants' listening proficiency levels. The pretest yielded similar results for all the participants. After having been assured confidentiality and anonymity, students were given consent forms. All the participants received two compulsory English classes per week during which an EFL textbook encompassing various topics based on the four basic skills was utilized. One of the study researchers was the instructor of both groups. Besides this regular instruction following a fixed syllabus, the experimental group was tasked with a total of 15 EL activities which were based on voluntariness and not a part of the grading system. The treatment lasted for seven weeks covering April and May in the school year 2021-2022. The experimental group received a presentation on the use of podcasts and was instructed to listen to 3 podcasts per week outside school. Podcasts used for the implementation were retrieved from the British Council website (https://learnenglish.britishcouncil.org/skills/listening). The screenshot of the listening section on the British Council website is shown in Figure 1.

Figure 1
The Screenshot of the Listening Section on the British Council Website
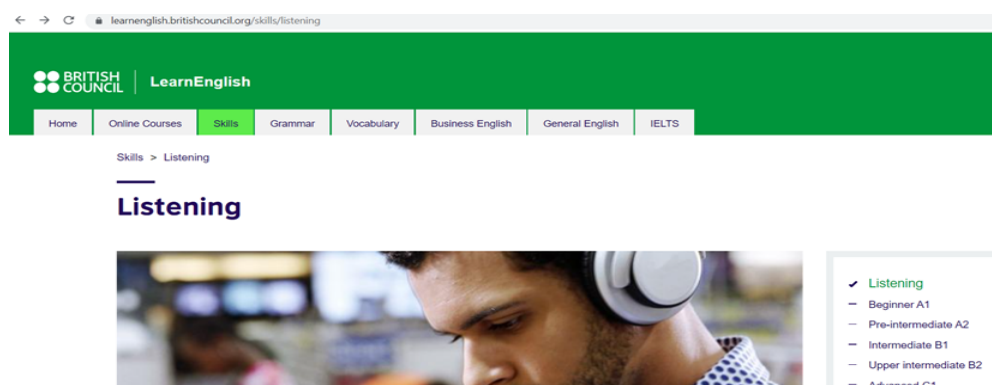
The students in the treatment group listened individually to a total of 15 podcasts and worked on the follow-up questions provided on the website. The treatment involved an easy-to-difficult order of podcasts, yet the students were free to determine the time and place to exercise the EL activities. Intending to reinforce the compulsory instruction (O'Bryan & Hegelheimer, 2007; Stanley, 2006), the content of the podcasts chosen for the intervention was in line with the topics of the pre-determined textbook entitled "Count me in (10)". The first seven podcasts were at the A2 level involving conversations related to different topics such as arranging a meeting, invitations, or understanding explanations. The next eight podcasts were at the B1 level and were dialogues about for example school life or TV series. The duration of each podcast was approximately 5 minutes. Textual support was provided through the transcripts already added to the podcasts on the website.

To examine the impact of th0 treatment, pretests and posttests were applied to both groups. The same measurements undertaken before the treatment were repeated after the treatment ended to identify the effect of the treatment on listening anxiety, attitudes towards English courses and listening proficiency.

Data Analysis

In the analysis of the quantitative data statistical analysis was employed. Firstly, the data was checked for normality assumption by the Shapiro-Wilk test. The Levene's test was performed to analyze the homogeneity of variances. Cronbach alpha was used as an internal consistency measure for the two scales used in the study. Next, a paired samples t-test was employed to examine whether the pre- and post-scores of the participants indicate any statistically significant difference for the control and experimental group. Finally, an analysis of covariance (ANCOVA) was applied to the students' post-scores by controlling their pre-scores in order to see the efficacy of the podcast listening treatment. The effect size was measured by a partial eta squared.

The 'constant comparative method' (Glaser & Strauss, 1967, p.101) was employed in analyzing qualitative data by categorizing it into discrete patterns to formulate a substantive theory. Reading through the transcripts of the semi-structured interviews enabled making a general sense of the data at the outset. During the evaluation process, new data was continuously included in the analysis by grouping similar patterns or forming further theoretical categories. To ensure data accuracy and achieve objectivity, the authors coded the same data independently. Simple agreement calculation yielded a high rate (%90) for intercoder agreement (Geisler & Swarts, 2019). To be more concrete, the sum of agreements was divided by the final number of codes and multiplied by 100. At the final stage, discrepancies were resolved by discussion and necessary changes were made collaboratively.

FINDINGS

First of all, the written questions related to students' past experiences with listening to podcasts and their expectations of the implementation were analyzed. From a total of 23 students in the intervention group, 21 students pointed out that they had not previously listened to podcasts. Nevertheless, as with the two students who knew about podcasts, they believed that listening to podcasts could be beneficial for improving listening skills. The second question also revealed that out of the 21 students who had no experience with podcast listening 2 students doubted its benefits.

The descriptive statistics of scores for both groups

The means, the standard deviations, and the corresponding mean differences of overall scores for the SATEC, the FLLAS, and the listening comprehension test are displayed in Table 3.

Table 3
Descriptive Statistics for Students' Scores

Group	Scores	Satec M	SD	Md	Fllas M	SD	Md	Listening Test M	SD	Md
Control (n=22)	Pre test	3.59	0.57	0.01	2.95	0.63	0.17	39.82	12.74	13.27
	Post test	3.60	0.52		3.13	0.75		53.09	12.96	
Experimental (n=23)	Pre test	3.31	0.68	0.10	2.93	0.60	-0.30	42.96	15.22	21.74
	Post test	3.40	0.57		2.63	0.51		64.70	15.00	

M: Mean, SD: Standard deviation, Md: Mean differences

The pre and post score differences for the control and experimental groups

A paired samples t-test was used to examine whether the pre- and post-test scores of the participants in the control group were statistically different. The results indicated a non-significant difference between the pre- and the post-scores obtained from the SATEC and the FLLAS (t(21)=-0.187, p=.85 and t(21)=-1.012, p=.32). However, the mean of the pre-scores of the listening comprehension

test (M=39.82±12.74) was lower than the mean of the post scores (M=53.09±12.96) and this difference was defined as statistically significant at .01 level (t(21)=-4.383, p<.01).

The same process was repeated for the scores of the treatment group. The results indicated no difference between the scores obtained from the SATEC (t(22)= -1.405, p=.17). However, the mean of the pre-scores obtained by FLLAS (M=2.93±0.6) was determined to be higher than the mean of post-scores (M=2.63±0.51) and this difference was recorded as statistically significant at .05 level (t(22)=2.281, p<.05). It is essential to note that the FLLAS is a scale of measure for anxiety and the items are all negatively worded. That is to say, a decrease in means indicates a decrease of students' listening anxiety. Finally, a significant difference was determined between the mean of pre-scores (M=42.96±15.22) and the mean of post-scores (M=64.70±15.00) obtained through the listening comprehension test (t(22)=-8.443, p<.01).The results of the paired samples t- tests for the control and experimental group are provided in Table 4.

Table 4
The Results of the Paired Samples t- Tests for Control (n=22) and Experimental Group (n=23)

		M	SD	SE	t-	p-
SATEC control	Pre-Score	3.59	0.57	0.12	-0.187	0.85
	Post-Score	3.60	0.52	0.11		
FLLAS control	Pre-Score	2.95	0.63	0.13	-1.012	0.32
	Post-Score	3.13	0.75	0.16		
Listening test control	Pre-Score	39.82	12.74	2.72	-4.383	0.00
	Post-Score	53.09	12.96	2.76		
SATEC experimental	Pre-Score	3.31	0.68	0.14	-1.405	0.17
	Post-Score	3.40	0.57	0.12		
FLLAS experimental	Pre-Score	2.93	0.60	0.12	2.281	0.03
	Post-Score	2.63	0.51	0.11		
Listening test experimental	Pre-Score	42.96	15.22	3.17	-8.443	0.00
	Post-Score	64.70	15.00	3.13		

The effects of podcast listening treatment

At this stage, an ANCOVA was conducted to analyse the effectiveness of the podcast listening treatment on students' post-scores under the control of their pre-scores. Data was checked for the assumptions before conducting the ANCOVA. Additionally, for each test, the adjusted and unadjusted means and standard errors are presented in Table 5.

Table 5
Unadjusted and Covariate Adjusted Descriptive Statistics for Instruction Type

	Groups	N	Pre-Scores		Post-Scores Initial		Post-Scores Adjusted By Covariate	
			M	SE	M	SE	M	SE
Listening Test	Control	22	39.818	2.716	53.091	2.763	53.976	2.532
	Experimental	23	42.957	3.173	64.696	3.127	63.849	2.476
SATEC	Control	22	3.593	0.122	3.604	0.111	3.494	0.059
	Experimental	23	3.307	0.142	3.404	0.119	3.509	0.058
FLLAS	Control	22	2.955	0.134	3.129	0.160	3.125	0.130
	Experimental	23	2.935	0.124	2.630	0.105	2.634	0.127

ANCOVA results for the listening comprehension test and for each scale are provided in the subsequent tables. The corresponding assummptions are also given under each table.

RQ1: The impact of EL to podcasts on Turkish EFL students' listening comprehension skills

To see whether listening to podcasts led to an improvement in listening proficiency, the scores of the pretest and posttest of the listening comprehension test were compared. The results of ANCOVA indicated a significant impact of the podcast listening treatment on students' post-scores for the listening comprehension test while controlling their pre-scores ($F(1,42)=7.72$, $p<.01$, $\eta^2 = .155$). The results obtained through this measurement are given in Table 6.

Table 6
The Results of ANCOVA for the Listening Comprehension Test

Source Of Variations	Type III Sum Of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared η^2
Pre-scores	2590.474	1	2590.474	18.490	.000	.306
Treatment (Podcast)	1081.849	1	1081.849	7.722	.008	.155
Error	5884.214	42	140.100			

R Squared = .411 (Adjusted R Squared = .383)

The standardized residuals are normally distributed by Kolmogorov Smirnov test, KS(45)=.081, p>.05

The homogeneity of variances between groups is not violated by Levene's test, F(1,43)=.002, p=.963

The interaction effect pre-scores * treatment is statistically non-significant as an indication of equal regression slopesF(1,41)=.991, p=.325.

RQ2: The impact of EL to podcasts on Turkish EFL students' listening anxiety

To explore whether podcast listening affected students' listening anxiety, the "Foreign Language Listening Anxiety Scale" was applied to the groups before and after the treatment. For the scores of the FLLAS, after controlling students' pre-scores, the ANCOVA displayed a statistically significant effect of the treatment on the post-scores ($F(1,42)=7.31$, $p<.05$, $\eta^2 = .148$). Estimated marginal mean in the control group (M=3.13, SE=0.13) was higher than the experimental group mean (M=2.63, SE=0.13). The results of the analysis run are presented in Table7.

Table 7
The Results of ANCOVA for FLLAS

Source Of Variations	Type Iii Sum Of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared H^2
Pre-scores	1.854	1	1.854	4.986	.031	.106
Treatment (Podcast)	2.716	1	2.716	7.305	.010	.148
Error	15.616	42	.372			

R Squared = .438 (Adjusted R Squared = .406)

The standardized residuals are normally distributed by Kolmogorov Smirnov test, KS(45)=.102, p>.05

The homogeneity of variances between groups is not violated by Levene's test, F(1,37)=3.406, p=0.072

The interaction effect pre scores * treatment is statistically non-significant as an indication of equal regression slopes $F(1,41)=0.124$, $p=0.727$.

RQ3: The impact of using podcasts on students' attitudes towards English courses

To reveal if the intervention and control groups differ in terms of attitude after the treatment pre- and post-scores of the "Scale of Attitudes towards English Courses" were evaluated. Regarding the scores of the SATEC, the ANCOVA results demonstrated that there was no statistically significant effect of the podacast listening treatment on students' post-scores under the control of their pre-scores $(F(1,42)=.31, p=.86, \eta^2= .001)$. The results obtained are provided in Table 8.

Table 8
The Results of ANCOVA for SATEC

Source Of Variations	Type III Sum Of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared H^2
Pre-scores	9.697	1	9.697	129.125	.000	.755
Treatment (Podcast)	.002	1	.002	.031	.860	.001
Error	3.154	42	.075			

R Squared = .764 (Adjusted R Squared = .747)

The standardized residuals are normally distributed by Kolmogorov Smirnov test, KS(45)=.100, p>.05

The homogeneity of variances between groups is not violated by Levene's test, F(1,43)=0.183, p=0.671

The interaction effect pre scores * treatment is statistically non-significant as an indication of equal regression slopes F(1,41)=0.170, p=0.682.

Overall, the results of the studyindicated that, although the implementation did not significantly impact students' attitudes towards English courses, the students in the treatment group performed better than the the students in the control group in regard to listening comprehension skills. While student gains increased by 35% in the control group, students' listening competence improved by 48% in the experimental group. Additionally, the research showed that students in the podcast listening group had a decrease in their listening anxiety levels when compared to those in the control group.

RQ4: Turkish EFL students' perceptions of using podcasts for improving listening skills

Themes (2) and categories (10) emerging from interview data are given in Table 9. In the interview sessions students were given voice and could express their feelings related to the intervention some of which are given subsequently.

Table 9
Students' Views on Listening to Podcasts

Themes	Categories	Frequency of Codes (N)
	Improved listening skills	10
	Entertaining	10
Positive Views on Listening to Podcasts	Reduced listening anxiety	8
	Motivating	7
	New vocabulary	4
	Better pronunciation	3
	Total	40
Negative Views on Listening to	No continuity	5

Podcasts	Difficult to understand	3
	High speech rate	2
	Time consuming	2
	Total	12

Positive views on listening to podcasts

In general, students held positive perceptions of listening to podcasts (N=40), specifically in terms of improving listening skills. Student (S) 2 offered the following explanation:

'I think that listening to podcasts outside school improves listening skills because you feel more relaxed and you can focus on the content. Furthermore, the more you listen to the target language the better you can develop your own listening strategies.'

Another factor mentioned by all the interviewees (N=10) was enjoyment. As S4 expressed, seeing that they were more successful with time contributed to this feeling:

'I liked listening to podcasts because it was an enjoyable activity. As I listened, I started to understand English. It was also entertaining to talk about the podcasts during the lessons. We listened to the podcasts individually at home but it was also like a whole class activity. Sharing our experiences and feelings was funny and interesting.'

Most interviewees (N=8) endorsed that feeling relaxed while listening to podcasts at home reduced their listening anxiety. Furthermore, the students liked listening to podcasts as they felt more motivated and self-confident during the lessons (N=7). S7 expressed her thoughts as follows:

'What I enjoyed most was that I could listen to the podcasts in a relaxed environment at home and I didn't feel the stress of a formal setting. Formerly, I was really anxious during the listening part of the exams but I realized that I was less anxious during the last exam. I felt better when I got a higher score. Now, I am more self-confident and motivated. I enjoy participating in the lessons and I don't have much listening anxiety.'

Finally, learning new vocabulary (N=4) and improving pronunciation (N=3) were cited as further benefits of listening to podcasts:

'When listening to podcasts you can learn new vocabulary and you can hear how the words are pronounced at the same time. Hence, you can improve your pronunciation.' (S5)

Negative views on listening to podcasts

Indeed, students also reported negative views on listening to podcasts (N=12). Some students (N=5) especially pointed out that language teachers should continuously motivate students to benefit from support materials. Being motivated by a teacher was reported as a precondition for their willingness to continue. They also suggested that if there is no continuity, an improvement of listening skills might be rather limited. S4 explained this point as follows:

'Listening to podcasts can improve listening comprehension but it needs to be done regularly. Courses at school are not sufficient in terms of time. We as students may be reluctant to carry it out on our own, therefore teachers should motivate us to do such activities outside school. In other words, we need the guidance and control provided by language teachers.'

Although the level of the podcasts was mostly considered appropriate, some of them claimed that understanding the podcasts was challenging due to a lack of vocabulary (N=3) and high speech rate (N=2).

'I couldn't understand some parts of the podcasts at first because there were many unknown words. Actually, I think that the speech rate was rather high.' (S3)

Lastly, the time spent on the listening activities was also criticized (N=2):

'We have other classes and sometimes the amount of homework assigned can be too much to allocate time for other activities so it was difficult to arrange the time needed for the tasks.' (S8)

DISCUSSION

The present study attempted to reveal whether listening to podcasts implemented in EL practice affects students' listening proficiency, listening anxiety and attitudes toward learning English. Interestingly, although the participants had almost no familiarity with podcast listening, their usefulness perceptions (Bhattacherjee & Premkumar, 2004), defined as 'perceived usefulness' (Davis, 1989), were generally positive. Similar to the previous studies (e.g., Gönülal, 2020; Polat, 2019; Saeeddakhtar et al. 2021; Şengül, 2014), the results showed that listening to podcasts improved students' listening comprehension skills. Likewise, in this study, the experimental group not only performed significantly better in the listening comprehension test included in the current treatment, most of the students also reported higher grades in the final exam of the compulsory instruction testing students' competence in the basic four skills. Thus, it can be inferred that choosing the listening materials for EL practice in tandem with the curriculum (Stanley, 2006) leads to greater student learning gains. However, the study conducted by Şendağ et al. (2019), showed that the use of podcasts in instructor-led IL improved listening and speaking skills. Moreover, participants in the EL group reported difficulties in arranging a quiet study place and lack of motivation fostered by an instructor.

CONCLUSION

The qualitative data of the study indicated that students' attention and motivation levels were not sufficient enough to improve their listening skills. One important aspect that was mentioned by three of the interviewees of this study needs to be emphasized here. They endorsed that it was of great help to be able to read the transcripts while listening to the podcasts. Danan (2016) suggests that transcripts added to audio texts facilitate both recognizing known words and vocabulary acquisition. Correspondingly, several studies provide evidence to support the benefits of transcripts in terms of improving listening competence in general (Brown et al., 2008; Chang, 2009; Şendağ, 2019). Considering that speech rate is a handicap for students (Siegel, 2012), it is advisable to provide students with textual support during listening activities.

Another point underlined during the interviews was students' need for teacher guidance specifically for additional support materials outside the classroom. As mentioned earlier, some students admitted not to carry out activities related to foreign language learning outside school, if not motivated by the instructor. Contrary to Chang's study (2010), this study yielded positive results in that students in the treatment group had less listening anxiety after the treatment. This is, indeed, an expected outcome as the experimental group's high exposure to the target language during the intervention process relieved students and decreased their anxiety level. On the other hand, students' listening anxiety in the control group increased due to less contact with the target language. The assumption that anxiety can have a debilitative effect on language learning and act as a predictor of low language proficiency (Horwitz, 2001; Krashen, 1982) seems to explain the reason why the control group could not make significant progress in listening competence despite the compulsory instruction. As Gavenila et al. (2021) found, the students in the intervention group were aware that not only the quantity of the listening materials but also the opportunity to practice English outside school in a relaxed atmosphere reduced the anxiety they previously encountered during listening activities. Some previously conducted studies (Tryanti,

Basalama, & Widodo, 2018; Shiri, 2015) also revealed that the motivation of experimental group students who participated in podcast listening activities was higher than that of the control groups. These studies found that podcasts not only increased students' enthusiasm and motivated them to use their creativity, but also improved their listening skills. In addition, being able to regulate the time and place of EL practice promotes learner autonomy (Lee & Cha, 2017). Scharle and Szabó (2000) pointed out that learners feel more self-confident if they experience independence and share the responsibility for learning. Similarly, most interviewees in the present study stated that the more EL practice they performed the more self-confident they felt.

SUGGESTIONS

The participants' attitudes towards English courses did not significantly change despite reduced listening anxiety and higher gains in listening proficiency may be related to the two limitations of the study, i.e., the time and duration. Several studies emphasized that students' motivation to learn a foreign language was highest at the onset of the school year followed by a demotivation towards the end (e.g., Koizumi & Matsuo, 1993; Lamb, 2007). Thus, future studies may start at an earlier point in the academic year and can be extended over a longer period. In this study, students' classes and study programs changed in the 11th grade; consequently, the study could not be extended to the next academic year.

Given the lack of target language exposure that second language learners have outside of school and the limited time in the weekly schedule, it is vital that students are provided with understandable and adequate input outside the classroom. EFL teachers could increase students' exposure to the target language through EL practice with digital materials either as a whole class activity, as in the present study, or by using materials on different topics with regard to students' individual interests. This study sought to understand whether the use of podcasts classified as authentic support materials would address this need, especially in terms of improving listening skills and reducing listening anxiety. In this study, students receiving the treatment improved their listening proficiency significantly. Thus, their reduced level of listening anxiety underlines the need for authentic listening materials in the target language outside school, preferably under the continuous guidance of L2 teachers. Moreover, curriculum developers could consider involving EL practice in study programs to encourage instructors to use EL effectively. Additionally, the results of this study could also be used when designing textbooks for L2 courses in high schools by adding guidelines and materials for EL practice. The sample size of the present study was limited to two classes with a total of 45 students at a high school in Turkey. Further research may be conducted with students having different educational background in different contexts. Future researchers may conduct action research related to EL practice by implementing different kinds of digital materials to see which technique for EL practice is most useful for improving listening skills of students at different ages or English levels.

Ethical Statement

We declare that this study is an original research article and has not been published anywhere before.

Ethics Committee Approval

02.03.2022 dated and 2022-10 numbered Social and Human Sciences Ethics Committee approval was given by Ordu University.

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Author Contributions

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Data Collection (CRediT 2) Author 1 (%10) – Author 2 (%10) – Author 3 (%80)

Research - Data analysis - Validation (CRediT 3-4-6-11) Author 1 (%30) – Author 2 (%40) – Author 3 (%30)

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Conflict of Interest

The authors declare that they have no conflict of interest.

Sustainable Development Goals (SDG)

This article aims to provide young people with access to quality and easy education as well as other learning opportunities in line with the sustainable development goals (4).

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