

The Effect of Podcast Use on Reading Fluency in Teaching Turkish as a Foreign Language*

RESEARCH ARTICLE

Merve MUTLU¹, Gökçen GÖÇEN²

¹ Lecturer, Kent University, Turkish Preparatory School, mervemutluu@gmail.com. ORCID: 0009-0000-9197-6196

² Assoc. Prof. Dr., Fatih Sultan Mehmet Vakıf University, Department of Turkish Education and Social Sciences Education, ggocen@fsm.edu.tr. ORCID: 0000-0001-7552-8406

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Abstract

In foreign language teaching, reading skills are developed through texts, and various resources, tools, methods, and techniques should be used to enhance practice-oriented skills. The use of diverse resources is believed to improve reading fluency in a foreign language. Reading fluency refers to the ability to read a text quickly and accurately. Research has proposed various strategies to enhance reading fluency, one of which is the use of podcasts. While there are studies on the effectiveness of podcasts in improving reading fluency in native Turkish education, no research exists on this topic in teaching Turkish as a foreign language. Learners of Turkish as a foreign language often struggle with reading fluency due to unfamiliar language structures and sounds, highlighting the need for strategies to improve their reading skills. This study aimed to determine the effect of podcast use on learners' reading fluency in Turkish as a foreign language, focusing on reading accuracy, reading speed, and prosodic reading. The study employed a single-subject experimental design, with an experimental group of two B2-level learners who faced challenges in reading fluency. Data collection tools included personal information forms, texts, the researcher's podcasts, and learners' reading records. The data collection process spanned 7 weeks and 25 hours in total. Data were analyzed using formulas for reading accuracy and speed, as well as a prosodic reading scale. The results indicated that podcasts significantly improved reading accuracy, speed, and prosodic reading skills, with a particularly lasting effect on prosodic reading.

Keywords: reading fluency skills, reading accuracy, reading speed, prosodic reading, podcast

* This study is based on the first author's master's thesis entitled "The effect of podcast use on reading fluency in teaching Turkish as a foreign language", prepared under the supervision of the second author.

Yabancı Dil Olarak Türkçe Öğretiminde Podcast Kullanımının Akıcı Okumaya Etkisi

ARAŞTIRMA MAKALESİ

Öz

Yabancı dil öğretiminde okuma becerisi öğrencilere metinler aracılığıyla kazandırılmakta ve geliştirilmektedir. Pratik odaklı becerilerin gelişimi için çeşitli kaynaklar, araçlar, yöntemler ve teknikler kullanılmalı, öğrencilere bunlardan yararlanma fırsatı sağlanmalıdır. Okuma becerisinin geliştirilmesinde farklı kaynak, araç, yöntem ve tekniklerin kullanılması öğrencilerin yabancı dilde akıcı okuma becerisini geliştireceği düşünülmektedir. Akıcı okuma, bir metni hızlı okuma ve okunanları doğru anlayabilme yeteneğidir. Akıcı okumayı geliştirmeye yönelik yapılan araştırmalarda öğrencilerin akıcı okuma becerisinin geliştirilmesine yönelik çeşitli öneriler sunulmaktadır. Bu önerilerden biri de Podcast kullanımıdır. Alan yazınında öğrencilerin akıcı okuma becerisinin geliştirilmesinde Podcast kullanımı ile ilgili ana dili olarak Türkçe eğitiminde araştırmalar bulunmaktadır. Ancak bu konuyla ilgili yabancı dil olarak Türkçe öğretiminde bir çalışma bulunmamaktadır. Yabancı dil olarak Türkçe öğretiminde öğrenciler farklı dil yapısı ve seslerle karşılaştıklarından akıcı okumada zorlanmaktadırlar. Bu nedenle yabancı dil olarak Türkçe öğretiminde öğrencilerin akıcı okuma becerisinin geliştirilmesine daha çok ihtiyaç vardır. Bu çalışmada yabancı dil olarak Türkçe öğretiminde Podcast kullanımının öğrencilerin akıcı okuma becerisine etkisi tespit edilmiştir. Podcast kullanımının öğrencilerin doğru okumasına, okuma hızına ve prozodik okumasına etkisi araştırılmıştır. Yapılan çalışma, tek denekli deneysel desen kullanılarak gerçekleştirilmiş; deney grubunu B2 seviyesinde yabancı dil olarak Türkçe öğrenen ve akıcı okumada zorluk çeken 2 öğrenci oluşturmuştur. Veri toplama araçları kişisel bilgi formu, metinler, araştırmacının Podcastleri ve öğrencilerin okuma kayıtlarıdır. Veri toplama süreci 7 hafta süreyle toplamda 25 saat sürmüştür. Veriler doğru okuma formülü, okuma hızı formülü ve prozodik okuma ölçeği ile analiz edilmiştir. Araştırmanın sonucunda Podcast kullanımının doğru okuma, okuma hızı ve prozodik okuma becerilerini geliştirdiği, özellikle prozodik okuma becerisine kalıcı etki ettiği görülmüştür.

Anahtar Kelimeler: akıcı okuma becerisi, doğru okuma, okuma hızı, prozodik okuma, podcast

Introduction

The main purpose of teaching Turkish as a foreign language is to provide learners with four basic language skills and to develop these skills. Kavcar et al. (1997) state that comprehension includes listening and reading skills, while expression includes speaking and writing skills. Sever (2004) names reading and listening skills as receptive skills and speaking and writing skills as transmitting skills.

As Ünalın (2006, p. 5) states, the primary goal in teaching Turkish as a foreign language is to provide learners with reading and listening skills. Because the more the learners read and listen, the more effectively they can express

themselves both orally and in writing. Among reading and listening skills, reading skill has a special place in terms of providing language input to learners of Turkish as a foreign language.

Reading is one of the most fundamental skills in language teaching. According to the Turkish Current Dictionary (TDK, E.T. 20.11.2023), reading is the process of vocalizing the letters and signs that make up a text or understanding the thought. Şahin (2009) states that reading consists of processes such as visually recognizing, understanding and vocalizing written symbols. These definitions emphasize that reading is not only a process of vocalizing the written text but also a process of understanding the text.

Reading skill has a great importance in teaching Turkish as a foreign language. Erdem et al. (2015) state that reading skill is the basis for the development of other language skills in teaching Turkish as a foreign language. As Keskin and Okur (2018, p. 295) state, reading is a basic skill and reading has a great role in the acquisition of other language skills.

Turkish as a foreign language learners have difficulties in the development of reading skills and learners make some mistakes while reading. According to Akyol (p. 244-246), the types of errors made in reading are reversals, skipping, additions, repetitions and misreading. When learners experience any of these errors, it hinders the development of reading skills. As Yılmaz (2008) states, learners who do not develop reading skills cannot read fluently by making reading errors because they focus their attention on vocalization rather than meaning during reading.

Developing reading skills is critical for a meaningful and reading fluency process. Failure to read fluently causes learners to be unable to make sense of the text. As stated by Willis (2008 as cited in Babacan, 2020), learners who are successful in reading fluency do not have difficulty during reading and do not have difficulty in understanding what they read. In this context, it can be said that reading fluency has an important place in learners' comprehension of the text they read.

Güteryüz (2004) defines fluency as reading the text accurately and quickly. Reading fluency is the speed of the reading process, accuracy of word recognition and the ability to read the text with appropriate emphasis and intonation. Akyol

(2020) states that reading fluency is reading done as if speaking in accordance with emphasis, intonation and punctuation marks, without repetition, spelling and unnecessary pauses. Reading fluency consists of three important dimensions: reading accuracy, reading speed and prosodic reading (Rasinski, 2004 as cited in Akyol, 2020). Reading fluency occurs with the combination of prosody, reading speed and reading accurately (Zarain, 2007 as cited in Suğur, 2023).

The first reading fluency skill is reading accuracy. According to Baştuğ and Akyol (2012), reading accuracy is recognizing and distinguishing words in texts. Başaran (2013) emphasizes that reading accuracy is the correct reading of the words and the correct vocalization of the words in the text, and that learners who do not fully acquire these skills read slowly and intermittently and make backtracking and corrections.

The second reading fluency skill is reading speed. Baştuğ (2021, p. 45) states that the learner should read at a certain speed in addition to recognizing the words in the text and reading correctly. According to Başaran (2013), reading fast enough is very important for reading comprehension. In order to increase the reading speed, the learner needs to automatize by making continuous repetitions.

One of the reading fluency skills is prosodic reading. Prosody is the ability to read the text with appropriate stress and intonation. Başaran (2013) states that prosody is achieved through naturalness in the voice and expression, expression, articulation, loudness, intonation, emphasis, rhythm and pause appropriate to the text. He also states that prosody is an indicator that the learner understands the text.

Reading accuracy, reading speed and prosodic reading need to be developed in order to improve learners' reading fluency skills. Various source books and course materials are used to develop learners' reading fluency skills, and various technologies, tools, methods and techniques are also utilized. Repeated reading (Çiftçi, 2015), teaching bütün with visual feedback activities (Çelebi, 2017), reading fluency case study (Güngör, 2019), choral reading, repeated reading, paired reading, echoing reading, reading by dividing into expressions (Arslan, 2023) methods have been used in studies conducted to improve learners' reading fluency skills in teaching Turkish as a foreign language. In addition to these, as Sulak & Çetinkaya (2022) stated, one of the tools that improve learners' reading fluency skills is the use of podcasts.

Podcast, derived from the words “iPOD” and “broadcasting”, is a technology that allows audio and video files in Mp3 format to be followed via RSS feeds from mobile and personal devices (Hasan & Hoon, 2013, p. 128). Podcasts can be created from storybooks in accordance with language levels or by the instructors themselves in an original way.

Podcast use contributes to teaching Turkish as a foreign language. According to Yılmaz and Babacan (2015), Podcast use offers authentic language use to language learners; especially in teaching Turkish as a foreign language Podcast use makes language teaching more effective and concrete because it appeals to auditory and visual senses. At the same time, Podcast use is expected to increase learners’ interest in technology and their motivation for language learning compared to traditional textbook material.

Podcast use is also related to language skills in teaching Turkish as a foreign language. Kaplan-Leiserson (2005) stated that podcast applications are a different learning material and contribute to the development of learners’ language skills. When considered in terms of language skills, podcasts contribute to learners’ listening skills due to their structure. In addition, podcasts have the opportunity to develop reading and writing skills in education by utilizing the instinctive potential of listening skills (Hew, 2009). In addition, Yorgancı (2021) stated that podcasts can be used as a teaching tool to improve speaking self-efficacy in teaching Turkish as a foreign language.

Podcast use in teaching Turkish as a foreign language contributes to listening skills. As Yılmaz and Babacan (2015) state, listening skill, which is one of the first skills acquired among language skills, contributes to the language development of learners when supported by Podcast. Research shows that the use of podcasts in foreign language teaching improves listening skills to a great extent (Ashton-Hay & Brookes, 2011 as cited in O’ Bryan & Hegelheimer, 2007 as cited in Yılmaz & Babacan, 2015). According to Yılmaz and Babacan (2015), in order for language teaching to be carried out effectively, importance should be given to the development of listening skills and language teaching activities should be made multidimensional by using podcasts. In addition to listening skills, the use of Podcasts in teaching Turkish as a foreign language also contributes to writing skills. Kurt and Göçer (2021) state that the use of podcasts provides learners with an environment where they can exhibit their writing activities with various

activities such as continuing the story they listen to, taking notes while listening, summarizing what they listen to, writing and dictating what is listened to, and can enable learners to make fewer mistakes. Yorgancı (2021) stated that podcasts can be used as an effective technological tool to improve learners' writing self-efficacy in teaching Turkish as a foreign language.

Although listening and speaking skills come to mind first when it comes to the use of podcasts in teaching Turkish as a foreign language, the use of podcasts also contributes to reading skills. As Kurt and Göçer (2021) state, mentioning a work in podcasts, conducting audio book studies or discussions on the book encourages learners to read and makes them interested in the work read. In addition, Rasinski and Young (2014) argue that the use of technological tools can help learners better grasp the emphasis of written words by recording texts and visually following the written text while listening to these recordings.

Podcast use not only contributes to reading skills but also improves learners' reading fluency skills. This improvement in learners' reading fluency skills is related to the fact that Podcast use contributes to both listening, speaking and writing skills. When considered in terms of listening skills, as Göçer (2018, p. 43) stated, "The listening process is trying to understand sounds and is a process that requires effort.". Learners can learn how to vocalize the sounds in a text by listening to podcasts. In terms of speaking skills, learners can improve their intonation and pronunciation skills through podcasts. In terms of writing skills, dictation exercises through listening to podcasts can improve the standard use of language and enable learners to pay attention to standard language use while reading. In this way, learners can read the words that they know the standard usage faster and more fluently. In this context, the use of podcasts contributes positively to learners' reading fluency skills.

When we look at the research on language skills and Podcast use in teaching Turkish as a foreign language, it is seen that different studies have been conducted. Yılmaz and Babacan (2015) examined the use of Podcasts in teaching Turkish as a foreign language. Coşkun and Demirkan (2016) examined Web Radio and Podcast applications in developing listening skills in teaching Turkish as a foreign language. Kurt and Göçer (2021) conducted a theoretical study on the usability of Podcast in teaching Turkish. Berk (2019) investigated the effect of electronic listening on listening comprehension success and listening

anxiety. Yorgancı (2021) examined the effect of Podcast (audio broadcast) use on productive language skills. Ağca (2023) examined the effect of podcast use on listening anxiety and listening self-efficacy perception.

When the researches were examined, it was seen that the use of Podcast in foreign language teaching was generally discussed in the studies. However, when considered in terms of language skills, it is understood that there are more studies on the effect of Podcast use on listening skills. It has been determined that there is no study on the effect of Podcast use on learners' reading skills or reading fluency skills in teaching Turkish as a foreign language.

When the literature is examined, it is seen that studies have been conducted on reading and reading fluency skills of learners in teaching Turkish as a foreign language (Arslan, 2023; Çelebi, 2017; Çiftçi, 2015; Güngör, 2019; Ülper, 2018). In these studies, topics such as the development of a reading motivation scale, the relationship between reading anxiety and comprehension, reading texts, and activities to improve reading skills were generally investigated. Among these studies, it has been determined that no research has been conducted on the effect of podcast use on learners' reading fluency skills in teaching Turkish as a foreign language.

When the literature is examined, there is only one study on the use of podcasts to improve learners' reading fluency skills. In this study, Suğur (2023) investigated the effect of Podcast use on learners' reading fluency skills in teaching Turkish as a mother tongue. As a result of his study, Suğur (2023) revealed that the use of Podcast contributed positively to learners' reading fluency skills. With a similar study, it is important to investigate the effect of Podcast use on learners' reading fluency skills in the field of teaching Turkish as a foreign language. Because the fact that Turkish as a foreign language learners perform reading skills with a different language structure and alphabet has a negative effect on learners' reading fluency skills. Learners whose reading fluency skills are not developed at the required rate read slowly and pausing. The learner who reads slowly and pausing cannot focus on the meaning of the text because he/she spends his/her attention on word recognition. For this reason, the learner cannot understand the text (Güneş, 2007; Rasinski, 2000).

Kaya and Yıldırım (2016) stated that if learners have reading fluency skills, they will be able to read the text in a meaningful and natural way; these

learners will be able to group words automatically by comprehending the text correctly and quickly during reading and will read by paying attention to punctuation marks. In this sense, it is important to improve the reading fluency skills of Turkish as a foreign language learners.

Podcast use can support learners' reading accuracy, fast and prosodic reading within the scope of developing learners' reading fluency skills (Rosell-Aguilar, 2007 as cited in Sulak & Çetinkaya, 2022). In this context, the effect of podcast use on the development of reading fluency skills of Turkish as a foreign language learners should be investigated.

On the basis of the stated importance and need, based on the problem question "What is the effect of Podcast use on reading fluency skills in teaching Turkish as a foreign language?", it is aimed to examine the effect of Podcast use on learners' reading fluency skills in teaching Turkish as a foreign language. In the research conducted for this purpose, answers to the following questions are sought:

1. What is the effect of podcast use on reading accuracy?
2. What is the effect of podcast use on reading speed?
3. What is the effect of podcast use on prosodic reading?
4. What is the effect of podcast use on the retention of reading fluency skills?

Method

Research Model

This study aimed to determine the effect of using podcasts to improve the reading fluency skills of 2 learners who learn Turkish as a foreign language at B2 level and have difficulty in reading fluently. For this purpose, a single-subject design, which is among the experimental methods among quantitative research methods, was used.

The single-subject research design is a form of experimental research that examines the effect of the independent variable on the dependent variable with one or a few participants under experimental conditions. This method is suitable for studying learners who have significant differences from other learners (Büyüköztürk et al., 2020, p. 19). In this study, learners who had reading fluency problems compared to other learners were selected. This selection was realized through the researcher's observations.

There are many single-subject research designs. In general, these designs can be defined as a time series study in which one or some conditions are studied with more than one multiple subject and changes are monitored graphically. A single-subject design allows the focus to be on a single subject to examine a particular variable or to evaluate the effect of an intervention. One of the advantages of the single-subject design is that intervention effectiveness can be evaluated at the individual level by taking individual differences into account (Alberto & Troutman, 1995; Best & Kahn, 1998; Kırcaali-İftar & Tekin, 1997; Tavvney & Gast, 1984; Wiersma, 1995; Wolery et al., 1988 as cited in Tekin, 2000).

In this study, ABA design, one of the single-subject designs, was used. According to Kırcaali-İftar and Tekin (1997, p. 69), “ABA design is the simplest model that allows establishing a cause-and-effect relationship between the independent variable and the dependent variable.” In this study, Podcast use was determined as the independent variable and the effect of Podcast use on the dependent variable, reading fluency skill, was examined. In the study, the development of learners’ reading fluency skills through the use of Podcasts was measured and analyzed at regular intervals.

Sample

Within the scope of the research, this study aims to determine the effect of Podcast use on learners’ reading fluency skills in teaching Turkish as a foreign language. In the study conducted for this purpose, the criterion sampling method was used while selecting the experimental group of the research.

Criterion sampling is a sampling method based on certain criteria or criteria. In a research, observation units can be formed from people, events, objects or situations with certain qualities. In this case, units that meet the criteria determined for sampling are included in the sample (Büyüköztürk et al., 2020, p. 95). The criteria determined for the experimental group in accordance with the purpose of this study are as follows:

- Participants should be learning Turkish as a foreign language at B2 level,
- Participants were behind in reading fluency compared to other learners at B2 level,
- Participants must be volunteers.

In line with the determined criteria, the experimental group of this study consisted of 2 learners who were learning Turkish as a foreign language at B2

level at a foundation university in Istanbul and had reading fluency problems. In the process of determining the experimental group, the reading of the learners was observed by the researcher who teaches Turkish as a foreign language at B2 level. In addition, the researcher also interviewed another instructor who teaches the learners on the subject. The learners who were behind in reading fluency compared to other learners at B2 level in the class were identified and then the learners who wanted to participate in the study were selected on the basis of volunteerism.

The participant learners were named as T1 and T2 in order to share the research data in a way to keep the participants' information confidential. The gender, age, country and mother tongue information of the learners are given in Table 1:

Table 1

Demographic Information of the Learners in the Experimental Group

Demographic Information	S1	S2
Gender	Woman	Male
Age	36	35
Country	Iran	Iran
Mother tongue	Persian	Persian
Turkish level	B2	B2

As indicated in Table 1, one of the two learners in the experimental group was female and one was male. The ages of the learners participating in the study were close to each other. The two learners who participated in the study are Iranian and their mother tongue is Farsi. Their Turkish language level is B2.

Data Collection

This section includes 4 data collection tools used in the research. These tools will be introduced in order.

Personal Information Form

Within the scope of the study, the "Personal Information Form" created by the researcher was used to get to know the participants. In the first week of the study, open-ended questions such as gender, age, country, mother tongue, level,

how long they have been in Turkey, and reasons for learning Turkish were asked to the learners through the “Personal Information Form”. The learners were asked to fill in the “Personal Information Form” in 10 minutes.

Texts

The texts “Sanata Adanmış Bir Ömür [A Life Dedicated to Art], Beyaz Gemi [White Ship] and İletişim Kurmak [Communicating]” were selected to evaluate the development of the learners’ reading fluency skills. The text titled “Astrolojinin Doğuşu [The Birth of Astrology]” was selected to evaluate the retention of the learners’ reading fluency skills. The selected texts were used to collect reading accuracy, reading speed and prosodic reading data.

Within the scope of the study, it was paid attention that the texts to be used in the study were texts that the learners had not encountered before and that they were selected from books on teaching Turkish to foreigners. The participant learners, who learn Turkish as a foreign language at B2 level at a foundation university in Istanbul, use the Yeni İstanbul B2 book in their lessons. For this reason, the texts used in the study were not selected from Yeni İstanbul B2 book. The texts used in the research were selected from Yedi İklim Turkish for Foreigners B2, Yeni Hitit 3 and Gazi Turkish for Foreigners B2 textbooks.

Expert opinion was sought for the selection of the texts to be used in the research. A total of 4 texts, 2 informative and 2 narrative texts, were selected by the researcher from each of Yedi İklim Turkish for Foreigners B2, Yeni Hitit 3 and Gazi Turkish for Foreigners B2 textbooks to be presented to the experts. A total of 12 texts were presented to 3 field experts teaching at the Turkish Language Teaching Application and Research Center (TÖMER) of a foundation university in Istanbul. In line with the opinions of the experts, a total of 4 texts, 2 informative and 2 narrative texts, were selected within the scope of the research.

Table 2 shows the texts selected within the scope of the study, the names of the books in which the texts are found and the type of texts:

Table 2*Information on the Texts Selected for the Study*

Name of the text	Book Title	Type of text
Sanata Adanmış Bir Ömür [A Life Dedicated to Art]	Yedi İklim Turkish for Foreigners B2 Textbook	Narrative Text
Beyaz Gemi [White Ship]	Yeni Hitit 3 Turkish Textbook for Foreigners	Narrative Text
İletişim Kurmak [Communicating]	Gazi B2 Turkish Book for Foreigners	Informative Text
Astrolojinin Doğuşu [The Birth of Astrology]	Yeni Hitit 3 Turkish Textbook for Foreigners	Informative Text

According to Table 2, the narrative text “Sanata Adanmış Bir Ömür [A Life Dedicated to Art]” was selected from Yedi İklim Turkish for Foreigners B2; the narrative text “Beyaz Gemi [White Ship]” was selected from Yeni Hitit 3; the informative text “İletişim Kurmak [Communicating]” was selected from Gazi Turkish for Foreigners B2; and the informative text “Astrolojinin Doğuşu [The Birth of Astrology]” was selected from Yeni Hitit 3.

In the selection of the texts within the scope of the research, attention was also paid to the readability features of the texts. The texts used in the application were selected according to the readability formula obtained by Ateşman (1997) by adapting the Flesch readability formula to Turkish. This formula was used to calculate the readability levels of the texts based on word and sentence lengths. The readability level and range determined for Turkish according to this formula are given in Table 3:

Table 3*Readability Level and Range*

Readability Level	Readability Range
Very Easy	90-100
Easy	70-89
Medium Difficulty	50-69
Difficult	30-49
Very difficult	1-29

According to Table 3, Ateşman's readability range is as follows: 90-100 is very easy; 70-89 is easy; 50-69 is medium difficulty; 30-49 is difficult; 1-29 is very difficult.

Table 4 shows the readability level and readability score of the texts selected within the scope of the study:

Table 4

Readability Level and Score of the Texts Selected for the Study

Text	Readability Level	Readability Score
Sanata Adanmış Bir Ömür [A Life Dedicated to Art]	Middle	51,70
Beyaz Gemi [White Ship]	Difficult	48,49
İletişim Kurmak [Communicating]	Very Difficult	26,59
Astrolojinin Doğuşu [The Birth of Astrology]	Difficult	37,23

According to Table 4, the readability levels of the texts used in this study are average in the text “Sanata Adanmış Bir Ömür [A Life Dedicated to Art]” and the readability score is 51,70. It is difficult in the text “Beyaz Gemi [White Ship]” and the readability score is 48,49. The text “İletişim Kurmak [Communicating]” is very difficult and has a readability score of 26,59. The text “Astrolojinin Doğuşu [The Birth of Astrology]” is difficult and has a readability score of 37,23.

Researcher's Podcasts

Within the scope of the study, it is aimed to determine the effect of Podcast use on learners' reading fluency skills in teaching Turkish as a foreign language. Podcasts are one of the important data collection tools in this study. The researcher created Podcasts to evaluate the development of learners' reading fluency skills.

In the study, three texts named “Sanata Adanmış Bir Ömür [A Life Dedicated to Art], Beyaz Gemi [White Ship] and İletişim Kurmak [Communicating]”, which were selected to evaluate the development of learners' reading fluency skills, were vocalized by the researcher and 3 Podcasts were created. The last text named “Astrolojinin Doğuşu [The Birth of Astrology]” was used without listening to the Podcast and without any practice in order to evaluate the permanence of the learners' reading fluency skills. For this reason, the text

“Astrolojinin Doğuşu [The Birth of Astrology]” was not turned into a podcast. The podcasts were recorded by the researcher in a quiet environment.

After the podcasts were created by the researcher, they were listened to by 2 experts in a quiet classroom environment. The researcher’s podcasts were listened to by the experts and analyzed with reading speed formula, reading accuracy formula and prosodic reading scale. The experts found the podcasts appropriate.

The duration of the podcasts created by the researcher is given in Table 5:

Table 5

Duration of Podcasts Created by the Researcher

Name of the text	Podcast Duration
Sanata Adanmış Bir Ömür [A Life Dedicated to Art]	4 minutes 45 seconds
Beyaz Gemi [White Ship]	4 minutes
İletişim Kurmak [Communicating]	5 minutes 51 seconds

According to Table 5, the podcast durations of the researcher in this study are 4 minutes 45 seconds in the text “Sanata Adanmış Bir Ömür [A Life Dedicated to Art]”, 4 minutes in the text “Beyaz Gemi [White Ship]”, and 5 minutes 51 seconds in the text “İletişim Kurmak [Communicating]”.

Podcasts created by the researcher were used in the process of evaluating the development of learners’ reading fluency skills. The Podcasts created by the researcher were listened to by the learners and studies were conducted on the texts.

Learners’ Reading Records

In this study, the learners’ readings were recorded as audio recordings in order to evaluate the development and retention of the learners’ reading fluency skills. Since the data were collected for the purpose of measuring reading fluency and there was no sharing purpose, the learners’ readings were named as audio recordings instead of podcasts.

In this study, a total of 7 audio recordings were recorded for each learner. The audio recordings were recorded by the researcher in a quiet classroom environment while the learners were reading the texts.

In this study, 3 texts named “Sanata Adanmış Bir Ömür [A Life Dedicated to Art], Beyaz Gemi [White Ship] and İletişim Kurmak [Communicating]” were used to evaluate the development of learners’ reading fluency skills. Each text was read twice by the learners. The first readings were carried out before the researcher’s Podcasts of the relevant text were played to the learners and before the application was made; thus, the current reading fluency levels of the learners were determined. The readings recorded before the application via the researcher’s Podcasts were named as 1st reading recordings. After the 1st reading recordings were recorded, the texts were practiced by listening to the Podcasts created by the researcher. After these studies, the texts were read by the learners for the second time. The reading of the learners after the application was recorded by the researcher as the 2nd reading record. In this way, the development of the learners’ reading skills was evaluated. The durations of S1 and S2’s reading records are given in separate tables.

The duration of S1’s reading records is shown in Table 6:

Table 6

Reading Recording Times of S1

Name of the text	1 st Reading Record	2 nd Reading Record
Sanata Adanmış Bir Ömür [A Life Dedicated to Art]	12 minutes	6 minutes
Beyaz Gemi [White Ship]	11 minutes	5 minutes
İletişim Kurmak [Communicating]	17 minutes	9 minutes

According to Table 6, the duration of S1’s reading recordings in this study was 12 minutes in the first reading record and 6 minutes in the second reading record in the text “A Life Devoted to Art”. In the text “Beyaz Gemi [White Ship]”, while it was 11 minutes in the first reading record, it was 5 minutes in the second reading record. In the text “İletişim Kurmak [Communicating]”, the 1st reading recording was 17 minutes while the 2nd reading recording was 9 minutes.

The duration of S2’s reading records is shown in Table 7:

Table 7*S2's Reading Recording Times*

Name of the text	1 st Reading Record	2 nd Reading Record
Sanata Adanmış Bir Ömür [A Life Dedicated to Art]	10 minutes	6 minutes
Beyaz Gemi [White Ship]	10 minutes	5 minutes
İletişim Kurmak [Communicating]	15 minutes	10 minutes

According to Table 7, the duration of S2's reading recordings in this study was 10 minutes in the first reading record and 6 minutes in the second reading record in the text "A Life Devoted to Art". In the text "Beyaz Gemi [White Ship]", while it was 10 minutes in the first reading recording, it was 5 minutes in the second reading recording. In the text "İletişim Kurmak [Communicating]", the 1st reading recording is 15 minutes while the 2nd reading recording is 10 minutes.

Within the scope of the study, the retention of the learners' reading fluency skills was also evaluated. After 4 weeks of the practices to measure the development of the learners' reading fluency skills, the learners were asked to read the text "Astrolojinin Doğuşu [The Birth of Astrology]", which they had never seen or listened to before, only once. In order to evaluate the permanence of the learners' reading fluency skills, this text was only read to the learners without listening to the podcast and without any study. During the reading, the researcher recorded the learners' readings as audio recordings. These readings made by the learners were named as final reading recordings. In this way, the permanence of the learners' reading fluency skills was evaluated.

S1's final reading recording time is given in Table 8:

Table 8*S1's Final Reading Recording Time*

Name of the Text	Final Reading Record
Astrolojinin Doğuşu [The Birth of Astrology]	8 minutes

According to Table 8, in this study, T1's final reading recording time was 8 minutes in the text titled "Astrolojinin Doğuşu [The Birth of Astrology]".

S2's final reading recording time is given in Table 9:

Table 9

S2's Final Reading Recording Time

Name of the Text	Final Reading Record
Astrolojinin Doğuşu [The Birth of Astrology]	6 dakika

According to Table 9, in this study, S2's final reading recording time was 6 minutes in the text titled "Astrolojinin Doğuşu [The Birth of Astrology]".

The 1st, 2nd and final reading records of the learners were dated and kept.

Validity and Reliability Studies

Expert opinion was used in the selection of the texts used in the research. The process of obtaining expert opinion on the subject is explained under the heading "Texts" in the data collection tools.

The suitability of the researcher's podcasts was evaluated in line with expert opinions. The process of obtaining expert opinion on the subject is explained under the heading "Podcasts Created by the Researcher" in the data collection tools. The researcher's Podcasts were shared so that readers could listen to them.

In order to ensure the validity of the reading accuracy, reading speed and prosodic reading data obtained during the research process, the learners' readings were recorded as audio recordings. The audio recordings of the learners were listened to by the researcher and analyzed with the reading accuracy formula, reading speed formula and prosodic reading scale. In order to ensure the validity and reliability of the analysis of the obtained data, the reading recordings were also asked to be listened to by an expert and analyzed with the reading accuracy formula, reading speed formula and prosodic reading scale. Then, the final data were obtained by taking the average of both scoring.

In this study, reading activities were conducted using podcasts in order to evaluate the development of learners' reading fluency skills. In order to evaluate the effect of podcast use on the retention of the learners' reading fluency skills

and to ensure the validity and reliability of the study, 4 weeks after the practices, the learners were given the printed version of the text “Astrolojinin Doğuşu [The Birth of Astrology]”, which they had never encountered before, and were asked to read this text only once. In this process, the learners did not listen to podcasts and did not work on the text. The final readings of the learners were recorded as audio recordings by the researcher. The sample readings of the learners were shared so that readers could listen to them.

The findings obtained from the final readings of the learners showed that the use of podcasts had a lasting effect on improving the learners’ reading fluency skills. This increases the validity of the study.

Data Analysis

Reading Accuracy

Reading accuracy is the basis of reading fluency. Reading accuracy includes the correct pronunciation of words, the correct combination of sounds, the correct recognition and analysis of words (Akkuş, 2022, p. 19). Reading the text correctly is important for reading to be fluent.

Reading accuracy is based on the vocalization of texts and the identification of reading errors made through these vocalizations. Determining reading errors is very important in measuring the percentage of reading accuracy (Baştuğ & Akyol, 2012). In this study, in order to measure reading accuracy, firstly, the Podcasts of the learners were listened to and reading errors were determined. While determining the reading errors, the types of errors specified by Akyol (2020, pp. 244-246) such as “reversals, skips, additions, repetitions, misreadings” were taken into consideration.

In order to determine the percentage of reading accuracy of the learners, the following formula was used based on the researchers (Akyol, 2020; Arslan, 2023; Güngör, 2019; Suğur, 2023):

Reading Accuracy Percentage=number of words read correctly/total number of words read x 100.

In order to measure reading accuracy, firstly, the total number of words read was subtracted from the number of words read incorrectly. Then, the number of correctly read words was divided by the total number of words in the text

and the result was multiplied by 100 to obtain the percentage of correct reading. How much of the text was read correctly was expressed as a percentage. This process was applied to the participant learners one by one and the correct reading percentages of the learners were determined.

Reading Speed

The second step in acquiring reading fluency skills is reading speed. According to Baştuğ (2021, p. 45), in addition to recognizing the words in the text and reading it correctly, the learner needs to read the text at a certain speed. Reading speed can be defined as word recognition and reading time (Baştuğ, 2012).

Determining reading errors is very important in measuring reading speed (Baştuğ & Akyol, 2012). In this study, in order to measure reading speed, the audio recordings of the learners were first listened to and reading errors were determined, as in reading accuracy.

The following formula was used to measure the reading speed of the learners based on the researchers (Akyol, 2020; Arslan, 2023; Güngör, 2019; Suğur, 2023):

Reading Speed=number of words read correctly/total reading time x 60.

In order to measure reading speed, the number of incorrectly read words was first subtracted from the total number of words read. Then, the number of words read correctly was divided by the time it took the learner to read the whole text and multiplied by 60 seconds. Using this formula, the number of words that the learner read correctly in one minute was obtained. In this application, not only the number of words read in one minute but also the number of words read correctly is important. For this reason, the number of words read correctly was determined by taking into account the errors made during reading. While determining the reading errors, the types of errors specified by Akyol (2020, pp. 244-246) such as “reversals, skips, additions, repetitions, misreadings” were taken into consideration. This process was applied to the participant learners one by one and the reading speed of the learners was determined.

Prosodic Reading

The last step in acquiring reading fluency skills is prosody. According to

Arslan (2023, p. 6), prosodic reading is reading by paying attention to features such as emphasis, intonation, stopping, pausing, and dividing the text into meaningful expressions.

In this study, the “Prosodic Reading Scale” developed by Keskin et al. (2013) was used to measure prosodic reading skills. The “Prosodic Reading Scale” was prepared to measure the dimensions of prosodic features such as intonation, emphasis, reading with meaning units, reflecting the emotion in the text, reading rhythm and voice features. This scale is likert type and consists of 15 items scored between 0 and 4. The maximum score that can be obtained from the scale is 60. Learners who score 50% and above on the scale are considered prosodically competent. The construct validity of the scale is based on the results of KMO=0.97 and Barlett analysis ($p=0.00$; <0.01). The Cronbach Alpha value of the scale was calculated as 0.981. The necessary permissions were obtained for the use of this scale and it was used in this study. In the application of the scale, the podcasts of the learners were listened to more than once and scoring was done according to the “Prosodic Reading Scale”.

Findings

This section presents the findings obtained in line with the sub-objectives of the study.

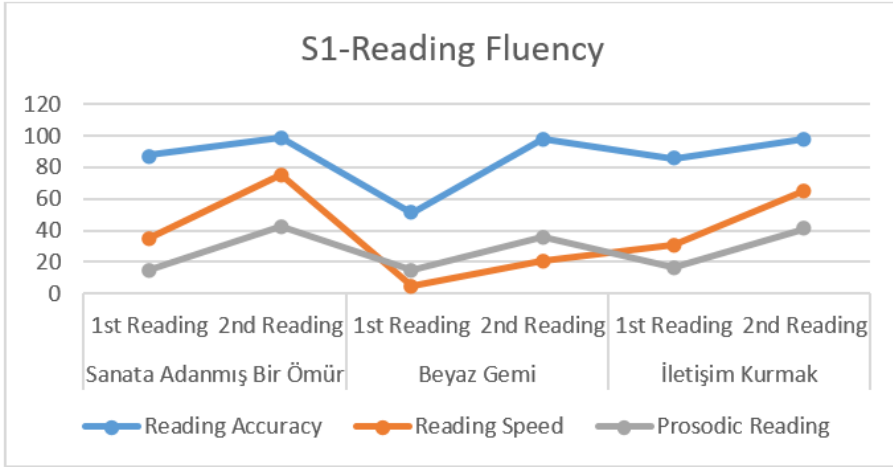
In this study, three texts “Sanata Adanmış Bir Ömür [A Life Dedicated to Art], Beyaz Gemi [White Ship] and İletişim Kurmak [Communicating]” were used to evaluate the development of learners’ reading fluency skills. The learners read each text twice and these readings were audio recorded by the researcher. The 1st reading was conducted before the study was conducted via podcast and the current reading fluency levels of the learners were determined. These readings were named as 1st reading recordings. Then, the texts were studied via podcast. After the reading activities through listening to the podcast, the texts were read for the last time and recorded by the researcher as an audio recording. These readings were named as the second reading recordings. Thus, the development of the learners’ reading skills was examined.

Within the scope of this study, each learner’s reading accuracy, reading speed and prosodic reading skills in 3 different texts were evaluated in general according to their 1st and 2nd reading records. The findings of each learner are presented in separate graphs.

The comparison of S1's 1st and 2nd reading records in terms of reading accuracy, reading speed and prosodic reading is shown in Graph 1:

Graph 1

Comparison of S1's 1st and 2nd Reading Recordings in terms of Reading Accuracy, Reading Speed and Prosodic Reading



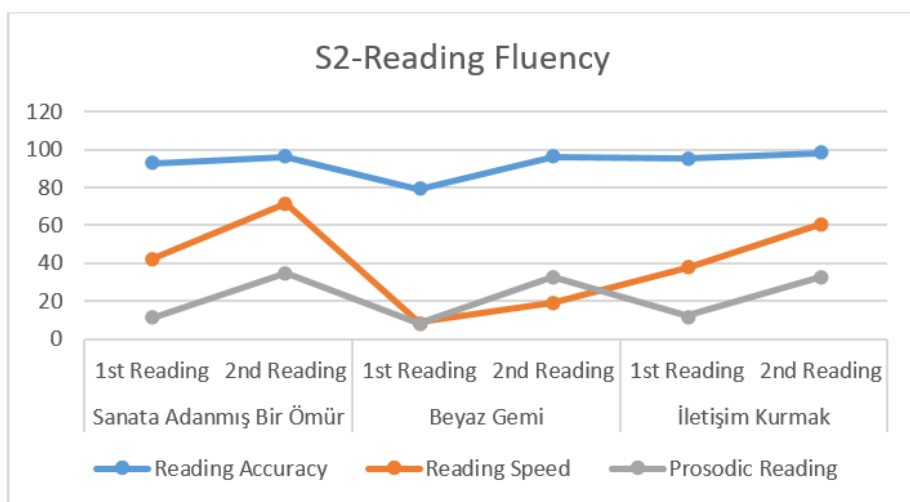
When Graph 1 is examined, it is seen that S1's percentage of reading accuracy, reading speed and prosodic reading data are compared in 3 different texts. Firstly, in the text "Sanata Adanmış Bir Ömür [A Life Devoted to Art]", while S1's reading accuracy rate was 87.5% in the first reading record, it reached 99.1% in the second reading record. While the reading speed was 35.1 in the first reading record, this speed increased to 75.4 in the second reading record. Prosodic reading score increased from 15 in the first reading record to 43 in the second reading record. In the second text, "Beyaz Gemi [White Ship]", while the reading accuracy rate of T1 was 51.3% in the first reading record, it reached 98.1% in the second reading record. While the reading speed was 5.1 in the first reading record, this speed increased to 20.6 in the second reading record. Prosodic reading score increased from 15 in the first reading record to 36 in the second reading record. Finally, considering the data in the text "İletişim Kurmak [Communicating]", while the reading accuracy rate of T1 was 85.6% in the first reading record, it reached 98.3% in the second reading record. While the reading rate was 30.7 in the first reading record, it increased to 65 in the second reading

record. Prosodic reading score increased from 17 in the 1st reading record to 41 in the 2nd reading record.

The comparison of S2's 1st and 2nd reading records in terms of reading accuracy, reading speed and prosodic reading is shown in Graph 2:

Graph 2

Comparison of S2's 1st and 2nd Reading Recordings in terms of Reading Accuracy, Reading Rate and Prosodic Reading



When Graph 2 is examined, it is seen that S2's percentage of reading accuracy, reading speed and prosodic reading data in 3 different texts are compared. Firstly, in the text "Sanata Adanmış Bir Ömür [A Life Devoted to Art]", while S2's reading accuracy rate was 92.9% in the first reading record, it reached 96.2% in the second reading record. While the reading speed was 42.3 in the first reading record, this speed increased to 71.2 in the second reading record. Prosodic reading score increased from 11 in the first reading record to 35 in the second reading record. In the second text, "Beyaz Gemi [White Ship]", S2's reading accuracy rate was 79.2% in the first reading record and reached 96.3% in the second reading record. While the reading speed was 8.7 in the first reading record, this speed increased to 19.1 in the second reading record. Prosodic reading score increased from 8 in the 1st reading record to 33 in the 2nd reading record.

Finally, considering the data in the text “İletişim Kurmak [Communicating]”, S2’s reading accuracy rate was 95.4% in the first reading record and 98.2% in the second reading record. While the reading rate was 37.8 in the first reading record, it increased to 60.6 in the second reading record. Prosodic reading score increased from 12 in the 1st reading record to 33 in the 2nd reading record.

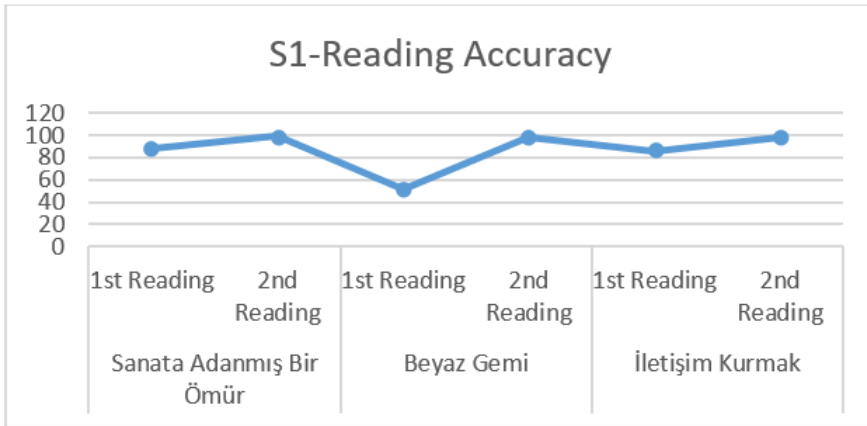
Findings and Interpretation on the Effect of Podcast Use on Reading Accuracy

In this study, the effect of podcast use on reading accuracy was examined. Learners’ reading of the texts were recorded as audio recordings by the researcher. The data of the recorded readings were analyzed with the reading accuracy formula. The reading accuracy percentage of each learner in 3 different texts was evaluated according to the 1st and 2nd reading records. The findings of each learner are presented in separate graphs.

The effect of podcast use on S1’s reading accuracy is shown in Graph 3:

Graph 3

The Effect of Podcast Use on S1’s Reading Accuracy



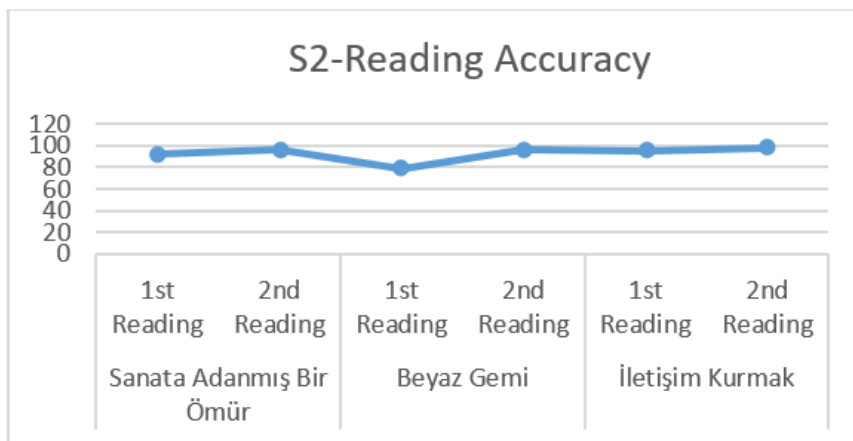
When Graph 3 is examined, it is seen that S1’s 1st and 2nd reading records of 3 different texts are compared in terms of reading accuracy percentage. For the text “Sanata Adanmış Bir Ömür [A Life Dedicated to Art]”, while the reading accuracy percentage was 87.5% in the first reading record, it was recorded as 99.1% in the second reading record. For the text “Beyaz Gemi [White Ship]”,

the reading accuracy percentage was 51.3% in the first reading record and 98.1% in the second reading record. Finally, while the percentage of reading accuracy in the text “İletişim Kurmak [Communicating]” was 85.6% in the first reading record, it reached 98.3% in the second reading record.

The effect of podcast use on S2’s reading accuracy is shown in Graph 4:

Graph 4

The Effect of Podcast Use on S2’s Reading Accuracy



When Graph 4 is examined, it is seen that S2’s 1st and 2nd reading records of 3 different texts are compared in terms of reading accuracy percentage. For the text “Sanata Adanmış Bir Ömür [A Life Dedicated to Art]”, while the reading accuracy percentage was 92.9% in the first reading record, it reached 96.2% in the second reading record. For the text “Beyaz Gemi [White Ship]”, the percentage of reading accuracy was 79.2% in the first reading record and 96.3% in the second reading record. Finally, while the percentage of reading accuracy in the text “İletişim Kurmak [Communicating]” was 95.4% in the first reading record, it reached 98.2% in the second reading record.

Findings and Interpretation on the Effect of Podcast Use on Reading Speed

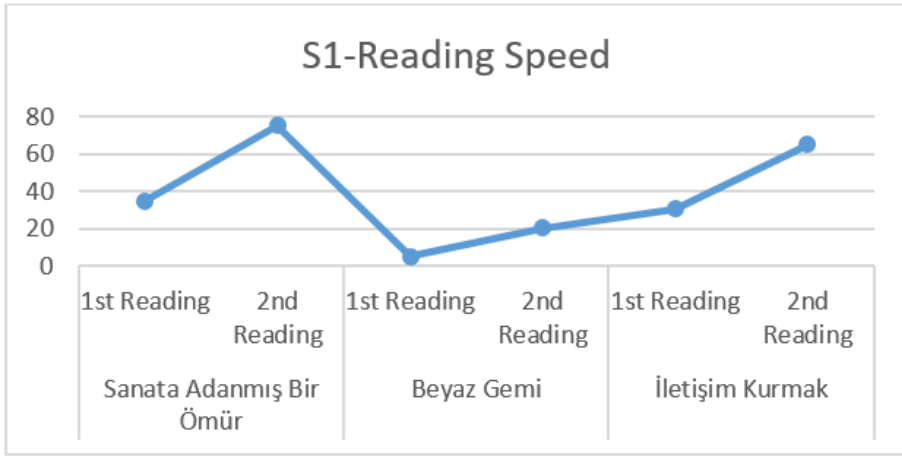
Within the scope of the study, the effect of podcast use on reading speed was examined. Learners’ reading of the texts were recorded as audio recordings by the researcher. The data of the recorded readings were analyzed with the

reading speed formula. The reading speed of each learner in 3 different texts was evaluated according to the 1st and 2nd reading records. The findings of each learner are presented in separate graphs.

The effect of podcast use on S1's reading speed is shown in Graph 5:

Graph 5

The Effect of Podcast Use on S1's Reading Speed

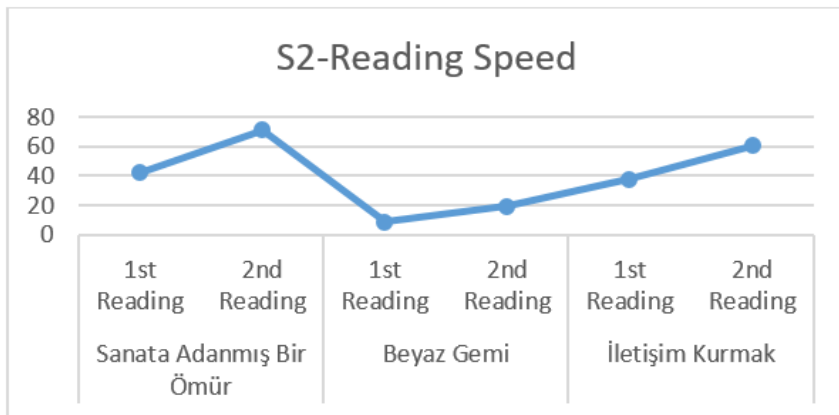


When Graph 5 is examined, it is seen that S1's 1st and 2nd reading records of 3 different texts are compared in terms of reading speed. For the text "Sanata Adanmış Bir Ömür [A Life Dedicated to Art]", while the reading speed was 35.1 in the first reading record, it was recorded as 75.4 in the second reading record. For the text "Beyaz Gemi [White Ship]", while the reading speed was 5.1 in the first reading record, it reached 20.6 in the second reading record. Finally, while the reading rate in the text "İletişim Kurmak [Communicating]" was 30.7 in the first reading record, it increased to 65 in the second reading record.

The effect of podcast use on S2's reading speed is shown in Graph 6.

Graph 6

The Effect of Podcast Use on S2's Reading Speed

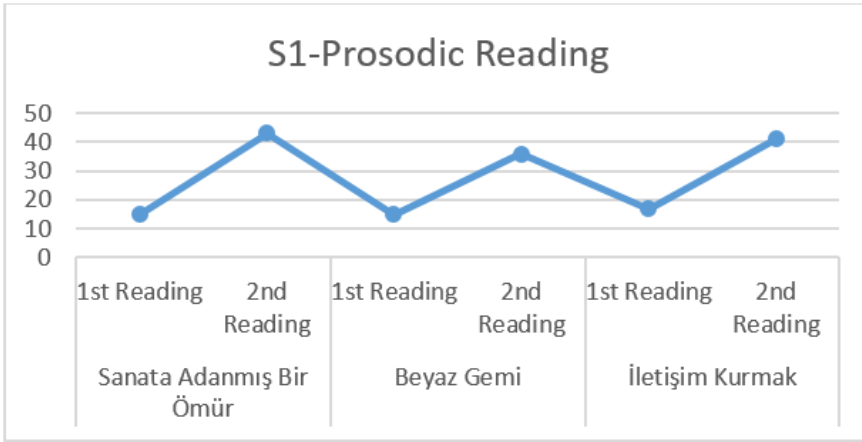


When Graph 6 is examined, it is seen that S2's 1st and 2nd reading records of 3 different texts are compared in terms of reading speed. For the text "Sanata Adanmış Bir Ömür [A Life Dedicated to Art]", while the reading speed was 42.3 in the first reading record, it was recorded as 71.2 in the second reading record. For the text "Beyaz Gemi [White Ship]", the reading speed was 8.7 in the first reading record, while it reached 19.1 in the second reading record. Finally, the reading rate in the text "İletişim Kurmak [Communicating]" increased from 37.8 in the first reading record to 60.6 in the second reading record.

Findings on the Effect of Podcast Use on Prosodic Reading and Comments

Within the scope of the study, the effect of podcast use on prosodic reading was examined. Learners' reading of the texts were recorded as audio recordings by the researcher. The data of the recorded readings were analyzed with the prosodic reading scale. The prosodic reading skills of each learner in 3 different texts were evaluated according to their 1st and 2nd readings. The findings of each learner are presented in separate graphs.

The effect of podcast use on S1's prosodic reading is shown in Graph 7:

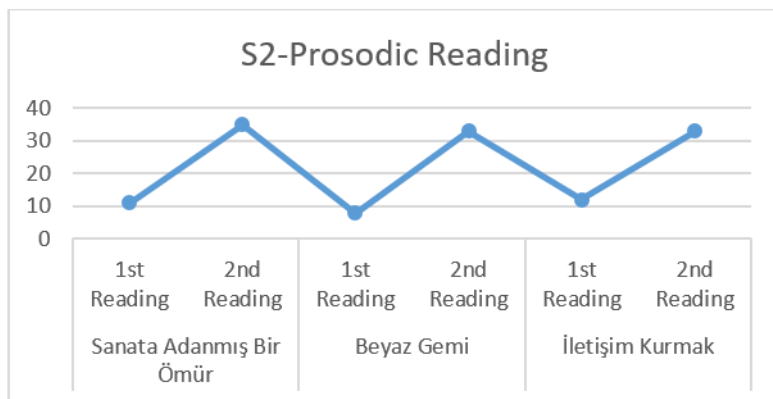
Graph 7*The Effect of Podcast Use on S1's Prosodic Reading*

When Graph 7 is analyzed, it is seen that S1's 1st and 2nd reading records of 3 different texts are compared in terms of prosodic reading. In the text "Sanata Adanmış Bir Ömür [A Life Dedicated to Art]", while the learner's prosodic reading was 15 in the 1st reading record, this value was recorded as 43 in the 2nd reading record. In the text "Beyaz Gemi [White Ship]", the prosodic reading value, which was 15 in the first reading record, increased to 36 in the second reading record. Finally, in the text "İletişim Kurmak [Communicating]", the learner's prosodic reading was 17 in the first reading record and 41 in the second reading record.

The effect of podcast use on S2's prosodic reading is shown in Graph 8.

Graph 8

The Effect of Podcast Use on S2's Prosodic Reading



When Graph 8 is examined, it is seen that S2's 1st and 2nd reading records of 3 different texts are compared in terms of prosodic reading. In the text "Sanata Adanmış Bir Ömür [A Life Dedicated to Art]", while the learner's prosodic reading was 11 in the 1st reading record, this value was recorded as 35 in the 2nd reading record. In the text "Beyaz Gemi [White Ship]", the prosodic reading value, which was 8 in the 1st reading record, increased to 33 in the 2nd reading record. Finally, in the text "İletişim Kurmak [Communicating]", while the learner's prosodic reading was 12 in the first reading record, it was 33 in the second reading record.

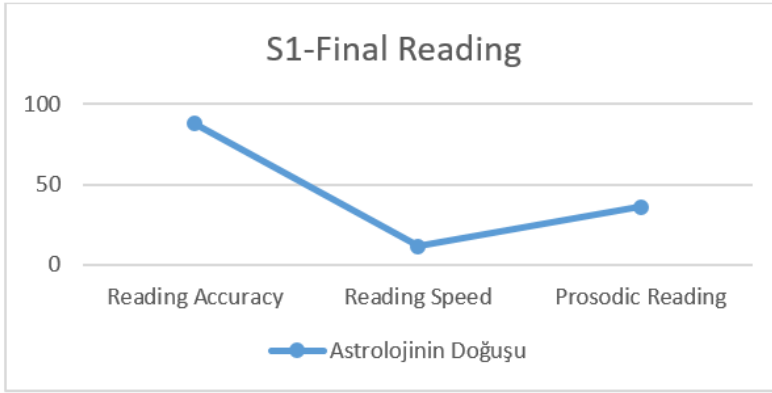
Findings and Interpretation on the Effect of Podcast Use on the Retention of Reading Fluency

In this study, the effect of podcast use on the retention of learners' reading fluency skills was also examined. Within the scope of the study, after four weeks of reading activities using podcasts, the learners were asked to read the text "Astrolojinin Doğuşu [The Birth of Astrology]", which they had never seen or listened to before, only once. During the reading, the researcher recorded the learners' reading of the text as an audio recording. Learners' readings were named as the final reading record. In this way, the permanence of the learners' reading fluency skills was evaluated. The data of the final recorded readings were analyzed with the reading accuracy formula, reading rate formula and prosodic reading scale. The findings of each learner were presented in separate graphs.

The permanence of the effect of podcast use on S1's reading fluency is shown in Graph 9:

Graph 9

The Permanence of the Effect of Podcast Use on S1's Reading Fluency

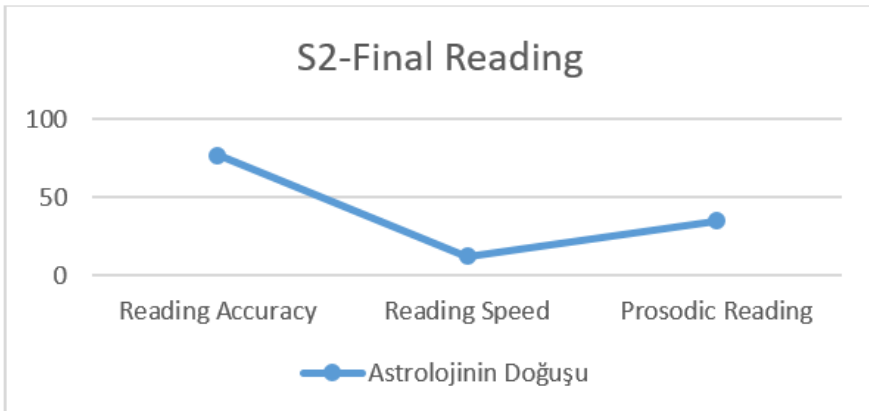


When Graph 9 is analyzed, it is seen that the reading accuracy rate of S1 in his final reading titled “Astrolojinin Doğuşu [The Birth of Astrology]” is 87.6%, his reading speed is 11.5 and his prosodic reading is 36.

The permanence of the effect of podcast use on S2's reading fluency is shown in Graph 10:

Graph 10

The Permanence of the Effect of Podcast Use on S2's Reading Fluency



When Graph 10 is analyzed, in S2's final reading titled "Astrolojinin Doğuşu [The Birth of Astrology]", the reading accuracy rate was 77.1%, reading speed was 12.2 and prosodic reading was 35.

Discussion and Conclusion

In this study, the effect of Podcast use on learners' reading fluency skills in teaching Turkish as a foreign language was investigated. In this context, the effects of Podcast use on learners' reading accuracy, reading speed and prosodic reading were examined.

Within the scope of the research, firstly, the effect of podcast use on reading accuracy was examined. After the podcast application, it was observed that the learners read more accurately and there was a decrease in reading errors. In this context, it was determined that the use of Podcast had a positive effect on the reading accuracy of the learners. Similar results were found in Suğur's (2023) study in which he examined the effect of Podcast use on improving the reading fluency skills of a learner who continues to the 2nd grade of primary school and has a reading fluency problem. This study and this study are similar both in terms of method and results. As can be seen, Podcasts positively affect the reading accuracy skills of both native and foreign language learners. Looking at the literature, Çiftçi (2015) used the repeated reading method to improve learners' reading fluency skills in teaching Turkish as a foreign language. Arslan (2023) used choral reading, repeated reading, paired reading, echoing reading, and reading by dividing into expressions in his study in which he examined the effect of Fluency Development course on reading fluency skills. Similar results were obtained in Çiftçi's (2015) and Arslan's (2023) studies. The results of both studies revealed that the learners had less difficulty in correct pronunciation and that the reading errors of the learners in the text decreased significantly. Akyol (2014) used the structured reading fluency method in his study and concluded that structured reading activities are an effective method in developing reading accuracy skills. In this context, the use of podcasts was positively effective in the development of reading accuracy just like other methods and techniques.

Secondly, the effect of Podcast use on reading speed was examined within the scope of the research. When compared before and after the Podcast applications with the learners, it is seen that there is an improvement in the reading speed of the learners. In this sense, it was determined that the use of Podcast had

a positive effect on the reading speed of the learners. In Suğur's (2023) study examining the effect of Podcast use on learners' reading fluency skills in mother tongue education, it was determined that Podcast use contributed positively to reading speed. As can be seen, Podcasts positively affect the reading speed of learners in both mother tongue and foreign language. Looking at the literature, it was seen that Soydaş (2019) obtained similar results in his study in which he investigated the effect of digital texts on the reading fluency and comprehension skills of 4th grade learners. This study and this study are similar both in terms of method (digital tools) and results. In this context, the use of podcasts was positively effective in the development of reading speed just like other methods and techniques.

Thirdly, the effect of Podcast use on prosodic reading was examined. When compared before and after the Podcast applications with the learners within the scope of the research, it was seen that the learners started to read by paying more attention to stress and intonation. In this context, it was determined that the use of Podcast had a positive effect on learners' prosodic reading. Looking at the literature, Suğur's (2023) study, which examined the effect of Podcast use on learners' reading fluency skills in mother tongue education, similarly concluded that prosodic reading skills improved significantly with Podcast use. As can be seen, Podcasts positively affect the prosodic reading skills of learners in both native and foreign languages. Akyol (2014) used the structured reading fluency method in his study and concluded that structured reading activities are an effective method to improve prosodic reading skills. Keskin (2012) used paired reading, choral reading and structured reading methods in his study. According to the results of the study, she concluded that the most effective method is the structured reading method and that this method has the most effect on prosody in learners' reading fluency skills. Çiftçi (2019) examined the effect of digital stories on the reading skills of 2nd grade primary school learners and concluded that digital stories contribute to the prosodic reading skills of learners. In Soydaş's (2019) study, as in this study, it was concluded that sound-based digital tools have a positive effect on prosodic reading. It is seen that the results of the studies conducted in the literature are similar to this study. In this context, the use of podcasts had a positive effect on the development of prosodic reading skills just like other methods and techniques.

Within the scope of the research, it was seen that the use of podcasts in teaching Turkish as a foreign language has a positive effect on the reading speed of the learners at least. Studies reveal that learners generally have low reading speed in both mother tongue and foreign language teaching. This situation shows that learners do not pay attention to their reading speed because they attach importance to reading accuracy. In his study, Arslan (2023) states that the fact that learners' reading accuracy rates are at an average level is an indication that they attach more importance to reading accuracy than reading speed. Learners decrease their reading speed in order to read accurately. Anderson (1999) also states that reading is a slow process for many foreign language learners and that learners start to read more slowly in order to understand a text they read, but this vicious cycle continues because slow reading makes reading more laborious (Anderson, 1999 as cited in Arslan 2023).

Within the scope of the research, it was seen that the use of podcasts in teaching Turkish as a foreign language had a positive effect on the learners' prosodic reading skills the most. It is seen that similar results were obtained in the studies of Soydaş (2019), Suğur (2023) and Çiftçi (2019). The reason for this is that a learner's good reading prosody is an indicator that he/she has fast and reading accuracy skills and understands what he/she reads. Researchers state that prosodic reading has an important place in the development of reading fluency, that when learners reach the desired level in reading fluency skills, they read by focusing more on prosodic features during reading, and that reading comprehension is also affected by this situation (Kuhn et al. 2010 as cited in Akyol, 2020).

Finally, in the research, it was examined whether the use of Podcast had a permanent effect on the learners' reading fluency skills after 4 weeks after the reading fluency activities conducted through Podcast in teaching Turkish as a foreign language. As a result of the evaluation of the permanence of the learners' reading fluency skills, it was determined that the use of Podcast had a permanent effect on the reading accuracy, reading speed and prosodic reading skills of the learners.

In this study, the effect of using Podcasts in teaching Turkish as a foreign language on learners' reading fluency skills was examined and the following developments were observed in learners with the observations of the researcher

in this process: Learners made comparisons with their own reading while listening to the researcher's Podcasts. While comparing their own reading and the researcher's Podcasts, the learners realized that they read poorly, misread, and did not pay attention to stress and intonation. This situation reveals that the use of Podcasts has a positive effect on reading fluency skills.

In the research, it was determined that the use of podcasts in teaching Turkish as a foreign language has a positive and lasting effect on learners' reading accuracy, reading speed and prosodic reading skills within the scope of reading fluency skills.

Recommendations

In this study, it was aimed to determine the effect of podcast use on learners' reading fluency skills in teaching Turkish as a foreign language. According to the analysis of the data obtained from this study, the following suggestions can be made for future research:

- The study covers a period of 7 weeks. The implementation period of the study may be longer in order to examine the reading fluency skills of the learners longitudinally.
- In this study, the effect of podcast use on learners' reading fluency skills at B2 level was measured. The effect of podcast use on reading fluency can also be investigated for other language levels.
- In this study, the effect of podcast use on learners' reading fluency skills in teaching Turkish as a foreign language was examined. The effect of podcast use on listening, writing and speaking skills can be investigated.
- This study was conducted at a foundation university in Istanbul on 2 learners who were behind in reading fluency according to the B2 level. The study can be extended with a larger group of participants.
- In this study, it was determined that the use of podcasts in teaching Turkish as a foreign language affects the learners' prosodic reading skills the most and reading speed the least. More research can be done on this.

Genişletilmiş Özet

Giriş

Öğrencilerin akıcı okuma becerisinin geliştirilmesi için doğru okumanın, okuma hızının ve prozodik okumanın geliştirilmesi gerekmektedir. Yabancı dil olarak Türkçe öğretiminde yapılan çalışmalarda tekrarlı okuma (Çiftçi, 2015),

görsel geribildirim etkinlikleriyle bütün öğretimi (Çelebi, 2017), akıcı okuma durum çalışması (Güngör, 2019), koro okuma, eşli okuma, yankılayıcı okuma, ifadeler bölerek okuma (Arslan, 2023) yöntemleri kullanılmıştır. Ayrıca Sulak ve Çetinkaya'nın (2022) belirttiği gibi Podcast kullanımı da öğrencilerin akıcı okuma becerisini geliştiren araçlardan biridir.

Podcast kullanımı yabancı dil olarak Türkçe öğretimine katkı sağlamaktadır. Yılmaz ve Babacan'a (2015) göre Podcastler, dil öğrenenlere otantik dil kullanımı sunmakta ve işitsel-görsel duylara hitap ederek öğretimi daha etkili hale getirmektedir. Aynı zamanda, geleneksel ders materyallerine kıyasla öğrencilerin teknolojiye olan ilgisini ve dil öğrenme motivasyonlarını artırması beklenmektedir.

Podcast kullanımı yabancı dil olarak Türkçe öğretiminde dil becerileriyle de ilişkilidir. Kaplan-Leiserson (2005) Podcast uygulamalarının farklı bir öğrenme materyali olduğunu ve öğrencilerin dil becerilerinin gelişimine katkı sağladığını belirtmiştir. Yapısı gereği dinleme becerisine katkı sağlayan Podcastler, aynı zamanda dinleme yoluyla okuma ve yazma becerilerini geliştirme fırsatı sunmaktadır (Hew, 2009). Bununla birlikte Yorgancı (2021) Podcastlerin yabancı dil olarak Türkçe öğretiminde konuşma öz yeterliliklerini geliştirmede öğretim aracı olarak kullanılabileceğini ifade etmiştir.

Yabancı dil olarak Türkçe öğretiminde Podcast kullanımı dinleme becerisine katkı sağlamaktadır. Yılmaz ve Babacan'ın (2015) belirttiği gibi dil becerileri içerisinde ilk kazanılan becerilerden biri olan dinleme becerisi, Podcast ile desteklendiğinde öğrencilerin dil gelişimine katkıda bulunmaktadır. Yapılan araştırmalar yabancı dil öğretiminde Podcast kullanımının dinleme becerisini büyük oranda geliştirdiğini göstermektedir (Ashton-Hay ve Brookes, 2011'den ve O' Bryan ve Hegelheimer, 2007'den aktaran Yılmaz ve Babacan, 2015). Yılmaz ve Babacan'a (2015) göre dil öğretiminin etkin bir şekilde gerçekleştirilebilmesi için dinleme becerisinin geliştirilmesine önem verilmeli ve Podcastlerden yararlanılarak dil öğretim çalışmalarının çok boyutlu hâle getirilmesi gerekmektedir. Dinleme becerisinin yanında yabancı dil olarak Türkçe öğretiminde Podcast kullanımı yazma becerisine de katkı sağlamaktadır. Kurt ve Göçer (2021) Podcast kullanımının öğrencilere dinlediği öyküyü devam ettirme, dinlerken not alma, dinlediğinin özetini oluşturma, dinlenileni yazma ve dikte etme gibi çeşitli etkinliklerle yazma çalışmalarını sergileyebilecekleri

ortam sunduğunu ve öğrencilerin daha az hata yapmalarını sağlayabileceğini ifade etmektedirler. Yorgancı (2021) Podcastlerin yabancı dil olarak Türkçe öğretiminde öğrencilerin yazma öz yeterliliklerini geliştirmede etkili bir teknolojik araç olarak kullanılabileceğini ifade etmiştir.

Yabancı dil olarak Türkçe öğretiminde Podcast kullanımı dendiğinde ilk olarak akla dinleme ve konuşma becerileri geliyor olsa da Podcast kullanımı okuma becerisine de katkı sağlamaktadır. Kurt ve Göçer'in (2021) belirttiği gibi Podcastlerde bir eserden bahsedilmesi, sesli kitap çalışmaları yapılması veya kitap üzerine tartışmalar yürütülmesi, öğrencilerin okumaya teşvik edilmesini ve okunan esere ilgi duymasını sağlamaktadır. Bununla birlikte Rasinski ve Young (2014) teknolojik araçların kullanımının, metinlerin kaydedilmesi ve bu kayıtlar dinlenirken metnin yazılı hâlinin gözle takip edilmesi yoluyla öğrencilerin yazılı kelimelerin vurgularını daha iyi kavrayabileceğini öne sürmektedir.

Podcast kullanımı öğrencilerin akıcı okuma becerisini de geliştirmektedir. Bu gelişim, Podcast kullanımının dinleme, konuşma ve yazma becerilerine katkısı ile ilişkilidir. Dinleme açısından Göçer (2018, s. 43), "Dinleme süreci sesleri anlamaya çalışmak olup çaba gerektiren bir süreçtir." ifadesiyle Podcastlerin seslerin doğru algılanmasını desteklediğini belirtmektedir. Konuşma açısından, Podcastler tonlama ve telaffuz gelişimine katkı sağlamaktadır. Yazma açısından, Podcast dinleyerek yapılan dikte çalışmaları dilin standart kullanımını iyileştirmekte ve öğrencilerin okuma sırasında da standart dil kullanımına dikkat etmelerini sağlamaktadır. Böylece öğrenciler, bildikleri sözcükleri daha hızlı ve akıcı okuyabilirler. Bu bağlamda Podcast kullanımı öğrencilerin akıcı okuma becerisine olumlu katkı sunmaktadır.

Yabancı dil olarak Türkçe öğretiminde dil becerileri ve Podcast kullanımına yönelik araştırmalara bakıldığında farklı çalışmaların yapıldığı görülmektedir. Yılmaz ve Babacan (2015) çalışmalarında, yabancı dil olarak Türkçe öğretiminde Podcast kullanımını incelemişlerdir. Coşkun ve Demirkan (2016) çalışmalarında, yabancı dil olarak Türkçe öğretiminde dinleme becerisini geliştirmede Web Radyo ve Podcast uygulamalarını ele almışlardır. Kurt ve Göçer (2021) Podcastin Türkçe öğretiminde kullanılabilirliği hakkında kuramsal bir çalışma yapmışlardır. Berk (2019) çalışmasında elektronik dinletilerin dinlediğini anlama başarısı ve dinleme kaygısına etkisini araştırmıştır. Yorgancı (2021) çalışmasında Podcast kullanımının üretici dil becerilerine etkisini incelemiştir.

Ağca (2023) araştırmasında Podcast kullanımının dinleme kaygısına ve dinleme öz yeterlik algısına etkisini incelemiştir.

Yapılan araştırmalar incelendiğinde çalışmalarda yabancı dil öğretiminde Podcast kullanımının genel olarak ele alındığı görülmüştür. Bununla birlikte dil becerileri açısından düşünüldüğünde Podcast kullanımının dinleme becerisine etkisine yönelik daha çok sayıda araştırma yapıldığı anlaşılmaktadır. Yabancı dil olarak Türkçe öğretiminde Podcast kullanımının öğrencilerin okuma becerisine ya da akıcı okuma becerisine etkisine yönelik bir çalışmanın ise yapılmadığı tespit edilmiştir.

Alan yazını incelendiğinde yabancı dil olarak Türkçe öğretiminde öğrencilerin okuma ve akıcı okuma becerisine yönelik araştırmaların da yapıldığı görülmektedir (Arslan, 2023; Çelebi, 2017; Çiftçi, 2015; Güngör, 2019; Ülper, 2018). Yapılan araştırmalarda genel olarak okuma motivasyonu ölçeği geliştirilmesi, okuma kaygısı ve anlama arasındaki ilişki, okuma metinleri ve okuma becerisini geliştirmeye yönelik etkinlikler gibi konular araştırılmıştır. Yapılan bu araştırmaların içinde yabancı dil olarak Türkçe öğretiminde Podcast kullanımının öğrencilerin akıcı okuma becerisine etkisine yönelik bir araştırmanın yapılmadığı tespit edilmiştir.

Podcast kullanımının akıcı okuma becerisine katkısı üzerine yapılan tek çalışma Suğur (2023) tarafından gerçekleştirilmiştir. Bu çalışmada, ana dili olarak Türkçe öğretiminde Podcast kullanımının akıcı okuma becerisine etkisi incelenmiş ve olumlu sonuçlar elde edilmiştir. Benzer bir çalışmanın yabancı dil olarak Türkçe öğretimi alanında gerçekleştirilmesi önemlidir. Akıcı okuma becerisi gelişmemiş öğrenciler yavaş ve duraklayarak okumakta, bu da metnin anlamına odaklanmalarını zorlaştırmaktadır (Güneş, 2007; Rasinski, 2000).

Kaya ve Yıldırım'a (2016) göre öğrencilerin akıcı okuma becerisine sahip olmaları durumunda metni anlamlı doğal bir biçimde okuyabileceklerini; bu öğrencilerin okuma sırasında metni doğru ve hızlıca kavrayarak kelimeleri otomatik olarak gruplandırabileceklerini ve noktalama işaretlerine dikkat ederek okuyacaklarını ifade etmişlerdir. Bu anlamda yabancı dil olarak Türkçe öğrenenlerin akıcı okuma becerisinin geliştirilmesi önemlidir.

Öğrencilerin akıcı okuma becerisinin geliştirilmesi kapsamında öğrencilerin doğru okumasına, hızlı ve prozodik okumasına Podcast kullanımı destek olabilmektedir (Rosell-Aguilar, 2007'den aktaran Sulak ve Çetinkaya,

2022). Bu bağlamda yabancı dil olarak Türkçe öğrenenlerin akıcı okuma becerisinin geliştirilmesinde Podcast kullanımının etkisi araştırılmalıdır.

İfade edilen önem ve ihtiyaç temelinde “Yabancı dil olarak Türkçe öğretiminde Podcast kullanımının akıcı okuma becerisine etkisi nedir?” problem sorusundan hareketle yabancı dil olarak Türkçe öğretiminde Podcast kullanımının öğrencilerin akıcı okuma becerisine olan etkisini incelemek amaçlanmıştır. Bu amaçla yapılan araştırmada şu sorulara cevap aranmaktadır:

1. Podcast kullanımının doğru okumaya etkisi nedir?
2. Podcast kullanımının okuma hızına etkisi nedir?
3. Podcast kullanımının prozodik okumaya etkisi nedir?
4. Podcast kullanımının akıcı okuma becerisinin kalıcılığına etkisi nedir?

Yöntem

Bu araştırma B2 seviyesinde yabancı dil olarak Türkçe öğrenen ve akıcı okumada zorluk çeken 2 öğrencinin akıcı okuma becerisinin geliştirilmesine yönelik Podcast kullanımının etkisini belirlemeyi amaçlamıştır. Bu amaç doğrultusunda nicel araştırma yöntemlerinden deneysel yöntemler arasında yer alan tek denekli desen kullanılmıştır. Bu araştırmanın deney grubunu İstanbul’da bulunan bir vakıf üniversitesinde B2 seviyesinde yabancı dil olarak Türkçe öğrenen ve akıcı okuma sorunu yaşayan 2 öğrenci oluşturmaktadır. Araştırma kapsamında “Kişisel Bilgi Formu”, “Metinler”, “Araştırmacının Podcastleri” ve “Öğrencilerin Okuma Kayıtları” olmak üzere 4 veri toplama aracı kullanılmıştır.

Verilerin analizinde “Doğru Okuma Formülü”, “Okuma Hızı Formülü” ve “Prozodik Okuma Ölçeği” kullanılmıştır. Öğrencilerin doğru okuma yüzdesinin belirlenmesi için araştırmacılardan (Akyol, 2020; Arslan, 2023; Güngör, 2019; Suğur, 2023) hareketle aşağıdaki formül kullanılmıştır:

Doğru Okuma Yüzdesi = doğru okunan kelime sayısı / toplam okunan kelime sayısı x 100.

Doğru okumanın ölçülebilmesi için öncelikle okunan toplam kelime sayısı, hatalı okunan kelime sayısından çıkarılmıştır. Ardından doğru okunan kelime sayısı metindeki toplam kelime sayısına bölünmüş ve sonuç 100 ile çarpılarak doğru okuma yüzdesine ulaşılmıştır. Metnin ne kadarının doğru okunduğu yüzde olarak ifade edilmiştir. Yapılan bu işlem katılımcı öğrencilere tek tek uygulanmış ve öğrencilerin doğru okuma yüzdeleri belirlenmiştir.

Öğrencilerin okuma hızlarının ölçülmesi için araştırmacılardan (Akyol, 2020; Arslan, 2023; Güngör, 2019; Suğur, 2023) hareketle aşağıdaki formül kullanılmıştır:

$$\text{Okuma Hızı} = \text{doğru okunan kelime sayısı} / \text{toplam okuma süresi} \times 60.$$

Okuma hızının ölçülebilmesi için öncelikle toplam okunan kelime sayısından hatalı okunan kelime sayısı çıkarılmıştır. Ardından doğru okunan kelime sayısı, öğrencinin metnin tamamını okuma süresine bölünmüş ardından 60 saniye ile çarpılmıştır. Bu formül kullanılarak öğrencinin bir dakikada doğru okuduğu kelime sayısı elde edilmiştir. Bu uygulamada sadece bir dakikada okunan kelime sayısı değil aynı zamanda doğru okunan kelime sayısı da önemlidir. Bu nedenle okuma sırasında yapılan hatalar dikkate alınarak doğru okunan kelime sayısı belirlenmiştir. Okuma hataları belirlenirken Akyol (2020, s. 244-246) tarafından belirtilen hata türleri “ters çevirmeler, atlayıp geçmeler, eklemeler, tekrarlar, yanlış okumalar” göz önünde bulundurulmuştur. Yapılan bu işlem katılımcı öğrencilere tek tek uygulanmış ve öğrencilerin okuma hızı belirlenmiştir.

Prozodik okuma becerisinin ölçülebilmesi için Keskin vd. (2013) tarafından geliştirilen “Prozodik Okuma Ölçeği” kullanılmıştır. “Prozodik Okuma Ölçeği” tonlama, vurgulama, anlam üniteleri ile okuma, metindeki duyguyu yansıtmaya, okuma ritmi ve ses özellikleri gibi prozodik özelliklerin boyutlarını ölçmek amacıyla hazırlanmıştır. Bu ölçek lipert tipinde olup, 0 ile 4 arasında puanlanan 15 maddeden oluşmaktadır. Ölçekten alınabilecek maksimum puan 60’tır. Ölçekten %50 ve üzeri puan alan öğrenciler prozodik olarak yeterli görülmektedir. Ölçeğin yapı geçerliliği KMO=0.97 ve Barlett analizi ($p=0.00$; <0.01) sonuçlarına dayanmaktadır. Ölçeğin Cronbach Alpha değeri ise 0.981 olarak hesaplanmıştır. Bu ölçeğin kullanımı için gerekli izinler alınmış ve bu çalışmada kullanılmıştır. Ölçeğin uygulanmasında öğrencilerin Podcastleri birden fazla kez dinlenmiş ve “Prozodik Okuma Ölçeği”ne göre puanlama yapılmıştır.

Tartışma, Sonuç ve Öneriler

Yapılan araştırma kapsamında ilk olarak Podcast kullanımının doğru okumaya etkisi incelenmiştir. Podcast uygulaması sonrasında öğrencilerin daha

doğru okudukları ve okuma hatalarında azalma olduğu görülmüştür. Bu bağlamda Podcast kullanımının öğrencilerin doğru okuması üzerinde olumlu etkisi olduğu tespit edilmiştir. Yapılan araştırma kapsamında ikinci olarak Podcast kullanımının okuma hızına etkisi incelenmiştir. Öğrencilerle yapılan Podcast uygulamalarının öncesi ve sonrası karşılaştırıldığında öğrencilerin okuma hızlarında gelişim olduğu görülmektedir. Bu anlamda Podcast kullanımının öğrencilerin okuma hızı üzerinde olumlu bir etki yarattığı tespit edilmiştir. Yapılan araştırma kapsamında üçüncü olarak Podcast kullanımının prozodik okumaya etkisi incelenmiştir. Araştırma kapsamında öğrencilerle yapılan Podcast uygulamalarının öncesi ve sonrası karşılaştırıldığında öğrencilerin vurgu ve tonlamaya daha fazla dikkat ederek okumaya başladıkları görülmüştür. Bu bağlamda Podcast kullanımının öğrencilerin prozodik okumaları üzerinde olumlu etkisi olduğu tespit edilmiştir. Yapılan araştırma kapsamında yabancı dil olarak Türkçe öğretiminde Podcast kullanımının öğrencilerin en az okuma hızına olumlu etki ettiği görülmüştür. Yapılan çalışmada yabancı dil olarak Türkçe öğretiminde Podcast kullanımının öğrencilerin en çok prozodik okuma becerisine olumlu etki ettiği görülmüştür. Podcast kullanılarak yapılan okuma uygulamalarının ardından 4 hafta geçtikten sonra Podcast dinletilmeden yapılan okuma çalışması kapsamında öğrencilerin akıcı okuma becerilerinin kalıcılığı değerlendirilmiş olup Podcast kullanımının öğrencilerin doğru okuma, okuma hızı ve prozodik okuma becerilerine kalıcı etkisi olduğu tespit edilmiştir.

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