Readability Levels of Story Series Prepared for Piktes

Yusuf GÜNAYDIN[a]

a: 0000-0002-0638-5621   Gazi University, Turkiye   yusufgunaydin@gazi.edu.tr

Abstract

Texts intended for language instruction need to possess specific attributes in order to be prepared in accordance with the learner's level and learning objectives, and to be correctly comprehended by the learner. For this purpose, a set of distinctive criteria has been formulated. Among these, the concept of readability holds prominence. This study aims to determine the readability of open reading materials tailored for children who are learning Turkish as a second language. The study materials encompassed the "Salih Story Series" and the "Aslı Story Series," curated for Turkish language instruction within the scope of the Project for Supporting the Integration of Syrian Children into the Turkish Education System (PIKTES). A total of 20 storybooks, forming two story series, designed for children aged 6 to 12 of Syrian and other foreign nationalities residing in Turkey, at A1 and A2 proficiency levels, were analyzed. This analysis encompassed syllable, word, and sentence lengths; average word and sentence lengths based on readability criteria by Ateşman (1997) and Çetinkaya-Uzun (2010); and readability scores and levels derived from these criteria. The objective was to individually evaluate and ascertain the readability levels of the stories. The research data indicated that the word and sentence counts of the stories exhibited variability according to their sequential arrangement within the series and demonstrated that there was no progressive increase in the readability of the stories, from simpler to more complex, easier to more difficult, or from known to unknown. Following a qualitative approach and designed in accordance with the method of document analysis, this study culminated in proposing recommendations aimed at the development of a formula for assessing the readability of reading texts to be employed in the instruction of Turkish as a second and foreign language. This formula takes into account comprehensibility, and suggestions were put forth regarding measures that can be undertaken to enhance readability.

Keywords

PIKTES, Reading Books, Readability, Teaching Turkish as a Second Language.

INTRODUCTION

The innate human curiosity for knowledge acquisition has undergone significant transformations over time, leading to the refinement of communication abilities. Learning, being a continuous process that starts at birth and persists throughout life, is intricately intertwined with language. Language serves as the primary tool for individuals to express their thoughts and emotions through verbal or non-verbal means (TDK, 2011). Ergin (2004) characterizes language as a natural medium that enables mutual understanding among people, which is governed by its own set of rules that evolve over time, and as a complex system of sounds rooted in ancient conventions. Karaağaç (2013), on the other hand, defines language as a socially constructed system of arbitrary associations, where sounds hold specific meanings. Banguoğlu asserts that language is a collection of vocal signs utilized for conveying the desires of individuals (2015, p.9). These definitions collectively depict language as a structured system, shaped by social consensus, and designed to facilitate the communication of thoughts and emotions. Proficiency in reading, listening, speaking, and writing skills plays a pivotal role in the effective transmission of language. The harmonious functioning of these language skills constitutes the essence of language itself (Demirel, 2012).

The development of language skills in individuals is closely linked to facilitating emotional and cognitive expression in both native language education and second language or foreign language learning contexts. Language skills actively engage learners, accommodate their unique characteristics and foster practical, dynamic, and cumulative progress, which contributes to long-term learning outcomes (Maden, 2013). Teaching language as a means of communication necessitates the simultaneous acquisition of reading, listening, speaking, and writing skills (Demirel, 2012; Gedik, 2009). Consequently, the provision of materials tailored to the four fundamental language skills in formal or informal language learning settings serves to bolster language development.

Within the framework of the "Supporting the Integration of Syrian Children into the Turkish Education System" (PIKTES) project, funded by the European Union, a range of educational resources has been developed. PIKTES, implemented by the Turkish Ministry of National Education, aims to extend educational opportunities for foreign national children who have been granted temporary protection in Turkey since 2016, while also nurturing their language proficiency. Scholarly literature highlights the challenges frequently encountered by learners in areas such as language acquisition, cultural adaptation, and overall adjustment (Mercan-Uzun & Bütün, 2016; Özer, Komşuoğlu & Ateşok, 2016). In response to these challenges, the project has engaged instructors and field experts in the formulation of instructional materials, including textbooks, supplementary reading materials, dictionaries, and more. These materials are designed to enhance the development of the four essential language skills and can be utilized in both formal and informal learning contexts, thereby facilitating the progression of Turkish language acquisition for foreign national children. Specifically, the incorporation of supplementary reading materials serves to fortify reading skills and empowers the target audience to advance their Turkish language proficiency beyond formal instruction.

The reading skill encompasses the ability to comprehend, interpret, and grasp written texts, rendering it a fundamental aspect of language instruction (Keskin & Okur, 2013). Proficiency in reading is employed across various domains for purposes such as knowledge acquisition, learning, and communication. Within the realm of language teaching, reading serves as a conduit through which learners enhance their vocabulary, grasp grammatical structures, employ language learning strategies, and develop other language skills. Reading materials used in language instruction can encompass a

range of sources, including books, stories, magazine and newspaper articles, as well as adapted or simplified texts tailored to learners' proficiency levels and specific topics.

To ensure the suitability of texts for language teaching, they must possess certain characteristics that align with learners' proficiency levels and desired learning outcomes, while accurately accommodating learners' comprehension (Şimşek, 2011). Various criteria have been developed for this purpose, with one such criterion being readability. Readability is influenced by factors such as vocabulary usage, sentence structure, spelling, and punctuation, as well as paragraph organization, font size, and formatting. In this study, readability will be assessed by examining the number of sentences, words, and syllables within the text, with the aim of determining its level of difficulty. Accordingly, readability can be defined as the measure of ease or difficulty with which a text is comprehended by the reader (Ülper, 2010). The assessment of readability involves ensuring that a text is appropriate for its intended audience. Consequently, Ateşman (1997) defines readability as the level of ease or difficulty in comprehending texts from the reader's perspective.

In the realm of language teaching, the accomplishment of the ultimate goal is intrinsically tied to the appropriateness of the linguistic content aligned with learners' proficiency level. Central to this linguistic content are reading texts. Given the intricate nature of reading in a new language, the establishment of readability criteria becomes essential, facilitating the analysis of the interplay between age, language proficiency, language level, and background knowledge in relation to texts. It is crucial for all practitioners, including educators, to possess an understanding of readability criteria that impact language development across both formal and informal settings, in order to mitigate associated complexities. Consequently, readability assessments are frequently undertaken, necessitating the computation of features such as syllable, word, and sentence length within the text. According to Ateşman (1997), the origin of readability studies can be traced back to the 9th century BC when religious scholars sought to differentiate significant words from trivial ones to facilitate the interpretation of sacred texts. However, systematic studies in this field commenced in the 19th century. Similarly, Wilkens, Alfter, et al. (2022) note that readability studies emerged in the 20th century, and to date, hundreds of formulas have been developed.

Numerous criteria and formulas have been devised to gauge the readability of a text. The objective is to establish a criterion for evaluating the ease with which a text can be read. Notable readability criteria encompass the Flesch-Kincaid Readability Formula, Gunning Fog Readability Formula, Coleman-Liau Readability Formula, SMOG Readability Formula, Fry Readability Formula, and many others. These formulas incorporate a range of variables, including sentence length, word choice, word length, sentence complexity, and word complexity, to calculate the readability of the text.

Table 1

Some Well-known Readability Formulas in the World

Formula	Main considered feature
Gunning Fog Readability Formula (Gunning, 1952)	The formula is calculated by determining the number of words with three or more syllables in the first 100-word section of the text and the average number of words used in sentences.

SMOG Readability Formula (McLaughlin, 1969)	The formula is calculated based on the average number of words with three or more syllables in the thirty selected sentences from a paragraph
Coleman-Liau Readability Formula (Coleman-Liau, 1975)	A 100-word paragraph is selected. The readability is calculated based on the total character count and total sentence count in the selected paragraph.
Fry Readability Formula (Fry, 1977)	The formula is calculated by considering the number of sentences and syllables within the 100-word sections extracted from the beginning, middle, and end of the text.
Flesch-Kincaid Readability Formula (Flesch, 1979)	A 100-word paragraph is selected from the text. The total number of words in the paragraph is divided by the total sentence count to determine the average sentence length, and the total number of syllables is divided by the total number of words to determine the average word length.

Numerous readability formulas have been developed worldwide to evaluate the readability of texts. These formulas take into account factors such as syllable count, word count, and sentence length to indicate the text's readability. However, it is important to note that these formulas have primarily been designed for languages other than Turkish. Consequently, relying solely on a single criterion might not be adequate for accurately assessing the readability of Turkish texts. In certain studies aimed at measuring the readability of Turkish texts, researchers have turned to employing formulas originally devised for evaluating the readability of English texts. Nonetheless, it is widely acknowledged that such formulas may not be suitable for evaluating Turkish texts due to the inherent typological differences between the two languages.

Table 2

Readability Formulas developed for Turkish Language

Formula	Main considered feature
Ateşman (1997)	The readability level of the text is calculated by assessing the number of words, sentences, and letters in a 100-word section of the text.
Bezirci-Yılmaz (2010)	To calculate the readability value of the text, the number of words with three, four, five, and six or more syllables in a sentence is determined separately, and the average word count is calculated using the square root.

Çetinkaya-Uzun (2010)	Based on the average word and sentence length in the selected section of the text, readability scores and corresponding reading levels are calculated.
Sönmez (2013)	A 100-word paragraph is selected, and the total number of words and sentences in the paragraph, as well as the number of unknown words (foreign words, terms, idioms, concepts, metaphors, symbols, formulas), are calculated.

Table 2 presents readability formulas specifically developed for the Turkish language and the key factors considered by these formulas. The formulas featured in the table include Ateşman (1997), Bezirci-Yılmaz (2010), Çetinkaya-Uzun (2010), and Sönmez (2013). The initial Turkish readability formula, devised by Ateşman (1997), was based on the "Flesch-Kincaid Readability Formula" (Flesch, 1979). Similarly, the Çetinkaya-Uzun (2010) Readability Formula, developed as part of Çetinkaya's (2010) doctoral thesis and widely recognized in the literature, focuses on the aspects of word and sentence lengths considered in the "Flesch-Kincaid Readability Formula". It is acknowledged that both Ateşman's (1997) and Çetinkaya-Uzun's (2010) formulas are considered more practical than Bezirci-Yılmaz's (2010) formula, as noted by Yılmaz and Temiz (2014). This distinction could be attributed to the limited elaboration of the application steps found in the studies on Bezirci-Yılmaz's (2010) and Sönmez's (2013) readability formulas.

Existing literature has predominantly concentrated on evaluating the readability of Turkish reading texts utilized in native language instruction, particularly in textbooks and children's literature (Bağcı & Ünal, 2013; Baki, 2018; Bozlak, 2018; Baş & Yıldız, 2015; Bayır & Kahveci, 2021; Bora & Arslan, 2021; Ceran, 2015; Çakıroğlu, 2015; Çeçen & Aydemir, 2011; Çetinkaya & Yenmez Aydoğan, 2019; Çıplak & Balcı, 2022; Çiftçi, Çeçen & Melanlıoğlu, 2007; Çinpolat, 2019; Çelik, Eker, İnce & Sağlam, 2018; Güder & Bilgen, 2021; Güneş, 2000; Kalın Ulu & Koçoğlu E, 2017; Kavun, 2023; Kayabaşı, Yılmaz & Doyumğaç, 2016; Kemiksiz, 2021; Kurnaz & Erdem, 2012; Okur & Arı, 2013; Okur, Arı, Ersoyol & Okur, 2013; Özçetin & Karakuş, 2020; Sarıçam, Kösecioğulları & Bozkurt, 2021; Şimşek & Çinpolat, 2021; Tekşan & Çinpolat, 2020; Temizyürek, 2010; Tosunoğlu & Özlük, 2011; Zorbaz, 2007). However, there is a noticeable dearth of research investigating the readability levels of texts specifically designed for teaching Turkish as a foreign or second language, with only a limited number of studies addressing this area (Aydın, 2022; Biçer & Alan, 2017; Erişik, 2021; Erol, 2014; Mutlu, 2020; Özcan, 2013; Yılmaz & Temiz, 2014; Zorbaz & Köroğlu, 2016). This study aims to fill this research gap by investigating the readability levels of freely accessible reading materials developed specifically for teaching Turkish as a second language. Through this exploration, this study seeks to offer an overview of the current status of existing reading materials while underscoring the significance of incorporating readability as a pivotal factor in producing new reading materials.

The materials chosen for this study consist of two sets of stories: "Salih Story Series" and "Aslı Story Series." These reading materials have been specifically crafted to teach Turkish to Syrian and other foreign children residing in Turkey, who are learning Turkish as their second language. The intended recipients of these materials are children at the A1 and A2 proficiency levels. While the literature lacks research focusing exclusively on the "Aslı Story Series", several publications delve into various aspects of the "Salih Story Series". These publications explore cultural elements (Gün, Tanrıkulu & Selvi, 2021),

cultural visuals (Tanrıkulu & Öz Sipan, 2021), values education (Aydın, İnce, & Uğuz, 2022), and lexical items (Göçen & Çiçek, 2022) within the "Salih Story Series." Furthermore, during the literature review, a book chapter authored by Bozkurt (2021) was uncovered, which focuses on determining the readability level of the Salih Story Series. However, Bozkurt's study solely utilized the Ateşman (1997) formula to gauge the readability of the stories. In contrast, the present research investigates both the "Salih Story Series" and the "Aslı Story Series" using two readability formulas: Ateşman (1997) and Çetinkaya-Uzun (2010). This approach enables a comprehensive comparison between the two series, distinguishing it from Bozkurt's study in terms of methodology and analysis.

METHOD

Research Design

This qualitative study aims to explore the readability of the "Salih Story Series" and the "Aslı Story Series." Qualitative research typically employs data collection methods such as observation, interviews, and document analysis, wherein data are gathered and interpreted within their social context to generate theoretical insights (Yıldırım & Şimşek, 2011). For this research, data were collected through document analysis of the selected materials. Document analysis, also referred to as document examination, involves a systematic interpretation of intentionally created artifacts by the researcher (Oral & Çoban, 2020). This method encompasses various types of documents, including both printed and electronic materials. In this study, the electronic versions of the "Aslı Story Series" and the "Salih Story Series" served as the primary research materials.

Data Collection and Analysis

This research endeavors to assess the readability of the "Salih Story Series" and the "Aslı Story Series," both crafted specifically for teaching Turkish to Syrian and other foreign children in Turkey. These series were a part of the Project for Supporting the Integration of Syrian Children into the Turkish Education System (PIKTES), funded by the European Union. The study focused on 20 storybooks, comprising two separate story series, designed for children aged 6 to 12 at A1 and A2 language proficiency levels. The selection of these series was influenced by their characteristic focus on well-defined characters. Each story within the series was subjected to analysis using the readability formulas developed by Ateşman (1997) and Çetinkaya-Uzun (2010). These formulas consider factors such as syllable count, word count, and sentence length to ascertain the readability levels of the stories. Aligned with this objective, the research aimed to address the following research questions:

Regarding the stories prepared within the scope of the PIKTES project:

1. What are the syllable, word, and sentence lengths of the stories?

2. What are the average word and sentence lengths of the stories according to the readability criteria of Ateşman (1997) and Çetinkaya-Uzun (2010)?

3. What are the readability scores and levels of the stories according to the Ateşman (1997) and Çetinkaya-Uzun (2010) formulas?

This study involved the analysis of the "Salih Story Series" and "Aslı Story Series," which were created within the context of the PIKTES project and characterized by narratives revolving around distinct characters, The assessment utilized the readability formulas proposed by Ateşman (1997) and Çetinkaya-Uzun (2010).

Table 3

The Readability Formulas used in the Research

Ateşman (1997)

OS = 198,825-(40,175x1)-(2,610x2)

OS: Readability Score

1: Average word length

2: Average sentence length

Çetinkaya-Uzun (2010)

OP = 118,823 – 25,987 x OSU–0,971x OTU

OP = Readability Score

OTU = Average sentence length

OSU = Average word length

Based on the Ateşman (1997) and Çetinkaya-Uzun (2010) readability formulas, the readability levels of the stories were analyzed according to the following steps:

1. Counting the number of words in the story texts

2. Counting the number of sentences in the story texts

3. Counting the number of syllables in the story texts

4. Determining the average word length in the stories.

5. Determining the average sentence length in the stories

6. Calculating the readability of the stories

According to the Ateşman (1997) formula, determining the readability score involved analyzing a selected 100-word portion from the story texts. Although this specific criterion was not explicitly outlined in Ateşman's study, previous research has taken it into consideration (Kayabaşı, Yılmaz, & Doyumğaç, 2016; Çeçen & Aydemir, 2011; Ulu Kalın & Koçoğlu, 2017; Baki, 2019; Erişik, 2021). Thus, for this study, the initial 100 words of each story were meticulously counted. In cases where a sentence extended beyond this 100-word segment, the entire sentence was included to ensure accurate representation. Subsequently, the analysis focused solely on this designated portion of the text, where the total number of syllables, words, and sentences was tallied. The average word count was calculated by dividing the cumulative syllable count by the overall word count, while the average sentence length was determined by dividing the total word count by the total sentence count. Finally, the derived average word and sentence lengths were applied within the formula, enabling the computation of the readability score for each story text in accordance with the Ateşman (1997) formula.

To compute the readability score according to the Çetinkaya-Uzun (2010) formula, the total count of words, sentences, and syllables within the stories was first determined (Çetinkaya, 2010). Subsequently, the average sentence length was derived by dividing the total word count by the total sentence count, while the average word length was calculated by dividing the total syllable count by the total word count. Finally, the calculated average word and sentence lengths were inserted into the formula, facilitating the computation of the readability score for each story text in accordance with the Çetinkaya-Uzun (2010) formula.

Table 4

Readability Classifications based on Ateşman (1997) and Çetinkaya-Uzun (2010)

Ateşman (1997)		Çetinkaya-Uzun (2010)		
Readability Score	Degree	Readability Score	Reading Level	Grade Level
90 - 100	Very easy	0 - 34	Emergent reading	10., 11., 12.
70 - 89	Easy	35 - 50	Instructional reading	8., 9.
50 - 69	Moderately Difficult	51 +	Independent reading	5., 6., 7.
30 - 49	Difficult			
1 - 29	Very difficult			

Table 4 displays the readability classifications generated through the application of Ateşman (1997) and Çetinkaya-Uzun (2010) readability formulas. It's noteworthy that these formulas employ distinct criteria, and their categorizations don't directly correspond. According to Ateşman, texts are classified from "very easy" to "very difficult" spanning the readability score spectrum of 100 to 1. Conversely, Çetinkaya-Uzun utilizes categories like "emergent reading," "instructional reading," and "independent reading" using readability scores ranging from 0 to 51+.

For the "Salih Story Series" and "Aslı Story Series," both developed within the framework of the PIKTES project, syllable, word, and sentence counts were computed in adherence to the procedures outlined in the Ateşman (1997) and Çetinkaya-Uzun (2010) readability formulas. The findings section details the cumulative counts of syllables, words, and sentences for each story, as well as the average word and sentence lengths, effectively demonstrating their respective levels of readability.

To uphold the reliability and validity of the research, a separate researcher conducted a re-evaluation of the story texts utilizing the Ateşman (1997) and Çetinkaya-Uzun (2010) formulas. Upon comparison

of the outcomes from both evaluations, a complete alignment of 100% was observed. This outcome serves to validate the study's reliability, confirming the consistency and accuracy of the findings.

FINDINGS

The stories analyzed within the scope of the research, from both the "Salih Story Series" and "Aslı Story Series," have been assigned a coding denoted as "P-Number" with the abbreviation "P" representing PIKTES. These designations are presented in Table 5 to provide a consolidated view of scores and levels derived from the Ateşman (1997) and Çetinkaya-Uzun (2010) readability formulas. The original sequence of the stories has been preserved within the table, indicating that the arrangement of the 20 stories within each series likely adheres to pedagogical principles, encompassing a progression from simplicity to complexity, from ease to difficulty, and from the familiar to the unfamiliar. This structuring is presumed to have been informed by considerations of the learners' anticipated level of word comprehension.

Table 5

Stories Examined in the Research Scope

ORDER	SALIH STORY SERIES	CODE	ASLI STORY SERIES	CODE
1	Salih Okula Başlıyor (Salih Begins School)	P1	Aslı'nın Yeni Arkadaşları (Aslı's New Friends)	P11
2	Salih Evde (Salih at Home)	P2	Aslı Uçurtma Şenliğine Gidiyor (Aslı Goes to Kite Festival)	P12
3	Salih Köyde (Salih in the Village)	P3	Aslı'nın Hayvan Dostları (Aslı's Animal Friends)	P13
4	Salih'in Bayram Ziyareti (Salih's Eid Visit)	P4	Aslı'nın Mevsimler Hayali (Aslı's Imaginary Seasons)	P14
5	Salih Oyun Oynuyor (Salih Play Games)	P5	Aslı'nın Uzay Yolculuğu (Aslı's Space Journey)	P15
6	Salih Hasta (Salih is Sick)	P6	Aslı'nın Sürprizi (Aslı's Surprise)	P16
7	Salih Tabiat ve Hayvan Müzesinde (Salih at the Nature and Animal Museum)	P7	Aslı Tiyatroya Gidiyor (Aslı Goes to the Theater)	P17
8	Salih'in Bir Günü (Salih's Day)	P8	Aslı Kütüphanede (Aslı at the Library)	P18

| 9 | Salih Çarşıda (Salih at the Market) | P9 | Aslı Trafik Kurallarını Öğreniyor (Aslı Learns Traffic Rules) | P19 |
| 10 | Salih'in Seyahat Günlüğü (Salih's Travel Diary) | P10 | Aslı Yıl Sonu Gösterisinde (Aslı at the End-of-Year Show) | P20 |

The stories included in the "Salih Story Series" and "Aslı Story Series" were analyzed based on the Ateşman (1997) and Çetinkaya-Uzun (2010) readability formulas. This analytical process involved computing the cumulative numbers of words, sentences, and syllables for each individual story. The results are documented in Table 6 and Table 7 under the heading "Unit Values." The findings of the analysis are summarized as follows:

Table 6

Unit Values for the Salih Story Series

Order	Story Title	Total Word Count	Total Sentence Count	Total Syllable Count
1	Salih Okula Başlıyor (Salih Begins School)	230	63	567
2	Salih Evde (Salih at Home)	314	68	802
3	Salih Köyde (Salih at the Village)	493	88	1176
4	Salih'in Bayram Ziyareti (Salih's Eid Visit)	493	85	1191
5	Salih Oyun Oynuyor (Salih Play Games)	531	112	1219
6	Salih Hasta (Salih is Sick)	514	93	1140
7	Salih Tabiat ve Hayvan Müzesinde (Salih at the Nature and Animal Museum)	686	124	1595
8	Salih'in Bir Günü (Salih's Day)	741	132	1692
9	Salih Çarşıda (Salih at the Market)	777	132	1725
10	Salih'in Seyahat Günlüğü (Salih's Travel Diary)	723	124	1714
TOTAL		5502	1021	12821

Upon examining the unit values assigned to the stories in the Salih Story Series, as depicted in Table 6, the total counts of words, sentences, and syllables exhibited a consistent increase across the series, indicating a gradual progression in complexity. However, it is worth noting that the sixth book, "Salih Hasta (Salih is Sick)," and the tenth book, "Salih'in Seyahat Günlüğü (Salih's Travel Diary)," demonstrated relatively lower counts of syllables, words, and sentences compared to the preceding story in the series.

**Table 7**

Unit Values for the Aslı Story Series

Order	Story Title	Total Word Count	Total Sentence Count	Total Syllable Count
1	Aslı'nın Yeni Arkadaşları (Aslı's New Friends)	874	195	2139
2	Aslı Uçurtma Şenliğine Gidiyor (Aslı Goes to Kite Festival)	779	154	2046
3	Aslı'nın Hayvan Dostları (Aslı's Animal Friends)	1048	222	2552
4	Aslı'nın Mevsimler Hayali (Aslı's Imaginary Seasons)	757	146	1942
5	Aslı'nın Uzay Yolculuğu (Aslı's Space Journey)	777	153	1843
6	Aslı'nın Sürprizi (Aslı's Surprise)	777	146	1914
7	Aslı Tiyatroya Gidiyor (Aslı Goes to the Theater)	786	161	2030
8	Aslı Kütüphanede (Aslı at the Library)	785	163	1981
9	Aslı Trafik Kurallarını Öğreniyor (Aslı Learns Traffic Rules)	814	152	2167
10	Aslı Yıl Sonu Gösterisinde (Aslı at the End-of-Year Show)	936	171	2422
TOTAL		8333	1663	21036

Upon analyzing the unit values of the stories in the "Aslı Story Series", as presented in Table 7, it became apparent that the increase in total word, sentence, and syllable counts was not as consistent as observed in the "Salih Story Series." In particular, the first book of the series, "Aslı'nın Yeni

Arkadaşları (Aslı's New Friends)," and the third book, "Aslı'nın Hayvan Dostları (Aslı's Animal Friends)," exhibited higher counts of total words, sentences, and syllables compared to the subsequent book in the series. Conversely, the eighth book, "Aslı Kütüphanede (Aslı at the Library)," displayed higher counts of total words and syllables compared to the subsequent book in the series.

Figure 1

Unit Values of Story Series
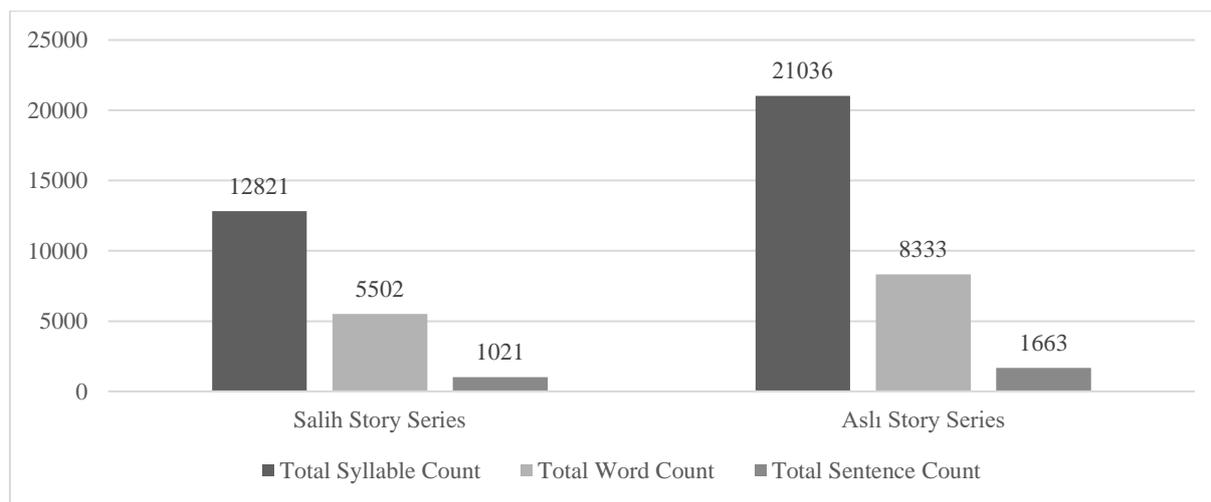
Upon comparing the unit values of both series, it became evident that the "Aslı Story Series" exhibited a higher total number of words, sentences, and syllables as depicted in Graph 1. In the realm of language teaching, it is generally anticipated that as the level progresses, the sentence length will correspondingly increase alongside the number of words, thereby resulting in a decrease in the number of sentences. However, when evaluating the total number of words and sentences individually for both the "Salih Story Series" and the "Aslı Story Series," it would be inappropriate to conclusively assert that the content of the respective stories in either series is exclusively suitable for A1-A2 levels based solely on these data. Similarly, it would be erroneous to claim that the stories are systematically designed to progress from easy to difficult or from simple to complex.

To determine the readability level of a Turkish text using the Ateşman (1997) and Çetinkaya-Uzun (2010) formulas, it is necessary to calculate the average lengths of sentences and words. The average sentence length is obtained by dividing the total number of words by the total number of sentences, while the average word length is calculated by dividing the total number of syllables by the total number of words. According to Ateşman (1997), the average word length in Turkish is 2.6 syllables, and the average sentence length ranges from 9 to 10 words. Similarly, Bezirci-Yılmaz (2010) also reported an average word length of 2.6 syllables and an average sentence length of 10 to 11 words. In this study, the average word and sentence lengths of each story series were analyzed using both the Ateşman (1997) and Çetinkaya-Uzun (2010) formulas. The difference in average unit values between the two formulas arises from the analysis of 100-word sections within the stories, as prescribed by the Ateşman (1997) readability formula. Conversely, the Çetinkaya-Uzun readability formula considers the entire text of the stories in determining the average word and sentence lengths.

Table 8

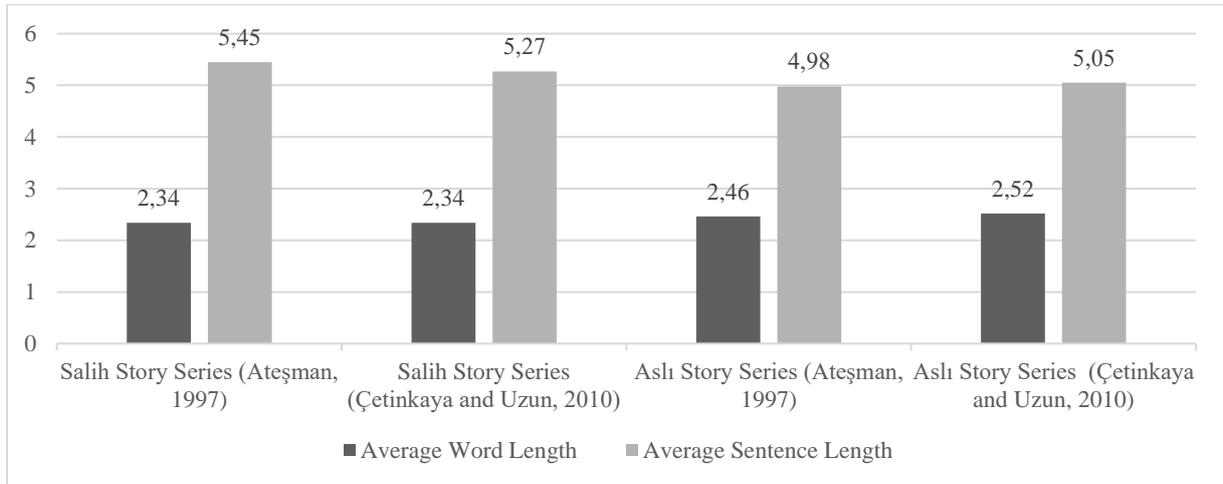*Average Word and Sentence Lengths for the Stories in the Salih Story Series*

Order	Story Title	Ateşman (1997)			Çetinkaya-Uzun (2010)		
		Average Word Length		Average Sentence Length	Average Word Length		Average Sentence Length
1	P1	2,27		3,92	2,46		3,65
2	P2	2,67		4,16	2,55		4,61
3	P3	2,49		5,88	2,38		5,60
4	P4	2,40		6,17	2,41		5,80
5	P5	2,44		5,26	2,29		4,74
6	P6	2,16		5,05	2,21		5,52
7	P7	2,25		5,88	2,32		5,53
8	P8	2,24		6,31	2,28		5,61
9	P9	2,23		7,35	2,22		5,88
10	P10	2,25		4,52	2,37		5,83
Average		2,34		5,45	2,34		5,27

Upon analyzing the average word length in the Salih Story Series using the readability formula proposed by Ateşman (1997), it was evident that the stories exhibited a range of 2.16 to 2.67 syllables (see Table 8). The average sentence length across the series spanned from 3.92 to 7.35 words. Apart from the "Salih Evde (Salih at Home)" story, all other stories demonstrated an average word length below the overall average, indicating a preference for shorter syllable words. When examining the average sentence lengths in the Salih Story Series, it became apparent that all stories fell below the average sentence length in Turkish. Conversely, the readability formula proposed by Çetinkaya-Uzun (2010) involves analyzing the entire text of the story series. The average word length ranged from 2.21 to 2.55 syllables, while the average sentence length varied between 3.65 and 5.88 words. According to the readability criteria established by Çetinkaya-Uzun (2010), all stories within the "Salih Story Series" exhibited average word and sentence lengths that were below the Turkish average.

Table 9

Average Word and Sentence Lengths for the Stories in the Aslı Story Series

Order	Story Title	Ateşman (1997)			Çetinkaya-Uzun (2010)		
		Average Word Length		Average Sentence Length	Average Word Length		Average Sentence Length
1	P11	2,44		4,80	2,44		4,48
2	P12	2,54		5,45	2,62		5,05
3	P13	2,40		3,84	2,43		4,72
4	P14	2,55		4,68	2,56		5,18
5	P15	2,32		4,25	2,37		5,07
6	P16	2,31		5,10	2,46		5,32
7	P17	2,74		5,42	2,58		4,88
8	P18	2,15		5,26	2,52		4,81
9	P19	2,69		5,04	2,66		5,53
10	P20	2,54		6	2,58		5,47
Average		2,46		4,98	2,52		5,05

Upon examining the Aslı Story Series using the readability formula proposed by Ateşman (1997), it became apparent that the average word length in the stories ranged from 2.15 to 2.69 syllables (see Table 9). The average sentence length varied between 3.84 and 6 words. As a result, with the exception of the stories "Aslı Tiyatroya Gidiyor (Aslı Goes to the Theater)" and "Aslı Trafik Kurallarını Öğreniyor (Aslı Learns Traffic Rules)," all other stories exhibited an average word length below the overall average. This suggests a preference for shorter-syllable Turkish words in stories with below-average word length. However, it should be noted that this observation is not a definitive judgment but rather a means to facilitate comprehension. Similar to the Salih Story Series, all stories within the Aslı Story Series had average sentence lengths below the Turkish average sentence length. When applying the readability formula proposed by Çetinkaya-Uzun (2010) to the Aslı Story Series, it was found that the average word length in the story texts ranged from 2.37 to 2.66 syllables, while the average sentence length varied between 4.48 and 5.53 words. Consequently, apart from the stories "Aslı Uçurtma Şenliğine Gidiyor (Aslı Goes to Kite Festival)" and "Aslı Trafik Kurallarını Öğreniyor (Aslı Learns Traffic Rules)," all other stories exhibited average word lengths below the Turkish average, and the entire set of stories showcased an average sentence length below the average.

Figure 2

Average Word and Sentence Counts in the Stories

Upon analyzing the word and sentence averages of the story texts based on the Ateşman (1997) and Çetinkaya-Uzun (2010) readability criteria, it was evident that both the Salih Story Series and the Aslı Story Series fell below the average word and sentence lengths in Turkish (see Graph 2). Comparing the average syllable length designated for Turkish, it could be observed that the words in the story texts were shorter. Similarly, in comparison to the average sentence length, it was apparent that sentences were constructed with fewer words. Overall, it can be concluded that as the language level increases, the average word and sentence lengths in the stories tend to increase as well. However, it is important to note that the increase does not occur in a sequential manner that aligns with the Turkish average for the stories in the series.

Table 10

Readability Scores and Levels of Salih Story Series according to Ateşman (1997) and Çetinkaya-Uzun (2010) Formulas

| Order | Story | Ateşman (1997) | | Çetinkaya-Uzun (2010) | | |
		OS	Degree	OP	Reading Level	Grade Level
1	P1	97,39	Very easy	51,35	Independent Reading	5., 6., 7.
2	P2	80,70	Easy	48,07	Instructional reading	8., 9.
3	P3	82,44	Easy	51,53	Independent Reading	5., 6., 7.

4	P4	86,30	Easy	50,56	Instructional reading	8., 9.
5	P5	87,06	Easy	54,71	Independent Reading	5., 6., 7.
6	P6	98,86	Very easy	56,03	Independent Reading	5., 6., 7.
7	P7	93,08	Very easy	53,16	Independent Reading	5., 6., 7.
8	P8	92,36	Very easy	54,12	Independent Reading	5., 6., 7.
9	P9	90,05	Very easy	55,42	Independent Reading	5., 6., 7.
10	P10	96,63	Very easy	51,57	Independent Reading	5., 6., 7.

Table 10 presents the readability scores and levels of the Salih Story Series based on the criteria proposed by Ateşman (1997) and Çetinkaya-Uzun (2010). The data revealed that all the stories in the series were classified as "very easy" and "easy" based on Ateşman's (1997) readability criteria. However, when considering the readability criteria established by Çetinkaya-Uzun (2010), the same story texts were classified as "instructional" and "independent" reading. The lack of consistency in the findings for each story is noteworthy. According to Ateşman's (1997) readability criteria, six out of the ten stories in the series (with an average readability score of n:94.72) were classified as "very easy," while four stories (with an average readability score of n:84.12) were categorized as "easy." In contrast, according to Çetinkaya-Uzun's (2010) readability formula, nine stories (with an average readability score of n:53.16) were deemed suitable for an "independent" reading level, recommended for grades 5, 6, and 7, while one story (with an average readability score of n:48.07) was classified as an "instructional" reading level, appropriate for grades 8 and 9.

Table 11

Readability Scores and Levels of Aslı Story Series according to Ateşman (1997) and Çetinkaya-Uzun (2010) Formulas
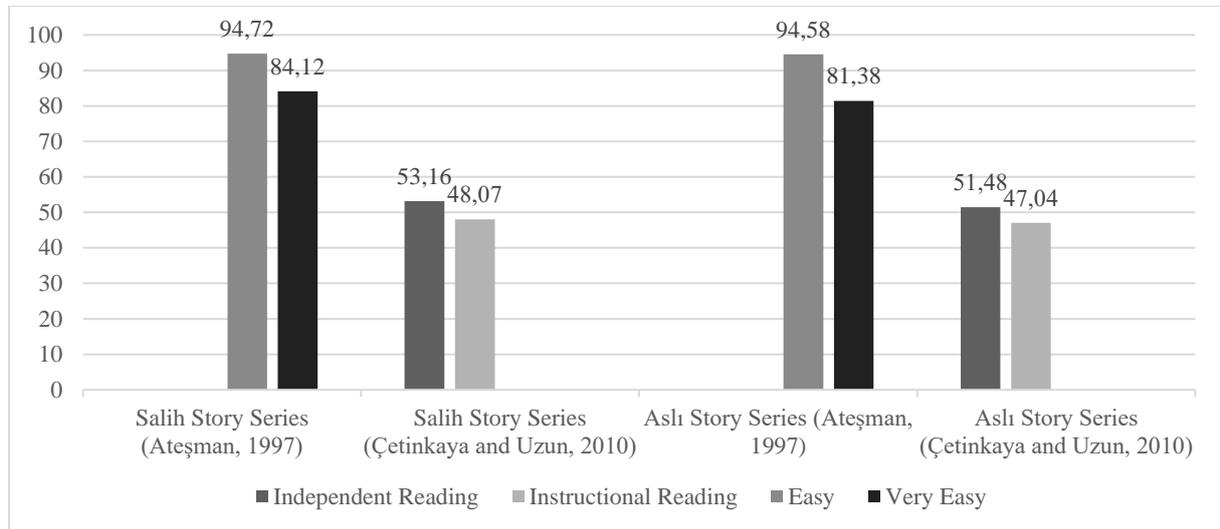
		Ateşman (1997)		Çetinkaya-Uzun (2010)		
Order	Story	OS	Degree	OP	Reading Level	Grade Level
1	P11	88,27	Easy	51,06	Independent reading	5., 6., 7.
2	P12	82,55	Easy	45,83	Instructional reading	8., 9.
3	P13	92,38	Very easy	51,09	Independent reading	5., 6., 7.
4	P14	84,16	Easy	47,26	Instructional reading	8., 9.
5	P15	94,52	Very easy	52,31	Independent reading	5., 6., 7.
6	P16	92,70	Very easy	49,72	Instructional reading	8., 9.
7	P17	74,59	Easy	47,03	Instructional reading	8., 9.
8	P18	98,72	Very easy	48,66	Instructional reading	8., 9.
9	P19	77,59	Easy	44,32	Instructional reading	8., 9.
10	P20	81,12	Easy	46,46	Instructional reading	8., 9.

Table 11 presents the readability scores and levels of the Aslı Story Series, utilizing the readability criteria proposed by Ateşman (1997) and Çetinkaya-Uzun (2010) formulas. Similar to the Salih Story Series, all stories in the Aslı series were categorized as "very easy" and "easy" according to Ateşman's (1997) readability criteria. However, the application of Çetinkaya-Uzun's (2010) readability formula placed the same story texts within the "instructional" and "independent" reading level categories. As per Ateşman's (1997) criteria, four out of the ten stories in the series (with an average readability score of n:94.58) were classified as "very easy," while six stories (with an average readability score of n:81.38) were marked as "easy." Conversely, according to Çetinkaya-Uzun's (2010) formula, seven stories (with

an average readability score of n:51.48) were deemed appropriate for an "independent" reading level, typically recommended for grades 5, 6, and 7. Meanwhile, three stories (with an average readability score of n:47.04) were categorized as an "instructional" reading level, suitable for grades 8 and 9.

Figure 3

Average Levels of Readability in the Story Series

When comparing the overall readability values of the story series using the criteria established by Ateşman (1997) and Çetinkaya-Uzun (2010), similar outcomes were observed across both series (see Figure 3). According to Ateşman's (1997) readability formula, the average readability level of the story texts could be categorized as "easy" and "very easy" for both the "Salih Story Series" and the "Aslı Story Series." Meanwhile, based on Çetinkaya-Uzun's (2010) readability formula, both series, namely the "Salih Story Series" and the "Aslı Story Series," fell within the "independent reading" and "instructional reading" levels.

RESULTS, DISCUSSIONS, AND SUGGESTIONS

Readability, which pertains to the ease of understanding a text, is closely linked to the reader's abilities and skills. While not yielding definitive outcomes, readability criteria developed for the target language can offer valuable guidance in assessing the readability of texts used in second or foreign language instruction (Uzun & Ateş, 2012). Readability measures play a significant role in the creation, enhancement, and organization of reading materials for language teaching textbooks and supplementary resources. In this study, the "Salih Story Series" and the "Aslı Story Series," developed as part of the PIKTES program, were evaluated in terms of readability.

Upon examining the readability values of the stories, it becomes evident that they were not systematically prepared to progressively increase in difficulty or complexity, nor did they consistently follow a pattern of transitioning from simple to complex. This observation aligns with findings from similar studies in the existing literature on readability (Yılmaz & Temiz, 2014; Zorbaz & Köroğlu, 2016; Şimşek, 2019; Mutlu, 2020; Can, 2021; Özdemir & Daştan, 2022; Aydın, 2022). The discrepancies observed in the results of the stories based on the levels established by the Ateşman (1997) and

Çetinkaya-Uzun readability criteria, as well as the divergence between easy and difficult texts within both sets of criteria, indicate that definitive conclusions regarding readability cannot be drawn. This can be attributed to the fact that the criteria developed for assessing the readability of texts in Turkish may primarily apply to the native language, while no specific criteria exist for evaluating the readability of texts designed for teaching Turkish as a second or foreign language.

The study's findings using readability criteria indicated that neither of the two series exhibited a gradual increase in readability. According to the Ateşman (1997) readability formula, among the total 20 stories, 10 fell under the "easy" category with scores ranging from 77.59 to 88.27, while the remaining 10 were classified as "very easy" with scores spanning from 90.05 to 98.86. However, an individual examination of the story sets reveals that, based on the Ateşman (1997) formula, the "Salih Story Series" encompassed four "easy" stories and six "very easy" stories, while the "Aslı Story Series" comprised six "easy" and four "very easy" stories. This comparison implies that the "Salih Story Series" generally leans toward easier readability compared to the "Aslı Story Series." Turning to the evaluation of the story series according to the Çetinkaya-Uzun (2010) readability formula, among the total 20 stories, nine stories fell under the "instructional reading" category (8th and 9th grade) with readability scores varying from 44.32 to 50.56, while 11 stories were classified as "independent reading" (5th, 6th, and 7th grade) with scores ranging from 51.06 to 56.03. In the "Salih Story Series," two stories were deemed suitable for "instructional reading," whereas eight stories aligned with "independent reading." On the other hand, in the "Aslı Story Series," seven stories were classified as "instructional reading," and three stories were categorized as "independent reading." Consistent with the results obtained from the Ateşman (1997) readability formula, the "Salih Story Series" was also considered easier than the "Aslı Story Series" based on the Çetinkaya-Uzun readability formula. Given the absence of a clear progression in readability, it would be prudent, based on the study's data, to potentially reorganize the series from easier to more challenging and from simple to complex. However, for more conclusive statements, a thorough evaluation of both the "Salih Story Series" and the "Aslı Story Series" in terms of comprehensibility is warranted.

In conclusion, enhancing the readability of materials intended for children learning a second or foreign language can significantly enhance their reading skills. Several strategies can be employed to achieve this goal. Firstly, employing clear and simple sentence structures can greatly enhance comprehension. Secondly, tailoring paragraph lengths to match the learners' proficiency level can prevent overwhelming text density. Thirdly, incorporating commonly used words and vocabulary lists can ensure that the language remains familiar and accessible. Fourthly, integrating visual aids like illustrations or diagrams can provide additional support and boost understanding. Fifthly, gradually increasing the difficulty level of the texts can challenge learners while sustaining their engagement. Lastly, paying attention to grammar and spelling rules within the texts can aid in reinforcing language learning and accuracy. By adopting these strategies, readability can be improved, resulting in enhanced reading experiences and language development for children learning a second or foreign language.

REFERENCES

Ateşman, E. (1997). Türkçede okunabilirliğin ölçülmesi [Measurement of readability in Turkish]. *Ankara Üniversitesi TÖMER Dil Dergisi*, *58*, 71-74. (http://www.atesman.info/wp-content/uploads/2015/10/Atesman-okunabilirlik.pdf)

Aydın, C., İnce, S., & Uğuz, O. O. (2022). PIKTES kapsamında hazırlanan "Salih Hikâye Serisi"nin değerler eğitimi bakımından incelenmesi [Analysing the "Salih Story Series" prepared within the scope of PIKTES in terms of values education]. *Çukurova Araştırmaları Dergisi*, *8*(1), 15-25. https://doi.org/10.29228/cukar.57370.

Aydın, G. (2022). Türkçeyi ikinci/yabancı dil olarak öğrenenler için hazırlanan yardımcı materyallerin okunabilirliği üzerine bir inceleme [A study on the readability of auxiliary materials prepared for learners of Turkish as a second/foreign language]. *Journal of History School*, *61*, https://doi.org/4202-4227. 10.29228/joh.66466.

Bağcı, H., & Ünal, Y. (2013). İlköğretim 8. Sınıf Türkçe ders kitaplarındaki metinlerin okunabilirlik düzeyi [Readability level of the texts in 8th grade Turkish textbooks]. *Ana Dili Eğitimi Dergisi*, *1*(3), 12-28. https://doi.org/10.16916/aded.15997.

Bailin, A., & Grafstein, A. (2016). *Readability: Text and context*. Springer.

Baki, Y. (2018). Türkçe Dersi 8. Sınıf kitabındaki metinlerin okunabilirliği [Readability of the texts in the 8th grade Turkish textbook]. *Dil Eğitimi ve Araştırmaları Dergisi*, *5*(1), 30-46. https://doi.org/10.31464/jlere.528298.

Banguoğlu, T. (2015). *Türkçenin Grameri [Grammar of Turkish].* (10th Ed.). Türk Dil Kurumu Yayınları.

Baş, B., & Yıldız, F. İ. (2015). 2. Sınıf Türkçe ders kitabındaki metinlerin okunabilirlik açısından incelenmesi [Analysing the texts in the 2nd grade Turkish textbook in terms of readability]. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, *11*(1), 52-61. https://dergipark.org.tr/tr/pub/mersinefd/issue/17396/181918.

Bayır, E., & Kahveci, S. (2021). Ortaokul fen bilimleri ders kitaplarının okunabilirlik açısından analizi [Analysis of secondary school science textbooks in terms of readability]. *Trakya Eğitim Dergisi*, *11*(3), 1561-1572. https://dergipark.org.tr/tr/pub/tred/issue/65108/870073.

Bezirci, B., & Yılmaz, A. E. (2010). Metinlerin okunabilirliğinin ölçülmesi üzerine bir yazılım kütüphanesi ve Türkçe için yeni bir okunabilirlik ölçütü [A software library for measuring the readability of texts and a new readability criterion for Turkish]. *DEÜ Mühendislik Fakültesi Fen Bilimleri Dergisi*, *12*(3), 49-62. https://dergipark.org.tr/tr/pub/deumffmd/issue/40831/492667.

Biçer, N., & Alan, Y. (2017). Yabancılara Türkçe öğretiminde kullanılan Yeni Hitit 3 ve İstanbul C1+ ders kitaplarındaki metinlerin okunabilirlik düzeylerinin karşılaştırılması [Comparison of the readability levels of the texts in Yeni Hitit 3 and İstanbul C1+ textbooks used in teaching Turkish to foreigners]. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 13(3), 1130-1139. https://doi.org/10.17860/mersinefd.328486.

Bora, A., & Arslan, M. A. (2021). Türkçe ders kitaplarındaki metinlerin okunabilirlik yönünden incelenmesi [Analysing the texts in Turkish textbooks in terms of readability]. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi*, 10(1), 222-236. https://dergipark.org.tr/en/download/article-file/1660494.

Bozkurt, M. (2021). Suriyeli Çocuklar için hazırlanan hikâye kitaplarının okunabilirlik düzeyleri: Salih Hikâye Serisi [Readability levels of story books prepared for Syrian children: Salih Story Series]. In A. Şahin (Eds.), *Anadili ve Yabancı Dil Olarak Türkçe Üzerine Araştırmalar [Research on Turkish as a Native and Foreign Language]*, Paradigma Akademi.

Bozlak, G. Ü. (2018). 2016-2017 ve 2017-2018 Eğitim ve öğretim yıllarında 5. sınıf Türkçe ders kitaplarındaki hikâye edici metinlerin Uzun-Çetinkaya formülü ile okunabilirlik düzeyleri/düzeylerinin incelenmesi [Analysing the readability levels/levels of the narrative texts in the 5th grade Turkish textbooks with Uzun-Çetinkaya formula during the education and training years]. *Akra Kültür Sanat ve Edebiyat Dergisi*, *6*(14), 209-234. https://doi.org/10.31126/akrajournal.357526.

Ceran, D. (2015). Yüz temel eser listesi Türk edebiyatı kategorisinde yer alan kitapların okunabilirlik düzeyleri ile yedinci sınıf öğrencilerinin kitaplar hakkındaki görüşlerinin değerlendirilmesi [Evaluation of the readability levels of the books in the Turkish literature category of the list of one hundred basic works and seventh grade students' opinions about the books]. *Dil ve Edebiyat Eğitimi Dergisi*, *3*(14), 23-51. https://www.researchgate.net/publication/348150599_Yuz_Temel_Eser_Listesi_Turk_Edebiyati_Kategorisinde_Yer_Alan_Kitaplarin_Okunabilirlik_Duzeyleri_Ile_Yedinci_Sinif_Ogrencilerinin_Kitaplar_Hakkindaki_Goruslerinin_Degerlendirilmesi.

Coleman, M., & Liau, T. L. (1975). A computer readability formula designed for machine scoring. *Journal of Applied Psychology*, *60*, 283-284. https://doi.org/10.1037/h0076540.

Çakıroğlu, O. (2015). İlkokul Türkçe ders kitaplarındaki metinlerin okunabilirlik düzeylerinin öğrenme güçlüğü olan öğrenciler açısından değerlendirilmesi [Evaluation of the readability levels of the texts in primary school Turkish textbooks in terms of students with learning difficulties]. *İlköğretim Online*, *14*(2), 671-681. https://doi.org/10.17051/io.2015.31984.

Çeçen, M. A., & Aydemir, F. (2011). Okul öncesi hikâye kitaplarının okunabilirlik açısından incelenmesi [Analysing preschool story books in terms of readability]. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *8*(16), 185-194. https://dergipark.org.tr/tr/pub/mkusbed/issue/19554/208310.

Çetinkaya, G. (2010). *Türkçe metinlerin okunabilirlik düzeylerinin tanımlanması ve sınıflandırılması [Defining and classifying the readability levels of Turkish texts]* (Unpublished Doctoral Dissertation). Ankara University.

Çıplak, G., & Balcı, A. (2022). Türkçe ders kitaplarındaki metinlerin okunabilirlik özelliğinin incelenmesi [Analysing the readability of texts in Turkish textbooks]. *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi*, *30*, 170-187. https://doi.org/10.29000/rumelide.1193033.

Çiftçi, Ö., Çeçen, M. A., & Melanlıoğlu, D. (2007). Altıncı sınıf Türkçe ders kitaplarındaki metinlerin okunabilirlik açısından değerlendirilmesi [Evaluation of texts in sixth grade Turkish textbooks in terms of readability]. *Elektronik Sosyal Bilimler Dergisi (ESOSDER)*, *6*(22), 206-219. https://dergipark.org.tr/tr/pub/esosder/issue/6136/82304.

Çinpolat, E. (2019). *Miyase Sertbarut'un kitaplarının okunabilirlik düzeyleri [Readability level of Miyase Sertbarut's books]* (Unpublished Master Thesis). Ordu University.

Demirel, Ö. (2012). *Yabancı Dil Öğretimi [Foreign Language Teaching]*. Pegem Akademi.

DuBay, W. H. (2004). *The principles of readability*. Costa Mesa. Impact Information.

Eker, C., İnce, M., & Sağlam, H. (2018). İnsan hakları yurttaşlık ve demokrasi ders kitabının okunabilirlik ve yaş düzeyine uygunluk açılarından değerlendirilmesi [Evaluation of the human rights, citizenship and democracy textbook in terms of readability and suitability for age level]. *Eğitimde Kuram ve Uygulama*, *14*(4), 404-416. https://doi.org/10.17244/eku.414512.

Ergin, M. (2004). *Türk Dil Bilgisi [Turkish Language Knowledge]*. Bayrak Basım/ Yayım/ Dağıtım.

Erişik, H. (2021). Yabancılar için Türkçe okuma kitaplarının okunabilirliği: Türkçenin sesi Yunus Emre örneği [Readability of Turkish reading books for foreigners: The example of Yunus Emre, the voice of Turkish]. *Journal of Sustainable Educational Studies*, *2*(3), 1-14. https://dergipark.org.tr/tr/pub/seader/issue/67287/1049673.

Erol, H. F. (2014). Yabancı dil olarak Türkçe ders kitaplarında okunabilirlik [Readability in Turkish as a foreign language textbooks]. *Türk Dili ve Edebiyatı Dergisi*, *50*, 29-38. https://dergipark.org.tr/tr/pub/iutded/issue/17078/178709.

Flesch, R. (1979). *How to write plain English*. Harpercollins.

Gedik, D. (2009). *Yabancılara Türkçe öğretimi (Ankara Üniversitesi TÖMER ve Gazi Üniversitesi TÖMER örneği)*. (Unpublished Master Thesis). Abant İzzet Baysal University, Bolu.

Göçen, G., & Çiçek, M. (2022). Türkçeyi yabancı dil olarak öğrenenler için hazırlanmış "Salih Hikâye Seti"nde yer alan söz varlığı unsurları [The elements of vocabulary in the "Salih Story Set" prepared for learners of Turkish as a foreign language]. *Journal of Sustainable Educational Studies (JSES)*, *3*(2), 82-96. https://doi.org/10.29228/ASOS.42978.

Gray, W. S., & Leary. B. (1935). *What makes a book readable*. Chicago University Press

Güder, O., & Bilgen M. (2021). "Matematik Korsanları" hikâye setinin okunabilirlik düzeyi [Readability level of the story set "Pirates of Maths".]. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, *60*, 273-301. https://doi.org/10.21764/maeuefd.987203.

Gün, M., Tanrıkulu, L., & Selvi, K. (2021). Yabancı dil olarak Türkçe öğretimi kitaplarında kültür aktarımı: "Salih Hikâye Serisi" örneği [Culture transfer in Turkish as a foreign language teaching books: The example of "Salih Story Series"]. *Route Education and Social Science Journal*, *58*, 287-295. https://doi.org/10.17121/ressjournal.2883.

Güneş, F. (2000). *Çocuk kitaplarının okunabilirlik ölçüleri açısından incelenmesi [Analysing children's books in terms of readability measures.]*. 1. Ulusal Çocuk Kitapları Sempozyumu. Ankara University, TÖMER Language Teaching Centre.

Kalın Ulu, Ö., & Koçoğlu E. (2017). 6. Sınıf sosyal bilgiler ders kitaplarının farklı okunabilirlik formüllerine göre incelenmesi [Analysing 6th grade social studies textbooks according to different readability formulas]. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, *17*(4), 2202-2220. https://doi.org/10.17240/aibuefd.2017.17.32772-364008.

Karaağaç, G., (2013). *Türkçenin dil bilgisi*. Akçağ Yayınları.

Kayabaşı, B.; Yılmaz, M., & Doyumğaç, İ. (2016). Mustafa Ruhi şirin hikâyelerinin okunabilirlik açısından incelenmesi [Analysing the stories of Mustafa Ruhi Şirin in terms of readability]. *Adıyaman Üniversitesi Eğitim Bilimleri Dergisi*, *6*(2), 323-343. https://doi.org/10.17984/adyuebd.306772.

Kavun, M. (2023). Yusuf Asal'ın Patattesspor serisinde yer alan kitapların okunabilirliği [Readability of the books in Yusuf Asal's Patattesspor series]. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi,* *12*(1), 178-193. https://doi.org/10.7884/teke.5679.

Kemiksiz, Ö. (2021). Türk dili ve edebiyatı ders kitaplarındaki metinlerin okunabilirlik düzeyleri [Readability levels of texts in Turkish language and literature textbooks]. *Ahi Evran Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *7*(3), 973-992. https://doi.org/10.31592/aeusbed.907768.

Keskin, F., & Okur, A. (2013). *Okuma Eğitimi [Reading Education]*. In M. Durmuş & A. Okur (Eds.), *Yabancılara Türkçe öğretimi el kitabı [Handbook of teaching Turkish to foreigners]*. Grafiker Yayınları.

Kurnaz, C., & Erdem, C. (2012). Dil ve anlatım ders kitaplarındaki metinlerin kelime- cümle uzunlukları ve okunabilirlik düzeyleri [Word-sentence lengths and readability levels of texts in language and expression textbooks]. *Türkçe Eğitimi ve Öğretimi Araştırmaları Dergisi*, *4*, 1-19. https://doi.org/10.29000/rumelide.1193033.

Maden, S. (2013). Temel dil becerileri eğitiminde kullanılabilecek aktif öğrenme öğretimsel iş/taktikleri [Active learning instructional tasks/tactics that can be used in basic language skills education]. *Ana Dili Eğitimi Dergisi*, *1*(2), 20-35. https://doi.org/10.16916/aded.16005.

Mercan-Uzun, E., & Bütün, E. (2016). Okul öncesi eğitim kurumlarındaki Suriyeli sığınmacı çocukların karşılaştıkları sorunlar hakkında öğretmen görüşleri [Teachers' opinions about the problems faced by Syrian refugee children in pre-school education institutions]. *Uluslararası Erken Çocukluk Eğitimi Çalışmaları Dergisi*, *1*, 72-83. http://ijeces.hku.edu.tr/tr/pub/issue/22947/175325.

Mutlu, H. H. (2020). Yabancılara Türkçe öğretiminde kullanılan ders kitaplarında (İstanbul Yabancılar için Türkçe Öğretim Seti, Yedi İklim Öğretim Seti) yer alan metinlerin okunabilirlik düzeylerinin incelenmesi [Analysing the readability levels of the texts in the textbooks used in teaching Turkish to foreigners (Istanbul Turkish Teaching Set for Foreigners, Yedi İklim Teaching Set)]. *Avrasya Uluslararası Araştırmalar Dergisi*, *22*, 371-386. https://doi.org/10.33692/avrasyad.728455.

Nassiri, N., Lakhouaja, A., & Cavalli-Sforza, V. (2022). Arabic L2 readability assessment: Dimensionality reduction study. *Journal of King Saud University-Computer and Information Sciences*, *34*, 3789-3799. https://doi.org/10.1016/j.jksuci.2020.12.021.

Okur, A., & Arı, G. (2013). 6, 7, 8. Sınıf Türkçe ders kitaplarındaki metinlerin okunabilirliği [Readability of texts in 6th, 7th, 8th grade Turkish textbooks]. *İlköğretim Online*, *12*(1), 202- 226. https://dergipark.org.tr/tr/pub/ilkonline/issue/8586/106680.

Okur, A., Arı, G., Ersoyol, F., & Okur, E. K. (2013). 5. Sınıf Türkçe ders kitaplarındaki metinlerin okunabilirliği [Readability of texts in 5th grade Turkish textbooks]. *Sakarya University Journal of Education*, *3*(2), 65-79. https://dergipark.org.tr/tr/pub/turkegitimdergisi/issue/54397/731948.

Oral, B., & Çoban, A. (2020). *Kuramdan Uygulamaya Eğitimde Bilimsel Araştırma Yöntemleri [Scientific Research Methods in Education from Theory to Practice]*. Pegem Akademi.

Özcan, E. (2013). 6.-7. Sınıf Türkçe ve Türk kültürü ders kitabının okunabilirliği ve hedef yaş düzeyine uygunluğu: Fransa örneği [6.-7. Readability of 6th-7th grade Turkish and Turkish culture textbook and its suitability for the target age level: The case of France]. *Sakarya University Journal of Education*, *1*(2), 16-24. https://dergipark.org.tr/en/pub/suje/issue/20628/219946.

Özçetin, K., & Karakuş, N. (2020). 5. Sınıf Türkçe ders kitaplarındaki metinlerin okunabilirlik yönünden incelenmesi [Analysing the texts in 5th grade Turkish textbooks in terms of readability]. *Türkiye Eğitim Dergisi*, *5*(1), 175-190. https://dergipark.org.tr/tr/pub/turkegitimdergisi/issue/54397/731948.

Özer, Y., Komsuoğlu, A., & Ateşok Z. Ö. (2016). Türkiye'deki Suriyeli çocukların eğitimi: sorunlar ve çözüm önerileri [Education of Syrian children in Turkey: problems and solutions]. *The Journal of Academic Social Science, 37,* 76-110. https://doi.org/10.16992/ASOS.11696.

Sarıçam, İ., Kösecioğulları, U., & Bozkurt, M. (2021). 2020-LGS Türkçe sorularının okunabilirlik açısından incelenmesi [Analysing 2020-LGS Turkish questions in terms of readability]. *International Journal of Language Academy*, *9*(1), 321-333. https://doi.org/10.29228/ijla.49671.

Sönmez, V. (2003). Metinlerin eğitselliğini saptamada matematiksel bir yaklaşım (Sönmez Modeli) [A mathematical approach in determining the educationality of texts (Sönmez Model)]. *Eğitim Araştırmaları*, *10*, 24–39.

Şimşek, P. (2011). *Yabancılara Türkçe öğretiminde okuma metinleri ve yardımcı okuma metinleri üzerine bir araştırma [A research on reading texts and supplementary reading texts in teaching Turkish to foreigners]* (Unpublished Doctoral Dissertation). Afyon Kocatepe University.

Şimşek, Y., & Çinpolat, E. (2021). Ortaöğretim Türk dili ve edebiyatı ders kitaplarının okunabilirlik özellikleri [Readability features of secondary school Turkish language and literature textbooks]. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *25*(1), 233-250. https://dergipark.org.tr/tr/pub/ataunisosbil/issue/60912/737833.

Tanrıkulu L., & Öz Sipan, M., (2021). Yabancı dil olarak Türkçe öğretiminde kullanılan "Salih Hikâye Serisi" setinde kültürel ögeler bulunduran görsellerin incelenmesi [Analysing the visuals containing cultural elements in the "Salih Story Series" set used in teaching Turkish as a foreign language]. *International Journal of Languages Education and Teaching*, *9*(1), 143-155. https://doi.org/10.29228/ijlet.49245.

Tekşan, K., & Çinpolat, E. (2020). Miyase Sertbarut'un kitaplarının okunabilirlik düzeyleri [Readability level of Miyase Sertbarut's books]. *Ana Dili Eğitimi Dergisi*, *8*(3), 829-842. https://doi.org/10.16916/aded.721787.

Temizyürek, F. (2010). Türkiye'de okuma seferberliği çerçevesinde seçilen kitapların kelime- cümle uzunlukları ve okunabilirlik açısından incelenmesi [Analysing the books selected within the framework of reading mobilisation in Turkey in terms of word-sentence lengths and readability]. *TÜBAR*, *27*, 645-654. https://dergipark.org.tr/tr/pub/tubar/issue/16968/177252.

Tosunoğlu, M., & Özlük, Y. Ö. (2011). Okunabilirlik ve ilköğretim 1. sınıf Türkçe ders kitabındaki düz yazı metinlerinin okunabilirlik açısından değerlendirilmesi [Readability and the evaluation of prose texts in the 1st grade Turkish textbook in terms of readability]. *Milli Eğitim*, *189*, 219-230. https://www.acarindex.com/pdfler/acarindex-9610-2336.pdf

Uzun, N. E., & Ateş, A. (2012). *İkinci dil öğretiminde ders izlencelerinin okunabilirliğe etkisi [The effect of syllabus on readability in second language teaching]*. In M. Aksan & Y. Aksan (Eds.). *Türkçe öğretiminde güncel çalışmalar [Current studies in Turkish teaching]*. Mersin Üniversitesi Yayınları .

Ülper, H. (2010). *Okuma ve anlamlandırma becerilerinin kazandırılması [Gaining reading and interpretation skills]*. Nobel Yayınları.

Wilkens, R., Alfter, D., Wang, X., Pintard, A., Tack, A., Yancey, K., & François, T. (2022). FABRA: French aggreator-based readability assessment toolkit. *Marseille: Proceedings of the 13th Conference on Language Resources and Evaluation*, 1217-1233. https://aclanthology.org/2022.lrec-1.130.

Yıldırım, A., & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri [Qualitative research methods in social sciences]* (9th Ed.). Seçkin Yayıncılık.

Yılmaz, F., & Temiz, Ç. (2014). Yabancılara Türkçe öğretiminde kullanılan ders kitaplarındaki metinlerin okunabilirlik durumları [Readability of the texts in the textbooks used in teaching Turkish to foreigners]. *International Journal of Language Education and Teaching*, *2*, 81-91. https://ijlet.com/?mod=makale_tr_ozet&makale_id=11499

Zorbaz, K. Z. (2007). Türkçe ders kitaplarındaki masalların kelime- cümle uzunlukları ve okunabilirlik düzeyleri üzerine bir değerlendirme [An evaluation on word-sentence lengths and readability levels of fairy tales in Turkish textbooks]. *Eğitimde Kuram ve Uygulama*, *3*(1), 87-101. https://dergipark.org.tr/tr/pub/eku/issue/5445/73894.

Zorbaz, K. Z., & Köroğlu, M. (2016). Gazi TÖMER yabancılar için Türkçe öğretim setindeki metinlerin kelime-cümle uzunlukları ve okunabilirlik düzeyleri [Word-sentence lengths and readability levels of the texts in Gazi TÖMER Turkish for foreigners teaching set]. *Electronic Turkish Studies*, *11*(3), 2509-2524. http://dx.doi.org/10.7827/TurkishStudies.9290.

Author Contributions

The article has a single author. The author has seen the final version of the article and approved its publication.

Conflict of Interest

No potential conflict of interest was declared by the author.

Supporting Individuals or Organizations

No grants were received from any public, private or non-profit organizations for this research.

Ethical Approval and Participant Consent

Ethical Approval and Participant Consent information is not needed for this article.

Copyright Statement

Authors own the copyright of their work published in the journal and their work is published under the CC BY-NC 4.0 license.

Plagiarism Statement

Similarity rates of this article was scanned by the iThenticate software. No plagiarism detected.

Availability of Data and Materials

Not applicable.

Acknowledgements

No acknowledgements.