Print ISSN: 1300-5448 Online ISSN: 2602-2249



Anadolu University Journal of Education Faculty aujef.anadolu.edu.tr

**RESEARCH ARTICLE** 

OPEN ACCESS

# Turkish language teacher candidates' thoughts on ereaders, digital reading, and reading preferences<sup>3\*</sup>

## Münire Özden<sup>1c</sup>, and Mehmet Çiçek<sup>2</sup>

<sup>1</sup> Giresun University, Rectorship, International Relations Office, Türkiye

<sup>2</sup> Gaziantep University, Institute of Educational Sciences, Turkish and Social Sciences Department, Türkiye

<sup>3</sup>This research extends a doctoral dissertation study of the first author under the supervision of the second author.

<sup>c</sup>Correspondence Author: Münire Özden, Rectorship, International Relation Office, Türkiye; <u>munire.ozden@giresun.edu.tr</u>

\* This research was approved by the decision of the Giresun University Ethics Committee's Social and Human Sciences Ethics Committee's decision, no. 138012 and dated 18.01.2023.

#### Article Info

DOI:	10.34056/aujef.1564610
Article History	
Received:	11/10/2024
Revised:	02/02/2025
Accepted:	30/03/2025

## Keywords

E-reader Digital reading, Paper-based reading Reading preferences

#### Highlights

- Students prefer digital reading tools because they find them portable and practical.
- Despite the advantages of on-screen textbooks, students may prefer printed books because of the sense of ownership.
- Low student interest in e-readers and insufficient awareness of their advantages prevent widespread use.
- Digital tools may not be equally effective or important for everyone; some may prefer traditional reading.
- Special programs and strategies should be created for students to develop digital reading habits.

#### Abstract

This research aims to determine teacher candidates' thoughts, experiences, and expectations about digital reading and e-readers and examine students' reading habits comprehensively. The research study group consists of 116 teacher candidates studying in the Turkish Language Teaching program. This qualitative research investigated many important factors, such as students' daily reading time, digital and traditional reading preferences, the software they use in digital reading, e-readers, and the reasons for preferring these devices. The study's findings were made more meaningful by comparing the data obtained with other studies in the literature. The study results show that students prefer digital platforms, but using e-readers is less common than using digital applications. However, it was concluded that students prefer reading from printed sources to reading from digital tools. This indicates that printed books are still a strong preference and that students face some barriers in transitioning to digital reading tools. Regarding the interest and usage rate of e-readers, it is understood that students mostly prefer printed books, and it will take time for their digital reading habits to develop. Furthermore, the study concluded that digital reading tools and e-readers may not be equally effective or important for all users. This shows that digital reading habits may vary according to the user's preferences, age, technological predisposition, and reading habits. In this context, it can be said that design, accessibility, and ease of use should be considered for digital reading tools to appeal to a broader user base.

**Citation:** Özden, M., & Çiçek, M. (2025). Turkish language teacher candidates' thoughts on e-readers, digital reading, and reading preferences. *Anadolu University Journal of Education Faculty*, 9(2), 167-180. https://doi.org/10.34056/aujef.1564610

© The Author(s). This is an open-access article under the "CC-BY-NC-SA" <u>https://creativecommons.org/licenses/by-nc-sa/4.0/deed.en</u> The authors agree that the text, figures, and documents in the article do not violate the copyrights of third parties and that the publisher is not responsible for any claim or lawsuit by third parties due to copyright infringement. The authors declare that the publisher is not responsible for the article's content and that all responsibility for the article belongs to the authors.

#### **1. Introduction**

As a social being who wants to communicate effectively with society and improve himself, a person should be able to use his language skills effectively; in this context, reading has an important place in developing comprehension skills. Reading is one of the basic learning areas that contributes significantly to the positive development of the human mind (Güneş, 2016). At the same time, it has a function that supports other skills and provides a source for these skills. Keskin and Akyol (2014) emphasize that reading has critical importance due to its contributions to the individual's social, cultural, and cognitive development. Grabe and Stoller (2002) define reading as "the process of creating meaning from the text, extracting and interpreting meaning from words". In this process, "understanding or making sense of what is read" emerges from combining the text, the reader, the reader's grammar background, reading strategies, and the interactions between the reader and the environment (Yükselir, 2014). When the reader completes the reading process effectively and consciously and evaluates the text from a critical perspective, he can "make sense of what he reads." This process offers the opportunity to restructure his thought development. (Block, 2004; Uzunkol, 2013). Therefore, it can be said that the act of reading plays a decisive role in the cognitive and cultural development of individuals and contributes to the process of creating meaning through various interactions.

While reading skills have maintained importance from the past to the present, technological developments in the 21st century have significantly changed traditional reading sources. In addition to conventional sources such as books, newspapers, and magazines, new generation electronic devices such as tablets, computers, and phones that can be used for reading purposes have emerged. This evolution in media and communication tools has expanded the scope of the concept of text, which forms the basis of the act of reading. The decrease in printed texts and the increase in multifunctional digital texts reflect this transformation (Cull, 2011). Digital texts are multifunctional forms of traditional written and oral narrative types in a technological environment (Ciğerci, 2015). Since digital texts simultaneously activate many sensory elements. These qualities make reading on digital screens more attractive than traditional written texts (Ateş, 2013; Cull, 2011). Kress (2010) and Van Leeuwen (2011) state that texts are read and understood through written language and visual signs or elements such as shapes, pictures, graphics, and colours.

Each sign has a distinctive potential that adds meaning to the text (Van Leeuwen, 2011). In this context, the concepts of "multimodal" and "multisemiotic" texts have emerged, visually addressing the text as a whole. "Multimodal text" defines narrative types that include visual and auditory elements. In contrast, "multisemiotic text" defines texts that include only visual and written elements, such as newspapers or magazines (O'Halloran, 2008). However, it is seen that the concept of "multimodal" is widely used for both types in the literature (Caple, 2018). Multimodal texts transform reading habits and ways of accessing information in digital environments, providing a richer and more interactive reading experience. In light of technological advances, there have been changes in the understanding of reading and comprehension. Literacy skills are no longer limited to the ability to read printed texts; instead, literacy has transformed into a broader understanding of skills that require the ability to understand and interact with various texts through digital and mobile technologies (Lankshear & Knobel, 2006). In the digital world, literacy has expanded from the linear and single-format understanding of text. This transformation is associated with rapid advances in information and communication technologies and the reflections of these technologies on social practices (Dalton & Proctor, 2008).

In recent years, with the increase in digital reading devices, software, and their preference by users, reading from digital screens has become increasingly widespread. Electronic books (e-books), electronic readers (e-readers), smartphones, and tablets provide users with portability and ease of access. Digital platforms offer interactive and versatile reading experiences by combining various media formats. In addition, blogs, articles, and social media content on the internet accelerate and diversify access to information (Wolfe et al., 2016). E-readers and e-books have begun to be used as much as traditional

printed books and other physical materials with the advancement of digital technologies. This transformation significantly affects reading habits and ways of accessing information.

In this research, e-readers were defined in detail in the light of developing technological infrastructures; the users' thoughts, preferences, and reading habits towards this new technology were examined comprehensively. The research aims to determine the perspectives, experiences, and expectations of the Giresun University Turkish Education program students towards this technology.

#### 1.1. What is an E-reader?

E-readers are electronic devices specifically designed to read digital books and periodicals. Among the digital reading tools, E-readers were first introduced in 1998 with the 'Rocket eBook' launched by NuvoMedia. This device is considered a pioneering product that first introduced the concept of digital book reading to consumers. However, many users did not adopt it due to its limited technical features. Nevertheless, this early device significantly contributed to the emergence of e-reader manufacturers such as Amazon and Kobo and the evolution of the e-book industry (Öngöz, 2023; Soydan, 2012).

Although the first e-reader was launched in 1998, the first widely accepted and used e-reader was the Amazon Kindle, which was commercialized in 2007. The Kindle is considered a significant milestone in e-reader technology (Anand et al., 2009; Cuddy, 2008). This device was designed to provide users with a comfortable and convenient reading experience. E-readers like this support modern reading habits by blending the portability and flexibility of digital devices with the readability of traditional printed books (Wolfe et al., 2016). E-readers come equipped with features such as a lightweight design, large storage capacity, long battery life, and eye-friendly screen technology, allowing users to easily access digital content and enjoy a personalized reading experience (Howell, 2014; Ragen, 2008). These devices typically use electronic ink (e-ink) technology, which mimics the appearance of ink on paper. E-ink technology minimizes screen glare and eye fatigue, providing comfortable reading even in bright light. Additionally, these screens offer high contrast and wide viewing angles, creating a visual experience similar to reading from traditional paper and enhancing user comfort during extended reading sessions (Öngöz, 2023). Furthermore, e-readers have long battery lives due to their energy-efficient e-ink screens, enabling usage for weeks on a single charge. Because of this feature, users can enjoy an uninterrupted reading experience without worrying about charging (Öngöz, 2023). It can be said that e-readers are easy to carry and possess long battery lives (Culén & Gasparini, 2011), particularly for users who travel frequently or wish to read for extended periods, providing a significant advantage.

E-readers offer significant advantages in terms of portability, allowing users to store thousands of books on a single device, thus providing access to a large digital library. These devices eliminate the physical burden of books thanks to their lightweight structure, allowing readers to easily access their book collections wherever and whenever they want, whether at home or while traveling (Sackstein et al., 2015). E-readers also allow users to customize font size, style, and line spacing to personalize their reading experience. This flexibility significantly improves reading comfort by enhancing text readability, especially for users with different visual needs (Anderson, 2018). Another important feature of these devices is that books can be downloaded instantly from online digital libraries via a Wi-Fi connection. This feature allows users to quickly access the books they want and simplifies the selection process from a wide range of digital content. Online access also makes book shopping more practical, allowing users to obtain new books with just a few clicks, without needing to visit physical stores (Howell, 2014; Myrberg & Wiberg, 2015; Öngöz, 2023). Many e-readers offer various additional features to facilitate and enhance the user experience. These features include built-in dictionaries, note-taking, highlighting text, adding bookmarks, and listening to audiobooks (Hancock et al., 2016). Such additional functions allow readers to create detailed notes on the text, highlight important sections, and develop personal reading preferences (Anderson, 2018).

#### 1.2. Purpose of the Research

In consideration of the information above, the purpose of this research, which was prepared based on digital reading, e-readers, reader preferences, and thoughts, is to provide information about digital reading sources and e-readers and to determine users' reading preferences. E-readers transform modern reading habits by providing easy access to digital books and periodicals. The advantages of these devices, such as portability, personal reading experience, long battery life, and eye-soothing screen technology, offer significant opportunities, especially for individuals receiving education (Anand et al., 2009; Ragen, 2008). In particular, e-readers provide students with easy access to reading materials, increase reading comfort, and the ability to customize personal reading experiences, which strengthens the educational potential of these devices (Anderson, 2018; Öngöz, 2023).

Many studies are in the literature on the widespread use of screen-reading habits. In particular, today's digital reading habits have made it common for students and general users to read on digital platforms. Wang & Lee (2017) and Smith (2020) emphasize that the use of digital reading tools has transformed traditional paper-based reading habits and that digital media use is rapidly increasing. These studies reveal that digital devices, especially e-readers, have significantly changed the reading experience. However, the number of studies conducted to improve the quality of screen reading is quite limited (Howell, 2014; Myrberg & Wiberg, 2015). With the increase in screen reading habits, concerns have also been expressed that this form of reading may negatively affect eye health. It is stated that reading on screens for a long time can increase eye fatigue and lead to visual impairment (Dillon, 2019; Manganelli, 2018).

Unlike traditional screens, e-readers have features that do not cause screen glare and minimize eye fatigue, indicating that these devices offer a healthy reading experience for users (Howell, 2014; Öngöz, 2023). E-ink screens offer long-term reading experiences, especially protecting eye health (Ragen, 2008). On the other hand, e-readers are still not widely used, and why users prefer these devices has not been sufficiently investigated (Anderson, 2018; Culén & Gasparini, 2011). Considering the advantages of e-readers, it is thought that increasing the use of these devices, especially in education, can play an important role in transferring students' reading habits to the digital environment (Anand et al., 2009; Myrberg & Wiberg, 2015). The spread of the new generation's reading habits on screens reveals the importance of educating teachers who have much more information and are experienced in this regard (Cuddy, 2008; Sackstein et al., 2015). Properly directing students' digital reading habits can be critical in developing their reading skills. At this point, it is understood that Turkish teachers need to gain the ability to use digital reading tools effectively. Determining the digital reading habits of Turkish teacher candidates and how e-readers can be used more efficiently in education will support the integration of digital reading tools in education. This research was conducted to contribute to similar field studies and understand Turkish teacher candidates' educational experiences and expectations, especially regarding e-readers. In particular, emphasizing the importance of teachers providing students with the ability to teach the effective use of digital reading tools will ensure that digital reading habits develop more healthily in educational processes (Anderson, 2018; Myrberg & Wiberg, 2015). It is seen that the benefits offered by e-readers should be examined in depth in the context of creating effective reading experiences, and the feedback from the target audience, along with the quality of the materials used in line to improve language skills in Turkish education, is of significant value for potential use in this area. It is thought that Turkish teacher candidates have various experiences and expectations regarding digitalizing reading habits and skills, such as understanding, interpreting, and analysing texts.

#### 2. Method

This research was conducted on students of the Turkish Language Education program at Giresun University Faculty of Education to examine their thoughts, experiences, and expectations regarding screen reading and e-readers. Research permissions were obtained in accordance with ethical principles before the research.

#### 2.1. Research Design

Qualitative research requires an inquisitive and interpretive approach to understanding the dynamics of the problem in its natural environment (Klenke, 2016) while also providing flexibility in the research process. This flexibility allows the researcher to develop new approaches at each stage and make arrangements that can increase the impact of the research (Creswell & Clark, 2017). In the study, a mixed questionnaire/survey containing mixed questions that can be used in quantitative and qualitative research was preferred to understand the participants' reading preferences and the factors that affect these preferences in more depth. This mixed questionnaire, prepared by the researcher and structured by obtaining expert opinion, includes open-ended and closed-ended questions.

#### 2.2. Participants, Procedure, and Ethical Considerations

Teachers and students are at the centre of reading and reading education, and it is seen that reading resources are increasingly diversified in parallel with digital developments and the impact of technology on education is increasing (Anderson, 2018; Howell, 2014; Sackstein, 2015); It is thought that university students studying in the field of Turkish Education programme are more prone to new tendencies in reading and reading comprehension due to their experience with both digital and traditional education methods. Considering that they will work as Turkish teachers after graduation, it can be stated that these students are at the centre of the reading process both through their current student roles and their future teacher professions. It is assumed that these students use digital reading and e-readers more effectively than other departments due to their interest in language, literature texts, and their professional needs, and that they can evaluate the role of these devices in their educational processes more deeply. However, Turkish Education program students are intensely interested in reading materials, language education, and texts. Since digital reading and e-readers are technologies that can affect text reading and review habits, the thoughts and experiences of students in this department directly coincide with the target of the research. While students in other departments may be interested in this technology, it is assumed that Turkish Language Education program students tend to evaluate it more critically regarding their education and professional life. For these reasons, it was thought that focusing on this department would ensure that the research achieves its purpose and that the data obtained is meaningful.

The study group is selected depending on the research's purpose, time, and resources (Lewis, 2015; Patton, 2005). In qualitative research, the quality of the study group is considered more important than quantity. Therefore, instead of many participants, a study group that meets the research objectives and provides reliable and detailed data can be preferred (Coyne, 1997; Morgan & Morgan, 2008). The priority of the research is to obtain reliable and meaningful data instead of collecting a large amount of data (Ekiz, 2003; Karasar, 2012). In this direction, the study group comprises students in the Turkish Education Programme at Giresun University.

The convenience sampling method was preferred in the study. This method was used because it provided time and cost advantages and easy access to the participants. Although there were 209 students actively registered in the Turkish Education program, this number could not be reached due to the lack of compulsory attendance, students who were not in class during the application, or who did not want to participate in the study. 116 students participated in the study voluntarily. The students were informed in detail about the study, and their voluntary consent was obtained. The gender and age information of the students participating in the study is presented in the table below.

Variable	Category	f	%
Constant	Female	88	75,86
Gender	Male	28	24,14
•	18-19	23	19,83
Age	20-21	52	44,83
	22-23	34	29,31
	24 and over	7	6,03

#### Table 1. Demographic characteristics of the participating study group

When Table 1 is examined, it is seen that the number of female students is more than the number of male students and most participants are between the ages of 20-21.

#### 2.3. Data Collection Tools

In the study, a mixed question form prepared by the researcher regarding digital and traditional reading comprehension was applied to students studying in the Turkish Education programme at Giresun University. The form was designed to include multiple-choice and open-ended questions. The obtained data were examined and interpreted using the descriptive analysis method. In order to ensure the content validity of the questions in the form, opinions were received from a total of 6 experts specialized in Turkish Education and Assessment & Evaluation. These experts evaluated the questions in terms of their suitability for the research purpose, comprehensibility, and content accuracy. Information about the experts is presented in the table below.

Table 2. Experts whose opinions were consulted for the mixed questionnaire

Field	Category
Turkish Education	5
Assessment& Evaluation	1

#### 2.4. Validity and Reliability

The validity and reliability of the data collection tool were established according to the Lawshe technique. The content validity measurement tool (Lawshe technique) is one of the earliest and most widely used methods to quantify content validity. It is a type of validity that evaluates whether the content of a measurement tool covers all aspects of the subject or concept intended to be measured (Lawshe, 1974; Wilson et al., 2012). If each item in the tool has sufficient content validity, content validity is considered to be achieved. However, if there are items with low suitability, content validity can be improved (Lawshe, 1975). The evaluation process is critical to increase reliability and validity and helps to design the measurement tool in accordance with its purpose. Analyses made after expert opinions reveal the content validity rates of each item, determine the suitability of the content of the prepared measurement tool for the purpose and enable the necessary corrections to be made (Ayre & Scally, 2014).

In the formula used in the calculation of content validity, the terms "Nu" and "N" reveal the importance of the evaluation of each item in the measurement tool by experts (Ayre & Scally, 2014; Wilson et al., 2012). "Nu" represents the number of experts who stated that an item is appropriate, and "N" represents the total number of experts who expressed their opinions about that item. The formula used to determine the content validity of the developed measurement tool is based on expert opinions in determining the suitability level of each item. In this process, the number of experts who stated that each item was suitable (Nu) and the total number of experts who gave their opinions about that item (N) were considered.

$$KGO = \frac{Nu - \frac{N}{2}}{\frac{N}{2}}$$

According to this technique, the researcher prepared a mixed questionnaire form consisting of open and multiple-choice questions. After the questions in the form were prepared, expert opinion was sought regarding the suitability of the items in the measurement tool. The tool was rearranged by evaluating the feedback from the experts. After the expert's opinion, each item's content validity rate (CVR) was calculated using the Lawshe technique. At least 5 experts are required to apply the Lawshe technique, and the number of experts whose opinions were received in this study is 6. The table below presents the content validity rates of each item based on expert opinions.

Item Number	Essential	Not Essential	Essential but needs revision	CVR
1				
1	6	0	0	1,00
2	5	1	0	0,67
3	3	0	0	0,00
4	4	2	0	0,33
5	1	2	0	0,33
6	4	2	0	
7	4	2	0	0,33
8	4	2	0	0,33
9	6	0	0	1,00
10	6	0	0	1,00
	5	1	0	0,67
11	6	0	0	1,00
12	5	1	0	0,67
13	6	0	0	1,00
14	6	0 0	0	1,00

Table 3. Content validity rates of the	e items in the measurement tool	as a result of expert evaluation

The significance value of content validity ratios may vary depending on experts' attitudes in evaluating the items. According to some standards stated in the literature, if more than half of the experts rate an item as "essential", the content validity ratio takes a value between 0 and 0.99 (Ayre & Scally, 2014). Suppose all experts rate the item as "essential". In that case, the CVR value is calculated as 1, while when the number of experts rating the item as "essential" is more than half but less than all, the CVR value varies between 0 and 1; when less than half of the experts rate the item as "essential" the cVR value becomes negative (Wilson et al., 2012, p.199). These standards are critically important in determining the items' content validity. These values, calculated based on experts' attitudes, have an important place in evaluating the suitability of the content of the measurement tool for the purpose.

According to the information in Table 3, it is seen that the items in the mixed questionnaire, except for item 3, are at the level of acceptability. This shows that most experts found the items appropriate, and the content validity of the measurement tool was ensured. However, since the content validity rates of items 2, 4, 5, 6, 7, 10, and 12, which were stated as "essential but needs revision", were determined to be low, it was concluded that these items should be rearranged in line with the feedback from the experts and the item 3, which was stated as "not essential", should be removed from the form. In this process, expert feedback on the necessity of the items in the measurement tool for the analysis of the reading action and the sub-objectives of the research was taken into account and the items were rearranged accordingly. This way, the measurement tool was ensured to serve its purpose more appropriately and effectively.

The mixed question form prepared as a measurement tool was applied to Turkish Education programme students after the corrections were made in line with expert evaluations and a pilot study was conducted. This study aimed to determine how the form works in practice and possible problems. During the pilot study, the form's understandability, validity, and reliability and its effect on students were observed and evaluated. Factors such as how students perceived the form and how accurately they answered the questions were considered.

The pilot study results were used to evaluate the effectiveness of the form, and the comprehensibility and consistency of the questions were examined. These evaluations are important to increase the usability of the form in the next stages. The final evaluation confirmed that the content of the form was suitable for measurement and reliable. The pilot study observed that the mixed question form measured the targeted topics accurately and was in line with student expectations. The repeatability and consistency of the results measured the reliability of the measurement tool. The data obtained during the pilot study showed that the mixed questionnaire was reliable and had high internal consistency and stability. As a result, since the final evaluation results showed that the content of the mixed questionnaire was suitable for the purpose of measurement, reliable, and valid, the form was created correctly and compatible with the target group, it was decided to implement it without any changes in its content.

#### 2.5. Data Collection Process

The researcher created the mixed questionnaire form used in the study and adjusted it with expert opinions. The form was applied to students in the Giresun University Turkish Education program. The application was carried out voluntarily, and a Voluntary Consent Form was obtained from each participant. The research was conducted in the 2023-2024 Spring Term, and the data collection phase was started after the pilot application. The data collection process consisted of the following steps:

- The mixed questionnaire was applied face to face.
- Data were collected and recorded.
- Statistical analyses were performed, and the results were interpreted.
- Findings and results were reported.

#### 2.6. Data Analysis

The descriptive analysis method was used in the study. Descriptive analysis is an analysis method that systematically organizes, explains, and interprets data using descriptive statistical information such as tables, graphs, and themes. It is widely used, especially in qualitative research (Creswell, 2013). This type of analysis focuses on making an existing phenomenon more understandable rather than developing a new theory by presenting the current situation as it is (Yıldırım & Şimşek, 2018). For this reason, this type of analysis, which includes stages such as organizing, classifying, and interpreting data to make an existing situation more understandable, was preferred in this study. The obtained data were examined, and the participants' views on digital reading and e-readers were systematically categorized. Direct quotes from the participants were grouped with similar data to create codes. During the coding process, frequency (f) and percentage (%) information regarding the frequency of expressing opinions was calculated. After coding, the frequency of expression of each category and code was determined, and frequency (f) and percentage (%) information were analysed. The study included these data to show which themes the participants focused on more and which opinions were more common. The codes were interpreted by considering cause-and-effect relationships. The participants' thoughts and experiences were considered at this stage, and the findings were enriched.

#### 3. Results

The findings were presented in tables under the subheadings below when the data obtained were analyzed. The data is also shown graphically below the tables.

#### 3.1. Digital Tools

Table 4. Devices used by students for reading from the screen

Digital Tools	f	%
Smartphone	116	100
Laptop	58	50
Tablet	36	31,03
Computer	29	25
E-Reader	16	13,79

According to Table 4, all students participating in the research have a smartphone, but the number of students using e-readers is quite low compared to the number of participants.

#### 3.2. Screen Reading Durations

Table 5. Students' daily screen reading durations

Digital Tools	f	%
0-1 hr	38	32,75
1-2 hr	61	52,58
2 hr and over	17	14,67

When Table 5 is examined, it is seen that 52.58 percent of the participating students read on screen for an average of 1-2 hours a day. The frequency and percentage data in the table are given below as a column chart.

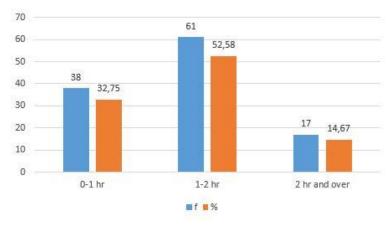


Figure 1. Students' daily screen reading durations frequency and percentage data

### 3.3. Software Used by students

Table 6. Software used by students for screen reading

Softwares	f	%
Google Play Books	14	12,06
PDF read	12	10,34
Wattpad	7	6,03
El-Kitap	4	3,44
Storytel	4	3,44
I don't use Apps	75	64,65

When Table 6 is examined, it is seen that only 35 percent of the students participating in the research use software for reading on the screen. The most preferred and used software among the students is Google Play Books. The data in Table 6 is given below as a column chart.

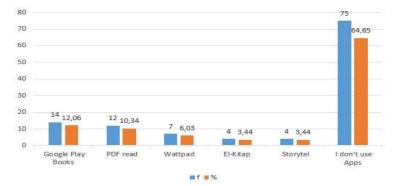


Figure 2. Software used by students for screen reading

#### 3.4. E-reader Devices Used by students

 Table 7. E-reader devices used by students for screen reading

E-reader Devices	f	%
Amazon Kindle	7	6,03
Calibro	3	2,58
Onyx Boox	3	2,58
Коро	3	2,58
l don't use an E-reader	100	86,20

When Table 7 is examined, it is seen that a total of 16 students use e-readers. This number constitutes 13.77% of the total number of participating students. It is understood that the most preferred e-reader device is Amazon Kindle, and the other 3 e-readers are used at the same rate. However, when Tables 6 and 7 are examined, it is determined that most students do not prefer any software or e-readers for reading on the screen. The data in Table 7 is given below as a column chart.



Figure 3. E-reader devices used by students for screen reading

#### 3.5. Reasons for Screen Reading

Table 8. Students' reasons for screen reading

Reasons	f	%
Fast access to information	30	25,86
Ease of transportation	24	20,68
Attractiveness	22	18,96
Reader interaction	11	9,48
No influencing factors	29	25

When Table 8 is examined, it is determined that the factors that most affect the use of digital tools are providing quick access to information, ease of transportation, being attractive, and increasing reader interaction. In addition, 25% of the students stated that no factor affected them. The relevant column chart for the table is given below.

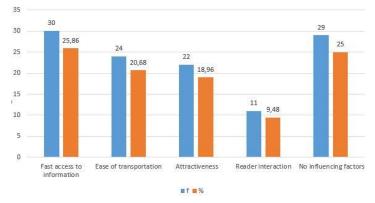


Figure 4. Students' reasons for screen reading

Some of the reasons students read from screens include:

- "... quickly accessing the information on my phone whenever I want gives me confidence and happiness."

- "... being able to read and respond to the comments made by other readers about what I read affects me."

- "I also like reading books, but the phone offers a wide variety of text/images on a subject, it makes it easier for me to understand."

- "Some images are more interesting, which increases my desire to read on the screen.

- ... "the phone fits in my pocket, it is not heavy like a book. I can carry it easily so I can take it anywhere, and since I also use it to call someone, it is always with me anyway..."

- "... there is nothing psychologically affecting it, I can read on screen or on paper if I want..."

- "... since the screen images are various, they interest me and I want to read it, but this is not always the case. Touching the book makes me happier."

The findings obtained from the research were evaluated and interpreted in the discussion and conclusion section.

## 4. Discussion and Conclusion

In this study, students stated that the attractiveness and portability of digital reading, screen-based reading software, and e-book readers are among the reasons for their preference. This shows that students consider features such as the practicality and portability of digital tools important. Being able to carry only one device instead of many books and having access to various reading materials on this device offers great advantages to students. In addition, the attractiveness of digital tools and encouraging reader interaction are other important factors that increase the value of using these tools. Wulandari (2023) stated that e-book readers play an important role in developing multi-literacy skills such as reading, digital literacy, and visual literacy of foreign language learners (EFL); e-book readers increase students' interest by providing them with access to a variety of materials anytime and anywhere, which strengthens motivation and comprehension in the learning process. These research findings confirm this observation.

However, despite the advantages of reading on screen, students may prefer printed books as a reading source. The main reason for this preference is the' sense of ownership of printed books. According to the research conducted by Kaban (2021), e-book readers improve reading comprehension skills in education and promote positive digital attitudes among students. However, students still stated that reading from the screen was not very effective, apart from features such as being easy to carry and attractive. Similarly, it can be concluded that digital tools may not be equally effective or important for every user. Some users may prefer traditional methods, such as reading on paper. The findings of this study support this situation.

Similarly, in the study by Alamri (2019), students' reading preferences for course materials were 65.98% in the direction of printed books, while the rate of those who preferred e-books remained at 17.60%. Although students were satisfied with their experiences with e-books, they were reluctant to purchase e-books. The main reasons for this preference include ease of use, price advantage, sense of ownership, and health concerns. This situation shows that improvements are needed in terms of design and accessibility in order to make digital reading materials more attractive to students.

According to the findings obtained from the research, when the results regarding e-readers, digital reading habits, and the use of digital tools were examined, it was observed that all students had smartphones. However, the number of students using e-readers was low. The reasons for the low use of e-readers despite the widespread use of smartphones are that students have a low interest in using e-readers, and the advantages provided by e-readers are not sufficiently recognized. This shows that e-readers have not yet become a habit. In addition, Sediyati (2018) reported that electronic devices encourage students to interact with literature in the digital age in an easy, accessible, and affordable way. However, it can be said that the high cost of e-readers in our country is a factor that prevents students from accessing these devices.

It has been determined that 45% of students spend 1-2 hours a day reading on screens. This rate indicates that more than half of the students do digital reading and shows that digital reading habits are becoming widespread. However, this rate also reveals that digital reading habits should be managed

healthily. Digital reading, unlike traditional book reading habits, can have various negative effects, such as prolonged use of the screen, eye health, and distraction (Baron, 2021). Therefore, strategies should be developed to positively shape students' digital reading habits.

#### 4.1. Suggestions for Future Research

In future studies, the reasons for the low usage rates of e-readers can be examined in more depth. Research can be conducted on the obstacles behind students not using these technologies (cost, access difficulties, habits) and their motivations for using these tools. Surveys or interviews on user experience can reveal which aspects of these tools are liked and which aspects need to be improved. A study can be conducted to understand students' thoughts on purchasing e-readers. In this study, variables such as ereader models, pricing, and ease of use can be tested. A survey study can be conducted to determine the effect of long-term digital reading on eye fatigue. In addition, experimental studies can be conducted on reading times and sources. Teaching strategies and programs can be developed to support students' digital reading habits. These programs can show students how to use digital resources effectively and efficiently. For example, applications designed to develop digital reading skills, monitoring of reading processes, and digital reading activities that guide students can be planned. In addition, digital materials must be presented in a personalized way, not only in terms of content but also according to the needs of the students. In order to develop digital reading habits, customized programs and strategies should be created according to the needs of the students. This not only reinforces the digital reading habits of the students but also increases their digital literacy levels and enables them to use technology more efficiently. As a result, it is thought that a better understanding and explanation of e-readers' advantages and ease of use can contribute to a broader adoption of this technology among users.

#### **Statement of Researchers**

#### Researchers' contribution rate statement:

Both authors contributed equally to all chapters.

**Conflict statement:** 

The authors declare that they have no conflict of interest.

#### **Data Availability Statement:**

The data supporting this study's findings are available from the corresponding author upon reasonable request. **Funding:** 

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

#### **Ethical Considerations:**

This research was approved by the Giresun University Ethics Committee's Social and Human Sciences Ethics Committee, decision no. 138012, dated 18.01.2023. **The Authors Biographies** 

**Münire Özden**, born in 1980, is a lecturer at Giresun University. She received a master's degree with a thesis from Tokat Gaziosmanpaşa University in the field of Turkish Education Programme. Now, she is a PhD student in the Turkish Education Program at Gaziantep University.

**Mehmet Çiçek** is a Professor at the Faculty of Education, Department of Turkish Education at Gaziantep University, Turkey, and has also served as the Institute Director at the same university since 2023. He completed his master's in Linguistics at the Université de Reims Champagne-Ardenne in France and received his doctorate from the same university in 1999.

#### 5. References

- Anand, B. N., Olson, P. W., & Tripsas, M. (2009). *eReading: Amazon's Kindle* (Harvard Business School Case No. 709-486). Harvard Business School. <u>https://www.hbs.edu/faculty/Pages/item.aspx?num=37016</u>
- Anderson, T. L. (2018). E-readers make a difference for diverse readers. *International Journal of Technology in Education and Science (IJTES)*, 2(1), 40–56. <u>https://www.ijtes.net/index.php/ijtes/article/view/10/10</u>
- Ateş, S. (2013). Eleştirel okuma ve bir beceri olarak öğretimi (Critical reading and its teaching as a skill). *Turkish Journal* of *Education*, 2(3), 40–49. <u>https://doi.org/10.19128/turje.181063</u>
- Ayre, C., & Scally, A. (2014). Critical values for Lawshe's content validity ratio: Revisiting the original methods of calculation. Measurement and Evaluation in Counseling and Development, 47(1), 79–86. <u>https://doi.org/10.1177/0748175613513808</u>

Baron, N. S. (2021). How we read now: Strategic choices for print, screen, and audio. Oxford University Press.

Block, C. C. (2004). Teaching comprehension. Pearson Education Inc.

- Caple, H. (2018). Analysing the multimodal text. In C. Taylor & A. Marchi (Eds.), *Corpus approaches to discourse: A critical review* (pp. 85–109). Routledge. https://doi.org/10.4324/9781315179346-5
- Ciğerci, M. F. (2015). İlkokul dördüncü sınıf Türkçe dersinde dinleme becerilerinin geliştirilmesinde dijital metinlerin kullanılması (The use of digital texts in developing listening skills in the 4th grade primary school Turkish course). (Doctoral dissertation, Anadolu University, Institute of Educational Sciences).
- Coyne, I. T. (1997). Sampling in qualitative research, purposeful and theoretical sampling; merging or clear boundaries? *Journal of Advanced Nursing*, *26*(3), 623–630. <u>https://doi.org/10.1046/j.1365-2648.1997.t01-25-00999.x</u>

Creswell, J. W., & Plano Clark, V. L. (2017). Designing and conducting mixed methods research. Sage.

- Cuddy, C. (2008). E-book readers. Journal of Electronic Resources in Medical Libraries, 5(4), 389–394. https://doi.org/10.1080/15424060802453787
- Cull, B. W. (2011). Reading revolutions: Online digital text and implications for reading in academy. *First Monday*, 16(6), 1–6. <u>https://doi.org/10.5210/fm.v16i6.3340</u>
- Culén, A. L., & Gasparini, A. (2011). E-book reader and the necessity of divergence from the legacy of paper book. In *Proceedings of the 4th International Conference on Advances in Computer Human Interaction* (pp. 267–273).
- Dalton, B., & Proctor, C. P. (2008). The changing landscape of text and comprehension in the age of new literacies. In J. Coiro, M. Knobel, C. Lankshear, & D. J. Leu (Eds.), *Handbook of research on new literacies* (pp. 297–324). Erlbaum.
- Ekiz, D. (2003). Eğitimde araştırma yöntem ve metodlarına giriş: Nitel, nicel ve eleştirel kuram metodolojileri (Introduction to research methods and techniques in education: Qualitative, quantitative and critical theory methodologies). Anı.
- Grabe, W., & Stoller, F. L. (2002). Teaching and researching reading. Pearson Education.
- Güneş, F. (2016). Kâğıttan ekrana okuma alanındaki gelişmeler (Advances in reading from paper to screen). Bartın University Journal of Faculty of Education, 5(1), 1–18. <u>https://dergipark.org.tr/en/pub/buefad/issue/24919/263039</u>
- Hancock, G. M., Schmidt-Daly, T. N., Fanfarelli, J., Wolfe, J. L., & Szalma, J. L. (2016). Is e-reader technology killing or kindling the reading experience? *Ergonomics in Design*, 24(1), 225–230. <u>https://doi.org/10.1177/1064804615611269</u>.
- Howell, V. (2014). E-books and Reading Experience. The Journal of Publishing Culture, 2, 2009-2017.
- Kaban, A. L. (2021). Gamified e-reading experiences and their impact on reading comprehension and attitude in EFL classes. *International Journal of Mobile and Blended Learning*, 13(3), 54–74. https://doi.org/10.4018/IJMBL.2021070105
- Karasar, N. (2012). Bilimsel araştırma yöntemi (Scientific research method). Nobel Yayıncılık.
- Keskin, H., & Akyol, H. (2014). Yapılandırılmış okuma yönteminin okuma hızı, doğru okuma ve sesli okuma prozodisi üzerindeki etkisi (Effect of structured reading method on reading speed, reading accuracy and oral reading prosody). Journal of Mother Tongue Education, 2(4), 107–119. https://www.anadiliegitimi.com/tr/pub/issue/1361/16049
- Klenke, K. (2016). Qualitative research in the study of leadership. Emerald Group Publishing.
- Kress, G. (2010). Multimodality: A social semiotic approach to contemporary communication. Routledge.
- Lankshear, C., & Knobel, M. (2006). New literacies: Everyday practices and classroom learning. Open University Press.
- Lawshe, C. H. (1975). A quantitative approach to content validity. Personnel Psychology, 28, 563–575.
- Lewis, S. (2015). Qualitative inquiry and research design: Choosing among five approaches. *Health Promotion Practice*, 16(4), 473–475. <u>https://doi.org/10.1177/1524839915580941</u>
- Morgan, D. L., & Morgan, R. K. (2008). Single-case research methods for the behavioral and health sciences. Sage.
- Myrberg, C., & Wiberg, N. (2015). Screen vs. paper: What is the difference for reading and learning? *The UKSG Journal*, 28(2), 49–54. <u>https://doi.org/10.1629/UKSG.236</u>
- O'Halloran, K. L. (2008). Systemic functional-multimodal discourse analysis (SF-MDA): Constructing ideational meaning using language and visual imagery. *Sage Journals*, 7(4). <u>https://doi.org/10.1177/1470357208096210</u>
- Öngöz, S. (2023). Akademik okuma için ideal e-okuyucu cihaz tasarımı üzerine bir durum çalışması (A case study on ideal e-reader device design for academic reading). *Journal of Instructional Technologies and Teacher Education*, 12(1), 14–30. <u>https://doi.org/10.51960/jitte.1212285</u>
- Patton, M. Q. (2005). Qualitative research. Sage.
- Sackstein, S., Spark, L., & Jenkins, A. (2015). Are e-books effective tools for learning? Reading speed and comprehension: iPad® vs. paper. South African Journal of Education, 35(4), 1–14. <u>https://doi.org/10.15700/SAJE.V35N4A1202</u>

Van Leeuwen, T. (2011). The language of colour: An introduction. Routledge.

- Wilson, F., Pan, W., & Schumsk, D. (2012). Recalculation of the critical values for Lawshe's content validity ratio. *Measurement and Evaluation in Counseling and Development*, 45(3), 197–210. <u>https://doi.org/10.1177/0748175612440286</u>
- Wulandari, M. (2023). Using e-book readers to foster EFL students' multi-literacies: A case study at a vocational high school in Ciamis. *Journal of English Education Program (JEEP)*, 10(1), 57–60. http://dx.doi.org/10.25157/(jeep).v10i1.9685