



## The Reading Comprehension Levels of Teachers: A Study on Teachers Working in Basic Education Schools

Ali BALTACI<sup>1</sup>

• Received: 13.04.2020 • Accepted: 13.07.2020 • Online First: 11.10.2020

### Abstract

The aim of this study is to determine the level of reading comprehension of the teachers working in primary education schools (primary and secondary schools). 1415 teachers working in Ankara constitute the sample group of the study. 'The Scale of Evaluation of Reading Comprehension' developed by the researcher was used in the study. Krippendorff's alpha ( $\alpha$ ) coefficient, Cohen's kappa ( $\kappa$ ) coefficient, Pearson moment coefficient is used to determine the questionnaire's reliability. According to the study results, it was determined that teachers understand the narrative texts at the 'good' level and the informative texts at the 'weak' level. In general, teachers understand what they read at an 'intermediate' level. Besides, there is a significant difference between the teachers' demographic characteristics (gender, professional tenure, branch, and graduation) and the level of reading comprehension. Teachers who are male, graduates, and have more professional tenure understand what they read. Also, when the general reading comprehension level is examined, Turkish language teachers are "good"; teachers in physical education, visual arts, music, and design branches are "weak"; computer technologies, religious education, science, math, pre-school, counseling, primary school teachers, social studies and foreign language teachers were determined as "medium" level. In this study, the insufficiency of teachers' reading comprehension levels has been made visible. This study, which indicates an important gap in the literature, is essential in extending reading comprehension studies to cover the pre-service and in-service periods.

**Keywords:** reading, reading comprehension, reading comprehension level, teacher

### Cited:

Baltacı, A. (2021). The reading comprehension levels of teachers: a study on teachers working in basic education schools. *Pamukkale University Journal of Education*, 51, 236-261. doi:10.9779/pauefd.719811.

<sup>1</sup> Assist. Prof. Dr., Mersin University, ORCID: 0000-0003-2550-8698 e-mail:alibaltaci@mersin.edu.tr

## Introduction

Every person is born into a language; this language directs his life. Heidegger states that language is the home of thought and the primary determinant of human life; He argues that the human intellectual world's width can be as much as the boundaries of his language (Heidegger, 2002). The person establishes his/her world with language, and language is accepted as the basic element that directs human life (Berger & Luckmann, 2005). All verbal or written communication of the person with others is within the boundaries of a language. A person's healthy relationship with society is directly related to developing language skills expressed as a combination of listening, speaking, reading, and writing. Reading is the process of loading a meaning and comprehending the message in the text correctly rather than voicing written letters and symbols (Habermas, 2001). This process develops depending on the relationship between the person and his environment. Language skills, the development of which starts in the family, and its immediate environment, progress systematically throughout life.

Despite investments in education, Turkish students' level of reading comprehension is not at the desired level in international evaluations (PISA, etc.). This is an important debate in the public sphere (PISA, 2015; MEB, 2019; Baltacı, 2017; Kurnaz & Akaydın, 2015). Besides, the qualifications and competencies of teachers who are in a position to contribute to students' language skills are also questioned. For students to acquire sufficient language skills, teachers should also be equipped with qualified language skills. In this respect, determining the level of reading comprehension of teachers will contribute to the language development of students and facilitate their adaptation to social order. In this context, it is essential to determine the teachers' level of reading comprehension within the scope of determining the teachers' basic competencies.

One of the aims of the education system is to develop students' reading comprehension skills from the first years of teaching (Çam, 2006). The development of the student's reading comprehension skill, based on the knowledge that reading at a certain speed affects the student's academic success, may increase efficiency in learning situations (Suna, 2005). Besides, reading skills development can create a necessary basis for new learning (Bügel & Buunk, 1996; Tayşi, 2007). A student who can read a text fluently and accurately can understand enough to read, and has a vocabulary can be easier to learn new information and higher academic achievement than those who do not have these features

(Odabaş, Odabaş, & Polat, 2008; Çelenk & Çalışkan, 2004). Başaran (2013) and Ungan (2008) reported that when the time devoted to learning is ignored, individuals' level of knowledge can only be determined by examining the level of reading comprehension. On the other hand, reading comprehension also contributes to one's basic communication skills and social cohesion (Wigfield, Gladstone, & Turci, 2016). From this point of view, it can be stated that reading comprehension is a skill area that can be used in academic life and a skill that should be developed in a professional or social life.

Reading is a tool to understand the realities of the world, facilitate the acquisition of new knowledge, and gain a critical perspective on different events and phenomena. It includes other skills such as perception, interpretation, analysis, and synthesis (Ehri, 2005). To be able to mention that reading, which includes subjective and objective processes, is fully realized, one must understand what he is reading. This situation determines that high-level mental processes work through reading (Coelho & Correa, 2017).

The thoughts and emotions written down by others are reconstructed with the person's ability to understand what they read. In this context, the information gained by the person's "reading" activity creates a difference in cognitive, affective, and behavioral fields. The process of making a difference in the message of the read text is called the ability of reading comprehension (Saracaloğlu & Karasakaloğlu, 2011). The real aim of reading is to quickly grasp the text's message and create a distinct cognitive, affective, or behavioral difference in the person. The more the person interacts with the text he/she reads, the greater the probability of comprehending the message in the text (Davey, 1983).

Knowing the meaning of the words in the text is the first condition to understand. However, it is more important to understand the sentences and the entire text. The comprehension of the text depends on the vocabulary that a person has achieved in the past. This accumulation, which is also expressed as readiness, is the person's cognitive, affective, and behavioral access (Hock & Mellard, 2005).

It is an important skill to relate the message in the text to their own experiences. In this way, the person can recognize the various dimensions of the message in the text he/she is reading by including the text in his subjective field. However, associating the message in the text with past life may, in some cases, lead to the development of various prejudices against the message in the text. This makes it difficult to understand the text read (Demir, 2012). On the other hand, the primary condition for the person to understand the text he/she reads and gain a critical view of the text's main message is the neutral evaluation of the text.

In this respect, to understand the text read correctly, bias should not be developed against the text or the message. (Hegarty & Golden, 2008).

Reading comprehension requires different mental and emotional processes regarding the text to work. In order to determine the level of reading comprehension in the cognitive and affective domain, it is sufficient to ask a verbal or written question regarding the basic message of the text read. The level of reading comprehension can be determined by evaluating the person's responses. On the other hand, it is complicated to determine how the text he read changes the person's attitudes and behaviors (Karatay, 2007; Vega, 1996). For example, it may be necessary to make long-term observations to determine how various warning messages, including traffic or health rules, affect individuals' behavior or whether messages in these texts are understood.

Knowing the factors that make up the structure of a text (text type and expression) facilitates understanding (Karatay, 2007). Although there are various classifications related to text types in the literature, they are generally distinguished as informative texts (essays, articles, etc.) and narrative texts (stories, novels, etc.) (Çeçen, 2011).

Informative texts are created to enlighten the reader by providing information about events and facts that are difficult to comprehend (Temizkan, 2009). This text type claims to explain a particular event or phenomenon in detail so that the reader can understand a subject deeply (Günay, 2007). Fiction is not included in informative texts; information is presented directly to the reader. In this respect, it differs from the narrative texts in terms of style and content. In this type of text, which does not involve artistic expression techniques, language and expression pattern is created, taking into account the level of knowledge to be conveyed and the person's experiences who will be addressed to this information (Temizkan, 2009). Since informative texts are generally composed of terms and hierarchical mainstream, it may be difficult for a person with poor vocabulary to understand informative texts (Saenz & Fuchs, 2005). In this respect, understanding informative texts are more complicated than narrative texts (Akyol, 2011; Kurnaz & Akaydın, 2015).

For an informative text to be understood correctly, the hierarchical structure and other details regarding the main and auxiliary ideas should be carefully determined. To benefit from such texts, the person must be familiar with the language and expression characteristics of these texts and their expectations. At this point, the prerequisite for understanding what it reads is to know the features of the type of text and the reading style required by this type (Karatay, 2007).

The narrative texts are based on the event flow, and the events cover a certain period. These texts present a fictional event that develops between a certain beginning and a result with artistic expression. In the narrative texts, there are various factors such as an event, perspective, narrator, time, place, and people (Aktaş, 2000). Unlike informative texts, the message intended to be given to the reader is not presented in narrative texts. For the reader to understand the message, he/she needs to know about such texts, follow various clues in the text, and make inferences (Üründü, 2011). However, narrative texts are easier to understand than informative texts (Akyol, 2011; Üründü, 2011).

Although the type of text is decisive in reading comprehension, the text's degree of difficulty is also important. In exams like PISA, PIRLS, the texts' difficulty levels are determined as a criterion by the learning taxonomies of Bloom or Haladyna, and there are different levels of questions related to the same text. At this point, while “reaching or remembering information” is a level, “Gathering, extracting, or interpreting information” is another level. Besides, in these exams, reading comprehension ability can be measured for high-level cognitive access (Birkerts, 2006; Deshpande, 2016). An effort has been made to include the features mentioned earlier that should be included in a reading comprehension scale in this study. In this study, Bloom's taxonomy was taken to determine the level of reading comprehension; thus, the teachers' cognitive access levels were tried to be determined.

Two skills called 'reading speed' and 'reading power' is important at the person's level of reading comprehension. Reading speed is an effort to understand a text by reading it in a certain time. In general, this skill is tried to be measured in central system exams. Reading power is the situation of accessing the details of the text read without a certain time limit. Reading power is effective, especially in informative texts or when it is important to pay attention to the text's details. The power of reading comprehension consists of three components: text, reader, and interpretation of the text (Chavez, 2001; Hock & Mellard, 2005). In this context, the results of the studies aiming to determine the reading comprehension status will vary depending on the text types used in the measurements, the reading purpose of the readers, the vocabulary, and the measurement methods to be used in the interpretation of the text read by the reader (Brantmeier, 2003; Ehri, 2005).

While most of the studies that measure reading comprehension are focused on reading speed (Coiro & Dobler, 2007; Bell, 2001; Rasinski, 2000; Yamashita, 2008), various studies also aim to measure reading power (Al-Homoud & Schmitt, 2009; Willis, 2012;

Friedman and Miyake, 2004; Meyer, Brandt and Bluth, 1980). Reading speed is the number of words read at a given time and is often used to provide a general view of a text. In this respect, measuring reading speed and reading comprehension are different concepts. Evaluation of reading and evaluation of reading comprehension are separated. For example, fluent reading speed is measured, and the relationship between fluent reading and reading comprehension is evaluated. In short, reading speed is not a determinant for reading comprehension, but it is an important factor. Reading power is the accessibility of the details of the text by examining a text in depth. The comprehension level of the person's text is important in determining the reading power rather than the number of words read per unit time. Accordingly, in this study, which was carried out to measure the level of reading comprehension of teachers, the focus was on reading power rather than teachers' reading speed.

Emotional and cognitive awareness and vocabulary and grammar knowledge affect comprehension. However, the level of readiness, interest in the text it reads, and the purpose of reading may affect reading comprehension. For the person to understand what he/she is reading, the text should be sufficient in terms of grammar and expression, and there should be no complicated messages in the text (Bügel & Buunk, 1996; Chall, Jacobs & Baldwin, 2009).

In the literature, the relationship between reading comprehension and the demographic variables it has has been frequently investigated. Many studies are showing that demographic features such as gender, age, marital status, educational status have different effects on reading comprehension (Brantmeier, 2003; Bügel & Buunk, 1996; Chavez, 2001; Pine 2006; Hsueh-Chao & Nation, 2000; Karatay, 2007; Phakiti, 2003; Suna 2006; Tayşi 2007). In these studies, which contain different results regarding gender variables, it was determined that women had higher reading comprehension levels during childhood and adolescence than men. Still, over time, this difference developed in favor of men. Age and professional tenure are a variable that has a positive effect on reading comprehension. People gain more experience as they get older and tend to reflect their life experiences on the text they read (Brantmeier, 2003). Besides, a person's education level affects reading and reading comprehension (Bügel & Buunk, 1996; Chavez, 2001). Within the scope of this study, in which the common scientific method is followed, the levels of reading comprehension will be tried to be determined according to the demographic

variables (such as gender, education level, and professional tenure) that teachers have, and the equivalence of the obtained data in the literature will be discussed.

In some studies conducted in the literature on student and prospective teachers, it was determined that reading comprehension is quite low (Kartal & Özteke, 2010; Topuzkanamış & Maltepe, 2010). However, some studies have found that reading comprehension is weak (Başaran, 2013; Yılmaz, Köse & Korkut, 2009; Urgan, 2008). But, there are studies in the literature that determine that reading comprehension is at different levels (Odabaş, Odabaş & Polat, 2008; Can, Türkyılmaz & Karadeniz, 2010). The teacher plays a critical role in gaining students' knowledge, skills, and behavior by the transferability principle, which is one of the basic conditions of learning situations, the knowledge, skills, and behaviors that the teacher has been transferred to the students more easily (Friedman & Miyake, 2004). However, Saracaloğlu & Karasakaloğlu (2011) and Topuzkanamış & Maltepe (2010) determined that the level of teacher candidates' reading comprehension was quite low. This situation may adversely affect the quality of education and instruction.

### **Purpose and Importance of the Study**

Reading comprehension is an indicator of a person's level of cognitive access and social awareness. While verbal or written expressions can determine cognitive access, social awareness is determined by the change in attitudes and behaviors. Reading comprehension studies can contribute to improving the cognitive level of the person. This study does not aim to determine the cognitive levels of primary education (primary and secondary school) teachers. However, it is hoped that qualified scientific data will be obtained on teachers' reading skills.

The level of reading comprehension is affected by the competence of a person's vocabulary. It is known that their teachers have access to various reading sources during their undergraduate studies, and they encounter many different words. It is also assumed that teachers can read the mother tongue fluently by grammar rules before the service. The main motivation of this study is the expectation that the teachers who have passed through an intensive learning process should have a high level of understanding of the text they read.

Teachers who encounter different types of texts in their professional work life need to understand these texts and adapt them correctly to his/her life. Determining teachers' reading comprehension skills will make teacher competencies more evident. Moreover, a new discussion area on the teacher training system's adequacy and effectiveness will be

created by submitting academic data on teachers' reading comprehension levels to the literature.

Teachers teach students the rules of the mother tongue and their active use in daily life, but they also strive to develop students' reading habits and reading comprehension skills. All students who benefit from the education system gain basic reading and writing skills from their primary school teachers but are actively affected by all teachers' language skills in the system. Determining the competencies of teachers who give students reading skills is important for determining the education system's quality. With the determination of the teachers' reading skills, not only the quality of the education for students but also the level of teachers' comprehension of the messages intended to be explained in written texts will become clear. Besides, findings in the literature indicate that reading comprehension skills increase communication skills of employees (Bügel & Buunk, 1996), efficiency (Ehri, 2005) and effectiveness within the organization, and enable new job opportunities (Chavez, 2001).

The literature has not yet been met with research on the level of reading comprehension of teachers who are actively working in the education system. This is one of the reasons for carrying out the study. With this research, the teachers' reading comprehension status, whose deficiencies are felt in the literature, will be determined, and an important gap will be closed. Moreover, suggestions will be developed for policymakers, teachers, and teacher training institutions. This research is also important because it is the first research known in the Turkish educational sciences literature and produces data that will contribute to science.

This study aims to determine the reading comprehension levels of basic education teachers. Within the scope of the study, answers to the following questions will be sought:

1. What are the basic education teachers' reading comprehension levels?
2. Is there a significant difference between basic education teachers' reading comprehension levels and demographic characteristics (gender, educational status, branch, and professional tenure)?

## **Method**

This study, which started in 2016 and completed in 2019 and spread over a long period, was used with the descriptive survey model, which is among the quantitative research methods,



to determine teachers' reading comprehension levels. In the descriptive survey model, the research problem is tried to be determined within its context. This model is the research approach that aims to envision the interactions of a case in the form of its past and present (Büyüköztürk, 2017). In descriptive survey studies, there is no effort to examine any changes or interactions between different variables.

### **Working Group**

*Sampling 1:* A preliminary application group was created to determine whether the 'The Scale of Evaluation of Reading Comprehension' developed in this study is available for the main application. The pre-application of the scale was carried out on teachers who were not included in the research sample, determined by a simple random sampling method, and participated in the in-service training activities organized by MoNE in Ankara, Mersin, Yalova, and Antalya in February 2016. The pre-application group consists of 149 teachers who work in Kütahya, Uşak, Afyonkarahisar, Burdur, Isparta, Antalya, Muğla, Manisa, Aydın, Denizli, and İzmir provinces, which are similar to the sample and do not participate in the main practice. The pre-application group teachers were interviewed face-to-face and asked to fill the scales, and the researcher collected the filled scales. Preliminary implementation studies started in February 2016 and were completed in October of the same year.

*Sampling 2:* The study's universe consists of 12272 teachers (working in primary and secondary schools) working in 25 districts of Ankara between 2016 and 2019. The stratified sampling technique, which is one of the probabilistic sampling forms, was used to identify the teachers in the sample (Büyüköztürk, 2017). Accordingly, the number of samples was chosen as 384 teachers. However, to increase the validity of the research, the maximum number of samples that could be reached was targeted, and all teachers working in the schools in the sample were tried to be achieved. In this context, 2500 scales were sent to the teachers in the sample (they will be referred to as participants after this point), and 1913 scales were collected. 377 of these scales were missing or incorrect, and 121 of them were not analyzed because they had extreme values. 1415 scales that meet the calculated sample size are included in the analysis. Demographic information about the participants in the study can be seen in Table 1.

Table 1. *Demographic information of the participants*

Variables	Subcategories	N	%	Total
Gender	Male	549	38,80	1415
	Female	866	61,20	
Education Level	Undergraduate	913	64,52	1415
	Graduate	502	35,48	
Professional Tenure	5 years and below	377	26,64	1415
	6-10 years	461	32,58	
	11 years and above	577	40,78	
Branch	Physical education	63	4,45	1415
	Computer technologies	42	2,97	
	Religious education	104	7,35	
	Science	122	8,62	
	Visual arts	46	3,25	
	Math	133	9,40	
	Music	45	3,18	
	Pre-school	136	9,61	
	Psychological counseling	59	4,17	
	Primary school	199	14,06	
	Social studies	117	8,27	
	Technology and design	79	5,58	
	Turkish language	141	9,96	
	Foreign language	129	9,12	

When Table 1 is analyzed, it was determined that 61.20% of the participants were women, 64.52% of them received undergraduate education, 40.78% of their professional tenure was 11 years, and above and 14.06% of them were primary school teachers.

### **Development of Measurement Tool**

'The Scale of Evaluation of Reading Comprehension' used in the research was developed by the researcher by examining the scales and applications used in the literature (Al-Homoud & Schmitt, 2009; Baltacı, 2017; Karatay, 2007; Keenan, Betjemann & Olson, 2008; Phakiti, 2003; Yamashita, 2008). In order to determine the participants' reading comprehension levels, it was decided to develop a scale consisting of various texts. It was envisaged that the scale composed of informative and narrative texts would be sufficient to determine the participants' reading comprehension levels. Thus, the scale consists of two separate measurement forms designed to contain informative and narrative texts and a personal information form to determine the participants' demographic characteristics.

The development studies of the scale planned to be used in this study were carried out in three stages. First of all, 30 texts (15 informative and 15 narratives) were chosen by using the scales mentioned above. For each text, a question pool consisting of six questions prepared in accordance with Bloom's renewed taxonomy was created. While the difficulty level of the texts in the question pool is a criterion; Including questions at different levels related to the same text was also determined as another criterion.

Considering the Bloom taxonomy, the texts in the question pool are classified according to different difficulty levels. Accordingly, each category (remembering, understanding, applying, analyzing, evaluating, creating) is grouped to cover five texts. Then a similar classification process lists the questions in the text. Thus, it is ensured that each problem is at a level to measure a category. The draft scale form, which was prepared as 30 texts and 180 questions, was presented to the opinion of a specialist of 25 people who received a doctorate level. In line with expert opinions, six texts were drawn from the draft scale. In this way, the scale prepared for pre-application includes four texts and six questions for each learning category and consists of 24 texts and 144 questions in total. Both parts of the scale (informative and narrative) include 12 texts and 72 questions.

Open-ended questions were not included in the scale. Sufficient space is left under each text to obtain the opinions of the participants. Besides, a dictionary section has been

created for critical or unknown words in each text. The draft version of the scale prepared for pre-application was applied to a group of 149 teachers (sample 1).

The 'Error Analysis Inventory' developed by Shanker and Ekwall (2009) was used to evaluate the pre-application data. At this stage, the correct answers of the participants were scored as "1" and the wrong answers as "0". Thus, the highest score that can be obtained from the measurement tool for each text type (informative and narrative) is 72, while the lowest score is 0. In order to interpret the scale scores, the average score values are divided into five categories. Those with a mean score between 0 and 14.3 were determined as 'too weak'; between 14.4 and 28.8 were determined as "weak"; between 28.9 and 43.3 were defined as "medium"; between 43.4 and 57.8 were defined as "good" and between 57.9 and 72 were determined as "very good."

The experts evaluated each item constituting the pre-application scale independently. The raters affect the reliability of the evaluation as a source of random error. Krippendorff's alpha ( $\alpha$ ) coefficient, Cohen's kappa ( $\kappa$ ) coefficient, and Pearson coefficient were used to minimize incidental errors and determine the reliability of the scale's scoring key.

The Kappa ( $\kappa$ ) coefficient focuses on at least two raters' compliance level who score at the classification level (Cohen, 1968).  $\kappa$  Coefficient takes a value between -1 and +1. The positive value of  $\kappa$  indicates that the raters' degree of cohesion will be greater than that of luck. The negative value of  $\kappa$  determines that rater alignment will be less than random expectations (Fleiss, 1971). It was determined that this coefficient was positive and high for the pre-application data ( $\kappa = .711$ ;  $p < .01$ ). This value shows that there is a significant agreement between raters (Landis & Koch, 1977).

The Krippendorff Alpha ( $\alpha$ ) coefficient calculates the consensus among raters without incidental correction. In interpreting the Krippendorff ( $\alpha$ ) coefficient,  $\alpha = 1$  determines the compatibility between the raters is perfect, and  $\alpha = 0$  determines the exact mismatch (Krippendorff, 1995). As a result of the pre-application, the ( $\alpha$ ) coefficient was determined as .715. This value of the alpha coefficient indicates that the scale is significantly compatible and reliable.

In pre-application, the Pearson coefficient was examined, and a significant, positive, and high relationship was determined between both raters ( $r = .907$ ,  $p < 0.01$ ). The correlation coefficient varies between -1.00 and +1.00, and as the absolute value of the coefficient grows, the degree of the relationship between the two values increases.

Büyüköztürk (2017) reports that the correlation coefficient ( $r$ ) between 0.80 and 1.00 is evidence that there is a high-level relationship between both variables. Based on the raters' reliability findings, it was determined that the scale and the evaluation key were sufficiently reliable.

In addition to the above reliability analysis, both raters' measurements evaluating the pre-application data were subjected to a separate process. The reliability of the scale was determined by Kuder-Richardson 20 (KR-20) reliability coefficient. KR-20 coefficient can provide a more balanced reliability value in the scales' reliability tests containing multi-dimensional or multiple measurement tools (Raykov, 1997). Based on this idea, it was decided to determine KR-20 values for each scale. KR-20 value for the section containing narrative texts was calculated as .59, and for the section with informative texts; this value was calculated as .63. Both forms of the scale are below acceptable limits (Bland and Altman, 1977). IN order to increase reliability, it was decided to exclude six texts from the scale. After the extracted texts, reliability analysis was made again, and the KR-20 value for the section containing the narrative texts was calculated as .74. This value is .82 for the section with informative texts. The overall reliability coefficient of the scale was determined as .81.

The scale, which is made ready for implementation as a result of validity and reliability analysis, consists of 18 texts and 108 questions. The final version of the scale was presented to the expert opinion, and "readability" analysis was performed. After the expert opinions, the texts were rearranged and made ready for the main application. The highest score that can be obtained from the measurement tool of both text types (informative and narrative) is 54, while the lowest score is 0. Five categories were used to interpret the scores obtained from the scale. Accordingly, the average score values are: "very weak" between 0 and 10.80, "weak" between 10.81 and 21.70, "medium" between 21.71 and 32.50, "good" between 32.51 and 43.30, "very good" between 43.31 and 54.

All the texts in the scale and the questions related to the text are located on the same page, and; there is a dictionary section with the meanings of the critical words under each text. Moreover, a personal information form is included in the introduction part of the reading comprehension scale to determine the participants' demographic characteristics.

'The Scale of Evaluation of Reading Comprehension' is intended for power measurement, which aims at achieving the most meaning from the text they read in a period determined by the participants rather than speed measurements that measure how much of

the text they read within a certain time. In this respect, the research data collection process has spread over a wide period considering the sample size. Data collection, which started in January 2017, was completed in November 2019. The scales were delivered to the teachers working in the districts of Ankara by the researcher. In order to increase the content validity of the scale and motivate the participants, the participants were asked to focus on the text they read. It is also stated that the data collected from the participants will be part of scientific research and that their personal information will not be used. Therefore, the filling time of the scale varies from person to person.

### **Data Analysis**

The data obtained from the scale were included in the analysis process after the outliers, and erroneous fillings were removed. Descriptive statistics were used to analyze the data collected to determine the participants' level of reading comprehension. The T-test and one-way analysis of variance (ANOVA) was used to determine whether teachers' level of reading comprehension levels differed significantly in terms of gender, educational status, branch, and professional tenure. The relationship between the level of understanding of informative and narrative texts was calculated by correlation analysis. The significance tests were done at  $p < .05$  level. All analyzes were made in the statistics program for statistical social sciences (SPSS); A different calculation module was used for the KR-20, Kappa, and Krippendorff coefficients.

### **Findings**

Analysis of the data collected within the scope of the research is included in this section. Findings regarding the reading comprehension levels of the participants are shown in Table 2.

When Table 2 is examined, it is determined that the participants understand the narrative texts at a good level ( $\bar{X} = 32.61$ ), informative texts at a weak level ( $\bar{X} = 16.37$ ), and generally at a medium level ( $\bar{X} = 24.49$ ). There is a positive, high-level relationship between the level of understanding of informative texts and narrative texts ( $r = .86$ ). There is a positive medium-level relationship between general reading comprehension level and understanding of narrative texts ( $r = .66$ ).

Table 2. *Descriptive statistics related to participants' reading comprehension levels*

Dimensions	N	$\bar{X}$	sd	1	2	3
1. Level of Understanding Narrative Texts	1415	32.61	10.76	-		
2. Level of Understanding Informative Texts	1415	16.37	11.82	.86*	-	
3. General Reading Comprehension Level	1415	24.49	11.28	.66*	.83*	-

\* Spearman rho  $p < 0.05$

A positive high-level relationship was determined between general reading comprehension level and understanding of informative texts ( $r = .83$ ). Table 3 shows the change in participants' reading comprehension levels by gender.

Table 3. *Differentiation of participants' reading comprehension levels by gender variable - independent sample t-test analysis results*

Dimensions	Gender	N	$\bar{X}$	sd	df	t	p
Level of Understanding Narrative Texts	Male	549	34.50	10.40	1413	6.38	.001*
	Female	866	30.72	11.13			
Level of Understanding Informative Texts	Male	549	18.36	11.94	1413	6.16	.001*
	Female	866	14.39	11.71			
General Reading Comprehension Level	Male	549	26.44	11.15	1413	6.25	.001*
	Female	866	22.56	11.42			

(\*) $p < .05$

When Table 3 is examined, the level of understanding of participants' narrative texts varies significantly according to gender [ $t_{(1413)}=6.38$ ;  $p < .05$ ]. Male participants ( $\bar{X} = 34.50$ ) understand the narrative texts more than women ( $\bar{X} = 30.72$ ). Men understand the narrative texts at the 'good' level, while women understand the 'medium' level. Similarly, the levels of understanding informative texts differ significantly with gender [ $t_{(1413)}=6.16$ ;  $p < .05$ ]. Men ( $\bar{X} = 18.36$ ) understand the informative texts more than women ( $\bar{X} = 14.39$ ). However, it is determined that both men and women understand the informative texts at a 'weak' level. The level of general reading comprehension differs significantly according to gender [ $t_{(1413)}=6.25$ ;  $p < .05$ ]. Men ( $\bar{X} = 26.44$ ) understand that they read more than women ( $\bar{X} = 22.56$ ). Besides, the level of reading comprehension is determined as the 'middle' level for

both men and women. The results of the analysis of the participants' educational status and reading comprehension levels are shown in Table 4.

Table 4. *Differentiation of participants' reading comprehension levels according to the educational status variable - independent sample t-test analysis results*

Dimensions	Educational Status	N	$\bar{X}$	sd	df	t	p
Level of Understanding Narrative Texts	Undergraduate	913	27.14	10.05	1413	18.6	.001*
	Graduate	502	38.09	11.48			
Level of Understanding Informative Texts	Undergraduate	913	15.49	10.53	1413	2.72	.006*
	Graduate	502	17.24	13.10			
General Reading Comprehension Level	Undergraduate	913	21.31	10.30	1413	10.3	.001*
	Graduate	502	27.68	12.29			

(\*) $p < .05$

According to Table 4, the education levels of the participants differ significantly with their understanding of narrative texts [ $t_{(1413)}=18.6$ ;  $p < .05$ ] and informative texts [ $t_{(1413)}=2.72$ ;  $p < .05$ ]. Participants with graduate education ( $\bar{X} = 38.09$ ) understand the narrative texts more than undergraduates ( $\bar{X} = 27.14$ ). It has been determined that the participants who have graduate education level understand the narrative texts at the "good" level, and the undergraduate students understand the same texts at the "medium" level. Similarly, graduate graduates ( $\bar{X} = 17.24$ ) understand the informative texts more than undergraduates ( $\bar{X} = 15.49$ ). It has been determined that the level of understanding of informative texts is 'weak' in both undergraduate and graduate education. In general, there is a significant difference between the level of education and the level of reading comprehension [ $t_{(1413)}=10.3$ ;  $p < .05$ ]. Graduates understand what they read at a 'medium' level ( $\bar{X} = 27.68$ ), while undergraduates ( $\bar{X} = 21.31$ ) understand what they read at a 'weak' level. In Table 5, the analysis results regarding the professional tenure and reading comprehension levels of the participants are presented.

According to Table 5, the level of understanding of participants' narrative texts varies significantly according to professional tenure [ $F_{(2,1412)}= 3.87$ ;  $p < .05$ ]. Participants with tenure over 11 years ( $\bar{X} = 38.51$ ) understand the narrative texts more than those with 5 years or less ( $\bar{X} = 27.31$ ) and 6-10 years of professional tenure ( $\bar{X} = 32.00$ ). Furthermore, it was determined that participants with 11 years or more professional tenure understand the narrative texts at the 'good' level, whereas participants with 10 years or less tenure



understanding the same texts at the 'medium' level. The level of understanding of the participants' informative texts varies significantly according to their professional tenure [ $F_{(2;1412)} = 4.35$ ;  $p < .05$ ]. Those who have tenure of 11 years or more ( $\bar{X} = 18.42$ ) understand more informative texts than those who have 5 years or less ( $\bar{X} = 14.60$ ) and 6-10 years of professional tenure ( $\bar{X} = 16.12$ ).

Table 5. *Differentiation of participants' reading comprehension levels according to professional tenure variable - one-way analysis of variance (ANOVA) results*

Dimensions	Professional Tenure	N	$\bar{X}$	sd	df	F	p	Differences
Level of Understanding Narrative Texts	(1) 5 years and below	377	27.31	9.10	2; 1412	3.87	.021	1-2
	(2) 6-10 years	461	32.00	12.57				1-3
	(3) 11 years and above	577	38.51	10.59				2-3
Level of Understanding Informative Texts	(1) 5 years and below	377	14.60	11.11	2; 1412	4.35	.013	1-2
	(2) 6-10 years	461	16.12	12.6				1-3
	(3) 11 years and above	577	18.42	11.98				2-3
General Reading Comprehension Level	(1) 5 years and below	377	20.96	10.11	2; 1412	4.14	.016	1-2
	(2) 6-10 years	461	24.07	12.48				1-3
	(3) 11 years and above	577	28.47	11.28				2-3

The understanding of the participants' informative texts was at a 'weak' level in all subcategories of the professional tenure. The general level of reading comprehension varies significantly with professional tenure [ $F_{(2;1412)} = 4.14$ ;  $p < .05$ ]. While the level of reading comprehension is 11 years or more ( $\bar{X} = 28.47$ ) and 6-10 years of tenure ( $\bar{X} = 24.07$ ) is at the 'medium' level; It has been determined that those who have five years or less professional tenure are at the 'weak' level ( $\bar{X} = 20.96$ ). In Table 6, the analysis results related

to the change of the reading comprehension levels of the participants according to their branches are presented.

Table 6. *Differentiation of participants' reading comprehension levels by branch variable - one-way analysis of variance (ANOVA) results*

Dimensions	Branch	N	$\bar{X}$	sd	df	F	p	Difference
Level of Understanding Narrative Texts	1. Physical education	63	21.65	13.69	12; 1402	4.21	.015	
	2. Computer	42	30.19	9.97				
	3. Religious education	104	39.77	8.96				13-1
	4. Science	122	29.08	10.42				13-5
	5. Visual arts	46	23.64	14.69				13-7
	6. Math	133	29.11	12.03				13-12
	7. Music	45	24.05	15.01				11-1
	8. Pre-school	136	30.44	10.79				11-5
	9. Psychological	59	39.12	12.12				11-7
	10. Primary school	199	40.11	8.13				11-12
	11. Social studies	117	41.01	6.79				10-1
	12. Technology and	79	26.91	11.29				
	13. Turkish language	141	44.16	5.16				
	14. Foreign language	129	37.26	11.56				
Level of Understanding Informative Texts	1. Physical education	63	9.19	15.96	12; 1402	4.72	.009	
	2. Computer	42	16.39	12.55				
	3. Religious education	104	19.22	11.88				13-1
	4. Science	122	14.88	9.17				13-5
	5. Visual arts	46	11.64	13.44				13-7
	6. Math	133	15.07	12.69				13-12
	7. Music	45	11.02	12.09				11-1
	8. Pre-school	136	15.64	10.64				11-5
	9. Psychological	59	18.72	10.44				11-7
	10. Primary school	199	22.03	9.96				11-12
	11. Social studies	117	21.09	10.28				10-1
	12. Technology and	79	13.15	12.44				
	13. Turkish language	141	23.06	10.25				
	14. Foreign language	129	17.34	13.66				

General Reading Comprehension Level	1. Physical education	63	15.42	14.83				
	2. Computer	42	23.29	11.26				
	3. Religious education	104	29.50	10.42				13-1
	4. Science	122	21.98	9.80				13-5
	5. Visual arts	46	17.64	14.07				13-7
	6. Math	133	22.09	12.36				13-12
	7. Music	45	17.54	13.55	2;			
	8. Pre-school	136	23.04	10.72	1412	4.52	.011	11-1
	9. Psychological	59	28.92	11.28				11-5
	10. Primary school	199	31.07	9.05				11-7
	11. Social studies	117	31.05	8.54				11-12
	12. Technology and	79	20.03	11.87				10-1
	13. Turkish language	141	33.61	7.71				
	14. Foreign language	129	27.30	12.61				

When Table 6 is examined, the level of understanding of the narrative texts of the participants varies significantly according to the branch [ $F_{(12;1402)}=4.21$ ;  $p<.05$ ]. Turkish language ( $\bar{X} = 44.16$ ), Social Studies ( $\bar{X} = 41.01$ ) and primary school teachers ( $\bar{X} = 40.11$ ) understand the narrative texts more than the teachers of Physical Education ( $\bar{X} = 21.65$ ), Visual Arts ( $\bar{X} = 23.64$ ), Music ( $\bar{X} = 24.05$ ) and Technology and Design ( $\bar{X} = 26.91$ ). However, Turkish language teachers understand the narrative texts at a 'very good' level. Moreover, it was determined that social studies, primary school, religious education, psychological guidance, and foreign language teachers understand these texts at a 'good' level. It has been determined that the participants in the branches of computer tech, science, visual arts, maths, music, pre-school, and design understand the narrative texts at a 'medium' level. At this point, it is remarkable that the participants in the physical education branch understand the narrative texts at a 'weak' level.

The level of understanding of the informative texts of the participants varies significantly according to the branch [ $F_{(12;1402)}= 4.72$ ;  $p<.05$ ]. Turkish language ( $\bar{X} = 23.06$ ), Social Studies ( $\bar{X} = 21.09$ ) and primary school teachers ( $\bar{X} = 22.03$ ) understand the informative texts more than the teachers of physical education ( $\bar{X} = 9.19$ ), visual arts ( $\bar{X} = 11.64$ ), music ( $\bar{X} = 11.02$ ) and Design ( $\bar{X} = 13.15$ ). At this point, informative texts, classroom, and Turkish language teachers are at a 'medium' level; teachers in other branches

understand “weak.” The level of physical education teachers' reading comprehension was determined as "very weak."

The level of general reading comprehension differs significantly according to the branches of the participants [ $F_{(12;1402)} = 4.52$ ;  $p < .05$ ]. It was determined that Turkish language ( $\bar{X} = 33.61$ ), social studies ( $\bar{X} = 31.05$ ) and primary school teachers ( $\bar{X} = 31.07$ ) understood more than teachers of physical education ( $\bar{X} = 15.42$ ), visual arts ( $\bar{X} = 17.64$ ), music ( $\bar{X} = 17.54$ ) and design ( $\bar{X} = 20.03$ ). Furthermore, when the general reading comprehension level is examined, it is determined that Turkish teachers understand what they read at a 'good' level. Moreover, computer tech, religious education, science, math, pre-school, guidance, primary school, social studies, and foreign language teachers understand at an 'intermediate' level. It has been determined that teachers in physical education branches, visual arts, music, and design understand what they read at a 'weak' level.

## Discussion and Conclusion

This study was carried out to determine teachers' level of reading comprehension working in primary and secondary schools. As a result of the research, there is a significant difference between the gender, professional tenure, branch, and educational status of teachers and their reading comprehension levels. Men, graduates, and those with professional tenure understand the texts they read more.

According to the research results, the level of comprehension of the narrative texts that teachers read varies according to gender. It has been determined that male teachers understand the narrative texts they read more than women do. However, a similar result can be seen at the level of understanding informative texts. This situation determines that male teachers are more competent in understanding what they read in general. In the literature, some studies support this result of the research and research, reaching different results. Chavez (2001), Çam (2006), and Karatay (2007) determined that women had higher levels of reading comprehension than men.

In contrast, Bügel and Buunk (1996) and Hannon (2014) argue that men are more successful in understanding what they read than women. However, Brantmeier (2003), Coşkun (2006), and Phakiti (2003) claim that there is no significant difference between reading comprehension and gender. However, perhaps the most important research result is that teachers understand “partially” what they read. Considering that the highest score that can be obtained from the scale prepared with texts of different difficulty within the scope of

the study is 54, it is noteworthy that men have an average of 26.44, and women have an average of 22.56. Accordingly, it can be said that male and female teachers do not understand or partially understand more than half of what they read. This result of the study reveals the insufficient level of reading comprehension of the teachers who have a critical role in the education system.

Participants' educational status or graduation levels affect their reading comprehension levels. This finding is similar to previous findings in the existing literature (Keene & Zimmermann, 1997; Thorndike, 1976). As the person's education level increases, the possibility of encountering different kinds of informative and narrative texts also increases. Thus, adults can read more and interpret what they read. Besides, with the increase in reading comprehension, adults can integrate what they read with their own lives (Thorndike, 1976). Although this research confirms the theoretical knowledge in the literature, it argues that the increase in education level will create a significant change in the level of reading comprehension.

Another result of the research is that the increase in teachers' professional tenure also increases the level of reading comprehension. This result is similar to the different research findings that examine the relationship between aging and reading comprehension levels of adults (Baker, 1984; Cain, Oakhill, & Bryant, 2004). As the professional tenure increases, teachers encounter more students and reading resources, and their professional and academic experience rises. The rise in experience brings with it an easier understanding of texts. However, given the increase in professional tenure, it can be determined that reading comprehension, which becomes evident with the results of this research, is low for teachers.

A striking result of this research is that there is an important separation between the teachers of different branches to understand what they read. Considering the general reading comprehension level, Turkish language teachers' being at a 'good' level is suitable for the normal flow of life. Because Turkish language teachers had more contact with texts than other branches and received reading skills training during the undergraduate period, it is known that primary school and social studies teachers and guidance and religious education teachers undergo a more text-oriented training process than other branches. But, the level of reading comprehension in the branches mentioned above is at the 'medium' level, which is below the level expected from these teachers. It is noteworthy that teachers in physical education, visual arts, music, and design branches understand what they read at a 'weak' level. It is believed that studies on reading skills have not been carried out in the branches

mentioned during undergraduate education. Teachers who are not trained in reading skills only touch texts with personal initiatives, and therefore they are inadequate to understand what they read. As a result of teacher training institutions not doing studies on reading skills, this research finding that teachers understand their reading inadequately is quite thought-provoking.

Reading comprehension can be improved by making a work plan at one's own pace. Nevertheless, first, it is necessary to make certain time management in daily life, to be willing and ready to gain reading habits. It is known that the majority of teachers do not receive any training on their reading comprehension skills in the pre-service period (undergraduate education). Moreover, there is no course or program in this direction in the general teacher-training curriculum prepared by the Council of Higher Education. The inadequacies of the teachers who are included in the education system devoid of their reading comprehension skills in the various central system exams (ALES, KPSS-ÖABT, etc.) regarding language and expression questions are similar to the results of this study. It can be suggested to include theoretical and practical courses in teaching undergraduate programs that will improve students' reading skills, including active reading strategies. In addition to this, it may be suggested to use alternative measurement methods and techniques instead of measurement techniques based on multiple-choice questions and to include open-ended questions to develop critical thinking skills. Furthermore, it can be suggested to do reading training that will improve the teachers' level of comprehension who are still in the education system through in-service training activities. Moreover, the competencies of both the mother tongue education departments of universities and different linguistics experts should be employed, and teachers should be provided with access to various reading resources, critical reading skills, or other and updated reading strategies.

Reading comprehension is a very important field of study in mother tongue education and practices. It is determined that the studies in the literature are mostly for students. At this point, more studies for adults should be conducted in the literature.

In this study, the teachers' reading comprehension level was made visible in the sample group studied. The current study, which indicates an important gap in the literature, is important in reading comprehension studies towards business life. This research was carried out on a limited sample of teachers working in Ankara. Research data was collected between 2016 and 2019. Social and economic changes and unexpected situations that may occur in the education system may cause the data on reading comprehension to change and

override the research. In this study, although the sample selection is kept wide enough to make the results generalizable, future studies may be suggested to study larger samples, including different provinces. Future studies may be suggested to expand the sample to include employees in various industrial sectors.

The type of text on the scale and the type of question about the text (multiple-choice, open-ended, etc.) affect measuring the level of reading comprehension. This research was carried out using a measurement mechanism consisting of informative and narrative texts of different difficulty levels and multiple-choice questions prepared by Bloom's taxonomy. It can be suggested that future studies should be carried out with measurement tools that will also include open-ended questions, which also measure the interpretation skills of the participants. Moreover, it may be suggested to have environmental conditions such as household income level, graduated faculty, or college in future researches. Thus, the effects of different variables on reading comprehension can be better understood. Since data collection and measurement involve relatively difficulties in reading comprehension research, it may be suggested to design future research using mixed research or qualitative research techniques and even longitudinal studies involving different years.

**References**

- Aktaş, Ş. (2000). *Roman sanatı ve roman incelemesine giriş*. Ankara: Akçağ.
- Akyol, H. (2011). *Yeni programa uygun Türkçe öğretim yöntemleri*. Ankara: Pegem.
- Al-Homoud, F., & Schmitt, N. (2009). Extensive reading in a challenging environment: A comparison of extensive and intensive reading approaches in Saudi Arabia. *Language Teaching Research*, 13(4), 383-401.
- Baker, L. (1984). Spontaneous versus instructed use of multiple standards for evaluating comprehension: Effects of age, reading proficiency, and type of standard. *Journal of Experimental Child Psychology*, 38(2), 289-311.
- Baltacı, A. (2017). Okul müdürlerinin okuma alışkanlıkları ve okuduğunu anlama düzeyleri. *Eğitim ve Toplum Araştırmaları Dergisi*, 4(2), 1-32.
- Bamberger, R. (1976). Literature and development in reading. *New Horizons in Reading*, 5(1), 60-65.
- Başaran, M. (2013). Okuduğunu anlamanın bir göstergesi olarak akıcı okuma. *Kuram ve Uygulamalarda Eğitim Bilimleri*, 13(4), 2277-2290.
- Bell, T. (2001). Extensive reading: Speed and comprehension. *Reading Matrix: An International Online Journal*, 1(1), 1-13.
- Berger, P. L. & Luckmann, T. (2008). *Gerçekliğin sosyal inşası: Bir bilgi sosyolojisi incelemesi*. İstanbul: Paradigma.
- Brantmeier, C. (2003). Does gender make a difference? Passage content and comprehension in second language reading. *Reading in a Foreign Language*, 15(1), 1-27.
- Bügel, K., & Buunk, B. P. (1996). Sex differences in foreign language text comprehension: The role of interests and prior knowledge. *The Modern Language Journal*, 80(1), 15-31.
- Büyüköztürk, Ş. (2017). *Sosyal bilimler için veri analizi el kitabı*. Ankara: Pegem.
- Cain, K., Oakhill, J., & Bryant, P. (2004). Children's reading comprehension ability: Concurrent prediction by working memory, verbal ability, and component skills. *Journal of Educational Psychology*, 96(1), 31-42.



- Can, R., Türkyılmaz, M., & Karadeniz, A. (2010). Ergenlik dönemi öğrencilerinin okuma alışkanlıkları. *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi*, 11(3), 1-21.
- Chall, J. S., Jacobs, V. A., & Baldwin, L. E. (2009). *The reading crisis: Why poor children fall behind*. Boston: Harvard University Press.
- Chavez, M. (2001). *Gender in the language classroom*. New York: McGraw Hill.
- Coelho, C. L. G., & Correa, J. (2017). Reading comprehension: Cognitive abilities and types of text. *Psico*, 48(1), 40-49.
- Cohen, J. (1968). Weighted kappa: Nominal scale agreement provision for scaled disagreement or partial credit. *Psychological Bulletin*, 70(4), 213-221.
- Coiro, J., & Dobler, E. (2007). Exploring the online reading comprehension strategies used by sixth-grade skilled readers to search for and locate information on the Internet. *Reading research quarterly*, 42(2), 214-257.
- Çam, B. (2006). *İlköğretim öğrencilerinin görsel okuma düzeyleri ile okuduğunu anlama, eleştirel okuma ve Türkçe dersi akademik başarıları arasındaki ilişki*. Unpublished master's thesis, Osmangazi University, Eskişehir.
- Çeçen, M. A. (2011). Yazma eğitimi açısından metin bilgisi. In M. Özbay (Ed.), *Yazma Eğitimi* (pp. 127-146). Ankara: Pegem.
- Çelenk, S., & Çalışkan, M. (2004). Bazı sosyoekonomik faktörlerin okuduğunu anlama başarısına etkisinin incelenmesi. *Çağdaş Eğitim Dergisi*, 309, 24-33.
- Davey, B. (1983). Think aloud: Modeling the cognitive processes of reading comprehension. *Journal of Reading*, 27(1), 44-47.
- Demir, Y. (2012). The effect of background knowledge and cultural nativization on reading comprehension and vocabulary inference. *Journal of Educational & Instructional Studies in the World*, 2(4), 188-198.
- Durkin, D. (1978). What classroom observations reveal about reading comprehension instruction. *Reading Research Quarterly*, 11(3), 481-533.
- Ehri, L. C. (2005). Learning to read words: Theory, findings, and issues. *Scientific Studies of reading*, 9(2), 167-188.
- Fleiss, J. L. (1971). Measuring nominal scale agreement among many raters. *Psychological Bulletin*, 76(5), 378.

- Friedman, N. P., & Miyake, A. (2004). The reading span test and its predictive power for reading comprehension ability. *Journal of Memory and Language*, 51(1), 136-158.
- Günay, D. (2007). *Metin bilgisi*. İstanbul: Multilingual.
- Habermas, J. (2001). *İletişimsel eylem kuramı*. (Çev: M. Tüzel). İstanbul: Kabalcı.
- Hannon, B. (2014). Are there gender differences in the cognitive components of adult reading comprehension? *Learning and Individual Differences*, 32(2), 69-79.
- Heidegger, M. (2002). *Hümanizm üzerine mektup: Hümanizmin özü*. (Çev: A. Aydoğan). İstanbul: İz Yayıncılık.
- Hegarty, P., & Golden, A. M. (2008). Attributional beliefs about the controllability of stigmatized traits: antecedents or justifications of prejudice? *Journal of Applied Social Psychology*, 38(4), 1023-1044.
- Hock, M., & Mellard, D. (2005). Reading comprehension strategies for adult literacy outcomes. *Journal of Adolescent & Adult Literacy*, 49(3), 192-200.
- Hsueh-Chao, M. H., & Nation, P. (2000). Unknown vocabulary density and reading comprehension. *Reading in a foreign language*, 13(1), 403-430.
- Just, M. A., & Carpenter, P. A. (1980). A theory of reading: From eye fixations to comprehension. *Psychological Review*, 87(4), 329-342.
- Karatay, H. (2007). *İlköğretim Türkçe öğretmen adaylarının okuduğunu anlama becerileri üzerine alan araştırması*. Unpublished doctoral dissertation, Gazi University, Ankara.
- Kartal, E., & Özteke, H. Ç. (2010). İlköğretim öğrencilerinin okuduklarını anlama ve anlatma düzeylerinin belirlenmesi. *The Journal of International Social Research*, 3 (11), 372-380.
- Keene, E. O., & Zimmermann, S. (1997). *Mosaic of thought: Teaching comprehension in a reader's workshop*. Portsmouth: Heinemann Inc.
- Keenan, J. M., Betjemann, R. S., & Olson, R. K. (2008). Reading comprehension tests vary in the skills they assess: Differential dependence on decoding and oral comprehension. *Scientific Studies of Reading*, 12(3), 281-300.
- Krippendorff, K. (1995). On the reliability of unitizing continuous data. *Sociological Methodology*, 4(2), 47-76.

- Kurnaz, H., & Akaydın, Ş. (2015). Türkçe öğretmeni adaylarının bilgilendirici ve öyküleyici metinleri özetleme becerileri. *Erzincan Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 9(2), 141-156.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 3(2), 159-174.
- Meyer, B. J., Brandt, D. M., & Bluth, G. J. (1980). Use of top-level structure in text: Key for reading comprehension of ninth-grade students. *Reading Research Quarterly*, 72-103.
- Odabaş, H., Odabaş, Y., & Polat, C. (2008). Üniversite öğrencilerinin okuma alışkanlığı: Ankara Üniversitesi örneği. *Bilgi Dünyası*, 9(2), 431-465.
- Pearson, P. D. (1991). *Developing expertise in reading comprehension: what should be taught? How should it be taught?* (Report No. 512). Illinois, IL: U.S. Center for the Study of Reading.
- Phakiti, A. (2003). A closer look at gender and strategy use in L2 reading. *Language Learning*, 53(4), 649-702.
- Rasinski, T. V. (2000). Commentary: Speed does matter in reading. *The Reading Teacher*, 54(2), 146-151.
- Fuchs, D., & Fuchs, L. S. (2005). Peer-assisted learning strategies: Promoting word recognition, fluency, and reading comprehension in young children. *The Journal of Special Education*, 39(1), 34-44.
- Saracaloğlu, A. S., & Karasakaloğlu, N. (2011). Sınıf öğretmeni adaylarının okuduğunu anlama düzeyleri ile çalışma ve öğrenme stratejilerinin çeşitli değişkenler açısından incelenmesi. *Eğitim ve Bilim*, 36(161), 98-115.
- Shanker, J. L., & Ekwall, E. E. (2009). *Locating and correcting reading difficulties*. New York: Pearson Inc.
- Suna, Ç. (2006). *İlköğretim öğrencilerinin okuma ilgi ve alışkanlıklarını etkileyen etmenlerin analitik olarak incelenmesi ve değerlendirilmesi*. Unpublished master's thesis, Anadolu University, Eskişehir.

- Tayşi, E. K. (2007), *İlköğretim 5. ve 8. sınıf öğrencilerinin hikâye ve deneme türü metinlerindeki okuduğunu anlama becerilerinin karşılaştırılması (Kütahya ili örneği)*. Unpublished master's thesis, Gazi University, Ankara.
- Temizkan, M. (2009). *Metin türlerine göre okuma eğitimi*. Ankara: Nobel.
- Thorndike, R. (1976). Reading comprehension in fifteen countries. *New Horizons in Reading*, 11(2), 500-507.
- Topuzkanamış, E., & Maltepe, S.(2010). Öğretmen adaylarının okuduğunu anlama ve okuma stratejilerini kullanma düzeyleri. *TÜBAR*, 27, 655-677.
- Ungan, S. (2008), Türkiye’de kitap okuma: okuma alışkanlığımızın kültürel altyapısı. *Gaziantep Üniversitesi Sosyal Bilimler Dergisi*, 7(1), 218–228.
- Üründü, V. (2011). *6-8. sınıf Türkçe ders kitaplarının tema ve metin türü açısından incelenmesi*. Unpublished master's thesis, İnönü University, Malatya.
- Vega, M. (1996). The representation of changing emotions in reading comprehension. *Cognition & Emotion*, 10(3), 303-322.
- Wigfield, A., Gladstone, J. R., & Turci, L. (2016). Beyond cognition: Reading motivation and reading comprehension. *Child Development Perspectives*, 10(3), 190-195.
- Willis, A. I. (2012). *Reading comprehension research and testing in the US: Undercurrents of race, class, and power in the struggle for meaning*. New York: Routledge.
- Yamashita, J. (2008). Extensive reading and development of different aspects of L2 proficiency. *System*, 36(4), 661-672.
- Yılmaz, B., Köse, E., & Korkut, Ş. (2009). Hacettepe Üniversitesi ve Bilkent Üniversitesi öğrencilerinin okuma alışkanlıkları üzerine bir araştırma. *Türk Kütüphaneciliği*, 23(1), 22-51.