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## *Journal of Language Education and Research*

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## The Effect of Listening Strategies on Perception of Self-Efficacy and Listening Achievement\*\*\*

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### ABSTRACT

The purpose of this study is to determine the effect of teaching listening strategies on 7th graders' listening self-efficacy and listening achievement. Therefore, one of the quantitative methods, quasi-experimental method with control group was used. The research was carried out with sixty 7th grade students in a secondary school in Arpacay, Kars in the 2018-2019 academic year. The research lasted eight weeks. Listening self-efficacy scale, narrative text achievement test and informative text achievement test were used to collect data. These scales were applied to the participants as pretest and posttest and it's evaluated whether there is a significant difference between the two tests. According to the analysis of the data, there was a significant increase in the listening self-efficacy perception of the students in the experimental group and their listening success in both text types compared to the control group. In the light of these results, it was determined that teaching listening strategies increased students' listening self-efficacy and listening achievement.

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### Statement of Publication Ethics

This study was conducted in accordance with scientific publication ethics. The ethical approval for the study was obtained from the Governorship of Kars with the document dated 16/11/2018 ,numbered 91782061-605.01-E21934428.

### Authors' Contribution Rate

The manuscript was collaboratively composed from beginning to the end by the two authors.

### Conflict of Interest

The authors declare that there is no conflict of interest.

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\*\*\*This study is derived from the first author's master thesis titled "The effect of teaching listening strategies on listening self-efficacy perception and listening achievement".

## Introduction

Among the four basic skills of language, which are reading, writing, listening and speaking, listening is of great significance. Listening and reading are defined as comprehension skills, whereas speaking and writing are the narration skills. Listening, as a comprehension skill, is the very first language skill that is acquired by humans, of which development is initiated prior to birth. The rest of the language skills are entirely built up over the foundation of the listening skill. Listening skill is a significant field for the development of learning, comprehension and intellectual skills (Gunes, 2007). Wolvin (2012) states that, the listening practice should be a significant part of basic studies among the educational program for today's world of information. Personal and professional achievements of students depend vastly on their effective communication skills. However, it is possible to say that, for several reasons, the time provided for listening skill practices is insufficient and that this skill is mostly underestimated (Dogan, 2016). On the other hand, related studies reveal that the listening skill is the most frequently and intensely used among others. According to Gonulal (2020), people are more inclined to listen, rather than read, speak or write, which locates listening in the core of the language learning process. Pinnell and Jaggar (2003) emphasize that, one makes use of the listening skill during at least the half of the communication, which is realized on daily basis. According to Brent and Anderson (1993), despite the fact that people acquire 80% of the information they have via listening, most adults could have not achieved a listening efficiency of above 25% (as cited by Turkel, 2012, p.129). Listening is mostly considered to be a passive skill and that, it could have been enhanced without any assistance (Osada, 2004). The perception that the listening skill is a self-sufficient one in terms of its development, resulted in the neglect of it.

Listening skill is encountered during most of the human learning process (Dogan, 2016). Being a good listener is also the key for success. Listening is the foundation for communication and acquisition of knowledge. Several studies have been realized regarding the how students benefit from language skills in both their daily and academic lives. Bird (1953) calculated the time that is spent for language skills in percentage as follows: listening 42%, speaking 25%, reading 15% and writing %18. As per a survey that was carried out among university students, they spared their time in percentage as follows: listening 53%, reading 17%, speaking 16% and writing 14% (Barker 1980; as cited in Cihangir, 2004, p.56). All these data reveal that the listening skill is the most used one among others and that it should not be neglected but should be enhanced.

Perception of self-efficacy is effective on the life of the individual in various aspects. Credence of self-efficacy are the judgements regarding one's own skills for the tasks to be undertaken for the realization of required arrangements and practices so that the individual could accomplish certain things (Bandura, 1986; as cited in Linnenbrink & Pitrinch, 2003). High or low levels of credence regarding self-efficacy are encountered in various ways.

According to Aydin, Demircan and Innali (2015), individuals who enjoy high-level of self-efficacy are decisive to successfully conclude arduous situations that they encounter for the first time, instead of avoiding them. Whereas the ones with lower level of self-

efficacy host more intense feelings of stress, nervousness and discontentment (Kilicoglu, Karakus & Demir, 2011). In this regard, it is important to understand in what levels students feel self-efficacy in listening. It is possible to state that; students with high-level of self-efficacy would put more effort to overcome troubles that appear during the process of listening and have more self-confidence to succeed. Whereas, for the ones with low-level of self-efficacy, we can say that they would avoid the troubles of listening process, easily get bored of listening activities and consider that their efforts would be of no effect to change the outcome.

It is widely accepted that the listening skill has a high significance in the communication process (Siegel, 2015). Most of the duty fall upon Turkish language teachers, who are responsible for the mother language education. It should be considered that students who reflect on the texts that they listen in Turkish language classes, question and make inquiries about them realize a better learning (Sever, Kaya & Aslan, 2013). Therefore, teachers shall guide their students and provide them with some techniques and strategies to better benefit from the process of listening. It was for this purpose that, the effect of listening strategies teaching on students' perception of self-efficacy and their listening accomplishments are inquired via this study.

### **Theoretical framework**

Language is the most significant element of communication between humans. The individual is required have an effective skill and habit of listening (Demir Atalay & Melanlioglu, 2016). Having an effective listening skill is the prerequisite for one to build up a healthy communication and have a concrete perception of his environment, incidents and the life itself (Izin, 2005). Therefore, a high level of academic and social achievement depends vastly on being an effective listener, hence receiving a well-designed listening teaching.

Listening activity takes place in course of a process. Listeners perform some cognitive and physical activities within this process. Hence, listening is not an activity, which initiates and ends in an instant, but rather an activity of process that includes numerous choices. Within this process, right choices would make it easier for the listener to build up a meaning, whereas false ones would do the opposite (Yildiz, 2015). Taking the listening durations within both educational and daily life into consideration, it becomes clear that the listening activity shall be handled in a systematic manner. The necessity for the teaching of listening strategies has been emphasized by the experts of field. Teachers still mostly make use of the direct instruction method in today's world. This fact increases the duration for listening among students and they acquire 83% of what they learn via listening (Ciftci, 2001). Therefore, it is possible to state that a student, whose listening skill is not well-developed, is likely to experience an ineffective learning process, although his intellectual capacity is not low.

Listening strategies may be defined as a set of physical and intellectual activities, which are used by individuals before, during and after the listening process, in order to increase the efficiency of it. Previously, listened was considered as a passive skill (Jung, 2003; Vandergrift, 2004). However, recently this view has lost its validity and it is

accepted that listening is an active process, during which the audience interacts with the listening material and builds up a meaning (Bentley & Bacon, 1996; Nunan, 1998; Holden, 2004). Utilization of some strategies during the process, would make it easier for the audience to actively interact with the material and build up a meaning. Listening strategies are utilized prior to, during and post listening activity. It may be helpful to describe these strategies briefly.

Dogan (2016) states that the pre-listening strategies aims to prepare students for the listening activity. This preparation has both intellectual and physical dimensions. Silence is the primary physical preparation prior to listening. Other elements of physical dimension may be sampled as; the organization of the source of sound and seating to enable an effective hearing for all students, regulation of the room temperature and taking precautions against outer noise. Intellectual strategies for pre-listening may be listed as follows: describing the listening method and objectives, activating prior knowledge, guessing, posing questions regarding the content of the material and looking for their answers during the process of listening. As for pre-listening, there are also some strategies that may be utilized during the listening activity. These are; the note-taking strategy, which enables the recording of important parts of the listening material, making use of hints to forecast about the material, the strategy of picking the key words that provide clues about the subject of the listening material, pointing out the significant aspects by paying attention to the intonation and emphasis of the speaker or the source of sound, the strategy of building empathy which enables a bond with the characters and incidents that take place within the content of the material, the strategy of relating with real life that enables the bonding of incidents and situations in the listening material with the ones of real life, materializing the auditory content via graphics, tables, diagrams and similar, question-answer activity and re-listening. The purpose of all these activities is a better understanding of the content.

During the post-listening process, students try to benefit from the listening activity to the highest level by realizing activities like answering questions with the assistance of pre-reading activities and notes which they took during the process of listening: summarizing the content of the listening material and evaluating the text from certain aspects (Dogan, 2016). Strategies of post-listening may be sampled as; summarization strategy that points out important parts without going into detail, discussion strategy by which different views on incidents, situations and characters are collected via discussion, questioning the accuracy of pre-listening forecasts and the ones that were put forward during listening, deduction strategy by which new knowledge was derived from the information that was given in the material, cause and effect strategy, self-assessment strategy by which strengths and weaknesses of listening process are determined, specifying elements of incident, characters, setting, time and the narrator if the text was a narrative one.

Listening strategies play a vital role for listening comprehension and in the elimination of problems, which occur during the process of listening (Mendelsohn, 2006). The purpose of strategic listening is to increase the level of comprehension. Individuals who adopt them have a developed skill of forecasting and they are able to make use of the

clues that are given in the text effectively (Akyol, 2006). The above mentioned information reveals that teaching listening strategies shall be significantly dwelled on.

### **The purpose and significance of the study**

Main purpose of this study is to find out whether teachings of listening strategies have an effect on 7<sup>th</sup> graders, in terms of their perception of self-efficacy in listening and their listening achievements. Listening is the most widely used skill in daily and academic lives of individuals. It is important that this skill is developed and utilized with correct methods and strategies; as for the skills of reading, speaking and writing. Individuals, who utilize it correctly, are successful in all aspects of life. Therefore, the study puts forward the hypothesis that the enhancement of listening skills and utilization of listening strategies would contribute to every aspect of the individuals' lives.

Literature review reveals that there are only a few studies regarding the effect of listening strategy teaching on the perception of self-efficacy for listening and listening achievements. This study aims to cover up this deficiency, provide a contribution to the field and light the way with the outcomes of this study for researchers, who would like to study on this field.

Within the content of the study, the problem statement is posed as follows:

Does listening strategy teaching have an effect on 7<sup>th</sup> graders' perception of self-efficacy in listening and their listening achievements?

Subproblems that are derived from the problem statement are as follows:

- 1) For the experimental and control groups:
  - a) is there a significant difference between the results of listening self-efficacy pretests?
  - b) is there a significant difference between the results of pretests on the achievement of narrative text listening?
  - c) is there a significant difference between the results of pretests on the achievement of informative text listening?
  
- 2) For the experimental and control groups
  - a) is there a significant difference between the results of listening self-efficacy posttests?
  - b) is there a significant difference between the results of posttests on the achievement of narrative text listening?
  - c) is there a significant difference between the results of posttests on the achievement of informative text listening?

- 3) For the experimental and control groups
  - a) is there a significant difference between the results of listening self-efficacy pretests and posttests?
  - b) is there a significant difference between the results of pretests and posttests on the achievement of narrative text listening?
  - c) is there a significant difference between the results of pretests and posttests on the achievement of informative text listening?

## **Methodology**

### **Research design and publication ethics**

In the study, which was carried out in order to determine the effect of listening strategy teaching on 7<sup>th</sup> graders' perception of self-efficacy in listening and their listening achievements, a semi-experimental survey model with pretest and posttest control groups is utilized. According to Karasar (2015: 97), there are two groups in the pretest/posttest-based model and those groups are formed via random assignment. They are used as the experimental and control groups. Measurements are taken from both groups, prior to and post experiments. The model includes pretest, which provides information regarding the levels of similarity between groups before the experiment and enables the regulation of outcomes of the posttest accordingly. Ethical principles were followed at every stage of the study. The ethical approval for the study was obtained from the Governorship of Kars with the document dated 16/11/2018 and numbered 91782061-605.01-E21934428.

### **Participants**

The participants of the study are the students, who attend the boarding secondary school located in the Arpacay district of city of Kars and constitute two 7th grade classes namely 7-C and 7-D, during the academic year 2018-2019. Totally, 60 students participated in the study, who were divided by half into the experimental group and the control group. The participants are made up of 25 female and 35 male students.

### **Data collection and analysis**

For the data collection process, Listening Self-Efficacy Scale of Aydin, Demircan and Innali (2015) and Achievement Test for Narrative Texts and Achievement Test for Informative Texts by Katranci (2012) are used. These scales are implemented on experimental and control group students as pretests. Later, listening strategies were practiced with the students of experimental group for 8 weeks, whereas control group students carried on their standard schedules of the curriculum. By the end of the implementation process, same scales were implemented as the posttests for both experimental and control groups.

SPSS 22 (Statistic Package for Social Sciences) program was used for the analysis of the collected data. Descriptive statistics of percentage, frequency, arithmetic average; and parametric statistics of independent t-test and dependent t-test were used.

Independent t-tests were used for the comparison of pretest and posttest of groups before and after the experiment, whereas dependent t-tests were used for the comparison of pretest and posttest scores within each group. Nevertheless, effect size was described for the analysis of all subproblems.

Eta-squared ( $\eta^2$ ), which is the effect size, explains the level of total variance of independent variable within the dependent variable. (Buyukozturk, 2016).

### **Procedure**

The purpose of this survey is to determine the effect of listening strategies teaching on 7<sup>th</sup> graders' perception of self-efficacy in listening and their listening achievements. Therefore, the experimental group was provided with listening strategies teachings, which include some activities that were carried out via listening texts. Prior to the implementation phase, Listening Self-Efficacy Scale, Achievement Test for Narrative Texts and Achievement Test for Informative Texts were applied to both experimental and control groups. Scales and tests, which were applied as pretests, were also applied as posttests by the end of the implementation phase. Implementation phase of the survey lasted 8 weeks.

During the implementation phase, experimental group participants were taught some listening strategies for 2 periods per week and some activities were carried out accordingly. Activities, which are carried out with the experimental group, are planned and implemented by the surveyor. Purpose of the implementations is to improve students' perception of listening self-efficacy and their listening achievements. Therefore, some drills, which were related with the listening texts, were handed out to the experimental group students. Students studied on the drills on the basis of the texts that they listened to.

Activities, which were built on the listening strategies, consisted of 4 texts totally: 2 narrative and 2 informative. Listening texts were derived from textbooks, which were approved by TTKB (Board of Education and Discipline) as per the Turkish Language Curriculum. A pool of 5 narrative and 5 informative texts was formed for the selection of texts. Experts of the field are consulted for this selection. Each text was studied for two weeks. Whereas, participants of control group have not been subject to any experimental process, but instead they studied texts in "Turkish Language Textbook for 7<sup>th</sup> Graders" of MEB (Ministry of National Education) and carried out related activities as planned in the curriculum.

### **Results**

This section of the study includes findings regarding the subproblems and related interpretations.

#### **Findings and Interpretations Regarding The First Subproblem of The Survey**

The first subproblem was stated as:

A) Is there a significant difference between the results of listening self-efficacy pretests of the experimental group and the control group? Results are presented in Table 1.

**Table 1.** Experimental and Control Groups' Statistical Results of Pretest Independent t-Test of Listening Self-Efficacy Scores

Group	N	$\bar{X}$	S	Sd	t	p
Experimental G.	30	193,000	31,061	58	,186	,853
Control G.	30	191,566	28,579			

Analysis of Table 1 reveals the proximity of the experimental and control groups' averages. There is no statistically significant difference ( $t_{(58)}=,186$ ,  $p>,05$ ). Average of experimental group students is ( $\bar{X}=193,000$ ) and average of control group students is ( $\bar{X}=191,566$ ). It is possible to accept that, groups were equivalent in terms of listening self-efficacy, prior to the phase of experimental process. Effect size was calculated to be small ( $\eta^2=,001$ ).

B) Is there a significant difference between the results of experimental and control groups' pretests on the achievement of narrative text listening? Results are presented in Table 2.

**Table 2.** Experimental and Control Groups' Statistical Results of Pretest Independent t-Test of Narrative Text Achievement Scores

Group	N	$\bar{X}$	S	Sd	t	p
Experimental G.	30	5,833	1,858	58	-,876	,385
Control G.	30	6,233	1,675			

Analysis of Table 2 reveals the proximity of the experimental and control groups' averages. There is no statistically significant difference ( $t_{(58)}=-,876$ ,  $p>,05$ ). Average of experimental group students is ( $\bar{X}=5,833$ ) and average of control group students is ( $\bar{X}=6,233$ ). It is possible to accept that, groups were equivalent in their achievements of narrative text listening, prior to the phase of experimental process. Effect size was calculated to be small ( $\eta^2=,001$ ).

C) Is there a significant difference between the results of experimental and control groups' pretests on the achievement of informative text listening? Results are presented in Table 3.

**Table 3.** Experimental and Control Groups' Statistical Results of Pretest Independent t-Test of Informative Text Achievement Scores

Group	N	$\bar{X}$	S	sd	t	p
Experimental G.	30	6,666	2,186	58	,522	,604
Control G.	30	6,366	2,266			

Analysis of Table 3 reveals the proximity of the experimental and control groups' averages. There is no statistically significant difference between the results of two groups' pretests on the achievement of informative text listening ( $t_{(58)}=,522$ ,  $p>,05$ ). Average of experimental group students is ( $\bar{X}=6,666$ ) and average of control group students is ( $\bar{X}=6,366$ ). It is possible to accept that, groups were equivalent in their achievements of narrative text listening, prior to the phase of experimental process. Effect size was calculated to be small ( $\eta^2=,001$ ).

Given that there is no significant difference among the three measurements of experimental and control groups, it is possible to assert that the groups were equivalent in terms of their listening self-efficacy and listening achievements, prior to the experimental process.

### Findings and Interpretations Regarding The Second Subproblem of The Survey

A) Is there a significant difference between the results of listening self-efficacy posttests of the experimental group and the control group? Results are presented in Table 4.

**Table 4.** Experimental and Control Groups' Statistical Results of Posttest Independent t-Test of Listening Self-Efficacy Scores

Group	N	$\bar{X}$	S	sd	t	p
Experimental G.	30	220,533	28,962	58	4,892	,000
Control G.	30	182,400	31,367			

Analysis of Table 4 reveals a significant difference in favor of the experimental group ( $t_{(58)}=4,892$ ,  $p<,05$ ). Average of experimental group students is verified as ( $\bar{X}=220,533$ ), whereas the average of control group students are ( $\bar{X}=182,400$ ). As per these results, it is possible to state that listening strategies teaching has improved listening self-efficacy. This situation can also be interpreted by saying that the students, who acquire and effectively make use of listening strategies, perceive themselves to be more self sufficient in listening. The effect size is as calculated large ( $\eta^2=,291$ ).

B) Is there a significant difference between the results of experimental and control groups' posttests on the achievement of narrative text listening? Results are presented in Table 5.

**Table 5.** Experimental and Control Groups' Statistical Results of Posttest Independent t-Test of Narrative Text Achievement Scores

Group	N	$\bar{X}$	S	sd	t	p
Experimental G.	30	7,866	1,525	58	4,747	,000
Control G.	30	5,833	1,728			

As per the analysis of Table 5, score averages of achievements of narrative text listening are statistically significant in favor of the experimental group ( $t_{(58)}=4,747$ ,  $p<,05$ ). Average of experimental group students appears to be ( $\bar{X}=7,866$ ), whereas the average of control group students are ( $\bar{X}=5,833$ ). The efficiency of listening strategies teaching can be explanation for the significant difference between the scores of achievement of narrative text listening in favor of the experimental group. The effect size is calculated as large ( $\eta^2 =,279$ ).

C) Is there a significant difference between the results of experimental and control groups' posttests on the achievement of informative text listening? Results are presented in Table 6.

**Table 6.** Experimental and Control Groups' Statistical Results of Posttest Independent t-Test of Informative Text Achievement Scores

Group	N	$\bar{X}$	S	sd	t	p
Experimental G.	30	9,400	1,220	58	5,805	,000
Control G.	30	6,933	1,981			

As per the analysis of Table 6, a statistically significant difference is observed in between score averages of achievements of informative text listening in favor of the experimental group ( $t_{(58)}=5,805$ ,  $p<,05$ ). Average of experimental group students appears to be ( $\bar{X}=9,400$ ), whereas the average of control group students are ( $\bar{X}=6,933$ ). The efficiency of listening strategies teaching can be explanation for the significant difference between the scores of achievement of informative text listening in favor of the experimental group. In other words, listening strategies teaching has increased students' achievements in informative texts. The effect size is calculated as large ( $\eta^2 =,367$ ).

Regarding the first subproblem of the survey, no significant difference was observed in between the pretest results of experimental and control groups. Whereas for the posttests of second subproblem, a significant difference was observed in the results of each of three dependent variables. Therefore, it is possible to state that listening strategies implementations have been effective in the improvement of students' achievements of listening and their self-efficacy. It is also possible to reach the conclusion that the activities that teachers and students are provided with the textbooks of MEB (Ministry of National Education) are not sufficient for the improvement of students' listening self-efficacy and their achievements in listening and that those resources should be improved.

## Findings and Interpretations Regarding The Third Subproblem of The Survey

The third subproblem is:

A) Is there a significant difference between the results of experimental and control groups' listening self-efficacy pretests and posttests? In accordance with the findings, which were derived from the statistical results of dependent t-test, the inner variations of experimental and control groups for the third subproblem of the survey are approached with dependent t-test and are presented as below.

**Table 7.** Experimental and Control Groups Statistical Results of Dependent t-Test of Pretest and Posttest Self-Efficacy Average Scores

Group	Measurement	N	$\bar{X}$	S	sd	t	p
Experimental G.	Pretest	30	193,000	31,061	29	-8,500	,000
	Posttest	30	220,533	28,962			
Control G.	Pretest	30	191,566	28,579	29	2,730	,011
	Posttest	30	182,400	31,367			

As seen in Table 7, listening strategies implementations on the experimental group has provided an increase of 13% in the average of self-efficacy scores ( $t_{(29)} = -8,500$ ,  $p < ,05$ ). Whereas, the activities of MEB (Ministry of National Education) textbook has caused a slight decrease in the listening self-efficacy of students, who are in the control group ( $t_{(29)} = 2,730$   $p < ,05$ ). It is possible to address this situation as a proof that, listening strategies teaching is effective in the improvement of listening self-efficacy. The reason why texts and related practices in the Turkish language textbook caused a slight decrease in students' self-efficacy, instead of improving it as expected can be that; they were insufficient and not designed in accordance with the interests and requirements of students. Effect size is measured as large for both the experimental ( $\eta^2 = ,734$ ) and the control group ( $\eta^2 = ,210$ ).

B) Is there a significant difference between the results of experimental and control groups' pretests and posttests on the achievement of narrative text listening? Results are presented in Table 8.

**Table 8.** Experimental and Control Groups' Statistical Results of Dependent t-Test of Pretest and Posttest on the Narrative Text Achievement

Group	Measurement	N	$\bar{X}$	S	sd	t	p
Experimental G.	Pretest	30	5,833	1,858	29	-6,506	,000
	Posttest	30	7,866	1,525			
Control G.	Pretest	30	6,233	1,675	29	1,054	,300
	Posttest	30	5,833	1,782			

As seen in Table 8, listening strategies implementations on the experimental group has provided an increase of 26% in the narrative text achievement in the experimental group ( $t_{(29)} = -6,506$ ,  $p < ,05$ ). As a result, it is possible to address this situation as a proof that, listening strategies teaching is effective in the improvement of experimental group students' narrative text achievements. Whereas the activities of the textbook have caused a slight decrease in the narrative text achievements of students, who are in the control group, just as in their self-efficacy in listening. The decrease is not statistically significant ( $t_{(29)} = 1,504$   $p > ,05$ ).

Effect size is measured as large ( $\eta^2 = ,601$ ) for the experimental group and small ( $\eta^2 = ,038$ ) for the control group.

C) Is there a significant difference between the results of pretests and posttests on the achievement of informative text listening?

**Table 9.** Experimental and Control Groups' Statistical Results of Dependent t-Test of Pretest and Posttest on the Informative Text Achievement

Group	Measurement	N	$\bar{X}$	S	sd	t	p
Experimental G.	Pretest	30	6,666	2,186	29	-7,186	,000
	Posttest	30	9,400	1,220			
Control G.	Pretest	30	6,366	2,266	29	-1,255	,219
	Posttest	30	6,933	1,981			

As seen in Table 9, listening strategies and related practises has provided an increase of 29% in the informative test achievement of the experimental group ( $t_{(29)} = -7,186$ ,  $p < ,05$ ). On the other hand, practises of the textbook has provided some increase in the informative text achievement of the control group ( $t_{(29)} = -1,255$   $p > ,05$ ), however this increase is not in a level to create a significant difference. This slight increase might be due to the recall of pretest experiences of the students. Effect size is measured as large ( $\eta^2 = ,648$ ) for the experimental group and small ( $\eta^2 = ,053$ ) for the control group.

The analysis of the third subproblem showed that the results of all three dependent variables of the experimental group reveal a significant difference in favor of the posttest. Whereas for the control group, their posttest listening self-efficacy and narrative text achievement reveals a decrease in an insignificant way and their informative text achievement reveals an insignificant increase. Taking these results into consideration, it is possible to state that listening strategies teaching and related practises have increased students' listening achievements and their perception of self-efficacy for listening.

### Discussion and conclusion

The analysis of literature regarding listening skills has revealed that various methods, techniques and strategies have a positive contribution in the improvement of listening skills and that they have a positive effect on listening achievements (Kaplan,

2004; Dogan, 2007; Katranci, 2012; Yildiz, 2015; Kassem, 2015; Simasangyaporn, 2016). This fact supports the results of this study.

Notion of self-efficacy involves the self-evaluation of the individual in order to perform a task and determine challenging issues in learning (Aydin, Demircan & Innali, 2015). According to Bandura (1994), self-efficacy is not about individual's level of competency in his skills, but it is about how much he believes in them (as cited by Akkoyunlu, Orhan & Umay, 2005:1). Individuals, who have a high-level belief in their self-efficacy exert more effort in order to succeed, whereas the ones with a lower level of self-efficacy give in and up more easily and have a difficulty in overcoming their concerns and feelings of anxiety. Several surveys reveal that teaching of various strategies, methods and techniques have provided a considerable increase in students' perception of self-efficacy (Muldur, 2017; Ayaz, 2018; Korkmaz, 2015). Rahimi & Abedini (2009) have determined that there is a strong relation between listening self-efficacy and listening achievement.

The comparison of experimental group students' pretest and posttest results of self-efficacy scale shows a significant difference in favor of posttest. There is an increase of 13% in the experimental group students' perception of self-efficacy. Whereas, the listening self-efficacy scale's pretest and post test scores of control group students', an insignificant decrease is specified. As a result, it is determined that listening strategies teaching increased experimental group students' perception of self-efficacy in listening self-efficacy.

The comparison of pretest and posttest scores for narrative text achievement of experimental group students has revealed a significant difference in favor of posttest. An increase of approximately 26% was provided in narrative text achievement when compared with the pretest. On the other hand, when the results of control group students are analyzed, an insignificant decrease in narrative text achievement was observed in their narrative text achievements. Conclusively, it is determined that listening strategies teaching and related activities have increased listening achievements for narrative texts.

The comparison of pretest and posttest scores for informative text achievement of experimental group students, has revealed a significant difference in favor of posttest. Experimental group students' informative text achievements have increased 29% approximately. When the results of the control group are analyzed, it is seen that there is an increase in their informative text achievements, however that it has not created a significant difference. Therefore, it is concluded that listening strategies teaching and activities that are carried out in accordance with these strategies has increased achievements in texts of informative type.

The comparison of posttest scores of experimental and control groups put forward a significant difference in favor of the experimental group's posttests for all three scales. With reference to surveys, which reveal similar results, Yildiz (2015) surveyed about the effect of listening strategies teaching on skills of listening comprehension and stated that there is a significant difference in favor of posttests as a result of the pretests and posttests that were carried out. Katranci (2012), analyzed the effect of meta cognition strategies teachings on listening comprehension skills and concluded that there was a significant

difference in listening comprehension in favor of the experimental group. Kocaadam (2011), surveyed about the effect of note-taking training on listening skills and determined that the scores of experimental group students' posttests were significantly higher than the scores of the control group students. Kassem (2015) analyzed the relation between the use of listening strategies and the perception of self-efficacy in listening and reached the conclusion that, students who frequently use listening strategies have a higher level of listening skills and perception of listening self-efficacy. As revealed by the above mentioned results, teaching of listening methods and strategies positively effect students' listening achievements and their perception of self-efficacy.

In accordance with the results that are derived from this survey, it is recommended that similar surveys should be carried out in various educational institutions, the competency and awareness of teacher candidates should be improved with regards to the use of listening strategies within the "Listening Training" module which is included in Turkish Language Teacher Training under-graduate program, in-service trainings for the effective use of listening strategies should be provided for the teachers, who are presently on duty and the listening practices in Turkish language textbooks should be re-organized in order to make them convenient for the implementation of listening strategies.

### References

- Akkoyunlu, B., Orhan, F., & Umay, A. (2005). Bilgisayar Öğretmenleri İçin "Bilgisayar Öğretmenliği Öz Yeterlik Ölçeği" Geliştirme Çalışması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 29, 1-8.
- Akyol, H. (2006). *Türkçe öğretim yöntemleri*. Kök Yayıncılık.
- Ayaz, B. (2018). *Sanatsal etkinliklerle bütünleştirilmiş fen öğretiminin öğrencilerin fen akademik başarısına, öz yeterlik algısına ve motivasyonuna etkisi*(Unpublished Master Thesis) Uşak Üniversitesi Fen Bilimleri Enstitüsü: Uşak.
- Aydın, İ. S., Demircan, U. ve İnnalı, H. Ö. (2015). Ortaokul Öğrencilerinin Dinleme/İzleme Öz Yeterlik Algılarına Yönelik Ölçek Geliştirme Çalışması. *International Journal of Languages' Education and Teaching*, 1420-1435.
- Bentley, S., ve Bacon, S. (1996). The all new, state-of-the-art ILA definition of listening: Now that we have it, what do we do with it?. *Listening Post*, 56, 1-5.
- Bird, D.E. (1953). Teaching Listening Comprehension. *Journal of Communication*, 3:2, 127.
- Brent, R., Anderson, P. (1993). Developing Children's Classroom Listening Strategies. *The Reading Teacher*, (47), 122-126.
- Büyüköztürk, Ş. (2016). *Sosyal Bilimler İçin Veri Analizi El Kitabı*. Pegem Akademi.
- Cihangir, Z. (2004). *Kişilerarası İletişimde Dinleme Becerisi*. Nobel Yayınevi.
- Çifçi, M. (2001). Dinleme Eğitimi ve Dinlemeyi Etkileyen Faktörler. *AKÜ Sosyal Bilimler Dergisi*, 2(2), 165-177.
- Demir Atalay, T. ve Melanlıoğlu, D. (2016). "Ortaokul Öğrencileri için Dinleme Stratejileri Ölçeği"nin Geçerlilik ve Güvenilirlik Çalışması. *A.Ü. Türkiyat Araştırmaları Enstitüsü Dergisi*, 57, 1885-1904. <https://doi.org/10.14222/Turkiyat1600>
- Doğan, Y. (2007). *İlköğretim ikinci kademedeki dil becerisi olarak dinlemeyi geliştirme çalışmaları* (Unpublished Doctoral Thesis). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.

- Doğan, Y. (2016). *Dinleme eğitimi*. Pegem Akademi.
- Gonulal, T. (2020). Improving listening skills with extensive listening using podcasts and vodcasts. *International Journal of Contemporary Educational Research*, 7(1), 311-320. <https://doi.org/10.33200/ijcer.685196>
- Güneş, F. (2007). *Türkçe Öğretimi ve Zihinsel Yapılandırma*. Nobel Yayınevi.
- Holden, W. (2004). Facilitating Listening Comprehension: Acquiring Successful Strategies. *Bulletion of Hokuriku University*, 28, 257-266.
- İzin, N. (2006). *Dil becerilerinin gelişiminde öz güven*(Unpublished Master Thesis). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Jung, E. (2003). The role of discourse signaling cues in second language listening comprehension. *The Modern Language Journal*, 87, 562-577.
- Kaplan, H. (2004). *İlköğretim 6. Sınıf Öğrencilerinin Dinleme Becerileri Üzerine Bir Araştırma*(Unpublished Master Thesis). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Karasar, N. (2015). *Bilimsel Araştırma Yöntemi*. Nobel Yayınevi.
- Kassem, H. M. (2015). The Relationship between Listening Strategies Used by Egyptian EFL College Sophomores and Their Listening Comprehension and Self-Efficacy. *Canadian Center of Science and Education*, Vol. 8, No. 2, 153-169. <https://doi.org/10.5539/elt.v8n2p153>
- Katrancı, M. (2012). *Üstbiliş Stratejileri Öğretiminin Dinlediğini Anlama Becerisine ve Dinlemeye Yönelik Tutuma Etkisi*(Unpublished Doctoral Thesis). Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Kılıçoğlu, G., Karakuş, E.N. ve Demir, T. (2011). Sosyal Alanlar Öğretmenlerinin Kişilerarası Özyeterlik İnançlarının Değerlendirilmesi. *International Conference On New Trends in Education and Their Implications*, 27-29 April 2011, Antalya-Turkey.
- Kocaadam, D. (2011). *Not Alarak Dinleme Eğitiminin İlköğretim 7. Sınıf Öğrencilerinin Dinleme Becerilerini Geliştirmesine Etkisi*(Unpublished Master Thesis). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Korkmaz, G. (2015). *Yaratıcı yazma yönteminin 6. sınıf öğrencilerinin yazma öz yeterlik algularına, yazmaya ilişkin tutumlarına ve yazma becerisi akademik başarılarına etkisi*(Unpublished Master Thesis). Gaziantep Üniversitesi Eğitim Bilimleri Enstitüsü, Gaziantep.
- Linnenbrink, E.A., Pintrich, P.R. (2003). The Role of Self-Efficacy Beliefs in Student Engagement and Learning in the Classroom. *Reading and Writing Quarterly*, 19, 119-137.
- Mendelsohn, D. J. (2006). *Learning How to Listen Using Listening Strategies. Current Trends in the Development and Teaching of the Four Language Skills*. Heinle & Heinle
- Müldür, M. (2017). *Öz düzenlemeye dayalı yazma eğitiminin ortaokul öğrencilerinin bilgilendirici metin yazma becerisine, yazmaya yönelik öz düzenleme becerisine ve yazma öz yeterlik algısına etkisi*(Unpublished Doctoral Thesis). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Nunan, D. (1998). *Approaches to Teaching Listening in the Language Classroom*. Paper presented at the Korea TESOL Conference, Seoul.
- Osada, N. (2004). Listening comprehension research: a brief review of the past thirty years. *Dialogue*, 3, pp. 53-66.

- Pinnell, G. S., Jaggar, A. M. (2003). Oral language: speaking and listening in elementary classrooms. *J. Flood, D. Lapp, J. R. Squire, & J. Jensen, Handbook of research on teaching the English language arts Mahwah, NJ: Erlbau.* pp. 881-913.
- Rahimi, A., Abedini, A. (2009). The Interface Between EFL Learners' Self-Efficacy Concerning Listening Comprehension and Listening Proficiency. *Novitas-ROYAL Research on Youth and Language, Vol. 3(1)*, 14-28.
- Sever, S., Kaya, Z., Aslan, C., & Düzçay, B. (Ed.). (2013). *Etkinliklerle Türkçe Öğretimi*. Tudem Yayınları.
- Siegel, J. (2015). *Exploring Listening Strategy Instruction Through Action Research*. Palgrave Macmillan.
- Simasangyaporn, N. (2016). *The effect of listening strategy instruction on Thai learners' self-efficacy, English listening comprehension and reported use of listening strategies*(Unpublished Doctoral Thesis). University of Reading Institute of Education: Reading.
- Türkel, A. (2012). Dinleme Eğitime İlişkin Teknikler ve Değerlendirmeleri. *Buca Eğitim Fakültesi Dergisi, (34)*, 128-141.
- Vandergrift, L. (2004). Listening to learn or learning to listen?. *Annual Review of Applied Linguistics, 24*, 3-25.
- Wolvin, A.D. (2012). Listening in the General Education Curriculum. *International Journal of Listening, (26)*, 122-128.
- Yıldız, N. (2015). *Dinleme Stratejileri Öğretiminin Beşinci Sınıf Öğrencilerinin Dinlediğini Anlama Becerilerine Etkisi*(Unpublished Doctoral Thesis). Onsekiz Mart Üniversitesi Eğitim Bilimleri Enstitüsü, Çanakkale.



## Dil Eğitimi ve Araştırmaları Dergisi

*Araştırma Makalesi*

### Dinleme Stratejilerinin Öz Yeterlik Algısı ve Dinleme Başarısına Etkisi\*\*\*

Mert UĞUR \*

Ali TÜRKEL \*\*

#### MAKALE BİLGİSİ

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#### Anahtar kelimeler:

*dinleme becerisi  
dinleme stratejileri  
dinleme başarısı  
dinleme öz yeterlik algısı*

#### ÖZET

Bu araştırma, dinleme stratejileri öğretiminin ortaokul 7. sınıf öğrencilerinin dinleme öz yeterlik algısına ve dinleme başarısına olan etkisini belirlemeyi amaçlamaktadır. Çalışmada nicel araştırma yöntemlerinden ön test-son test kontrol gruplu yarı deneysel model kullanılmıştır. Araştırma 2018-2019 eğitim-öğretim yılında Kars ili Arpaçay ilçesine bağlı bir ortaokulda 7. sınıf öğrencileriyle gerçekleştirilmiştir. Çalışmaya deney grubundan otuz, kontrol grubundan 30 olmak üzere toplam 60 öğrenci katılmıştır. Araştırma sekiz hafta sürmüştür. Verilerin toplanmasında Dinleme Öz Yeterlik Ölçeği ile Öyküleyici Metin Başarı Testi ve Bilgilendirici Metin Başarı Testi kullanılmıştır. Bu ölçme araçları katılımcılara ön test ve son test olarak uygulanmış, iki test arasında anlamlı fark olup olmadığı incelenmiştir. Araştırma sonunda elde edilen verilerin analizine göre deney grubundaki öğrencilerin dinleme öz yeterlik algılarında ve her iki metin türündeki dinleme başarılarında kontrol grubuna göre anlamlı düzeyde artış olduğu görülmüştür. Bu sonuçlar ışığında dinleme stratejileri öğretiminin öğrencilerin dinleme öz yeterlik algılarını ve dinleme başarılarını artırdığı belirlenmiştir.

#### Teşekkür

Yazarlar, dergi hakemlerine ve editöre bu makalenin geliştirilmesinde gösterdikleri rehberlik için teşekkür eder.

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Yazarlar çıkar çatışması olmadığını beyan ederler.

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## Giriş

Dört temel dil becerisi olan okuma, yazma, dinleme ve konuşma becerileri arasında dinleme becerisinin önemi büyüktür. Dinleme ve okuma, anlama; konuşma ve yazma, anlatma becerileri olarak adlandırılmaktadır. Bir anlama becerisi olan dinleme, ilk kazanılan dil becerisi olup henüz dünyaya gelmeden önce gelişmeye başlamaktadır. Diğer dil becerilerinin tümü dinleme becerisi üzerine yapılandırılmaktadır. Dinleme becerisi, öğrenme, anlama ve zihinsel becerileri geliştirmede önemli bir alandır (Güneş, 2007). Wolvin'e (2012) göre günümüz bilgi dünyasında dinleme eğitimi, öğretim programındaki temel çalışmaların önemli bir parçası olmalıdır. Öğrencilerin kişisel ve profesyonel alandaki başarıları büyük ölçüde etkili iletişim kurabilmelerine bağlıdır. Buna karşın çeşitli nedenlerden ötürü dinleme becerisi eğitimine ayrılan zamanın çok az olduğu ve bu beceriye gerekli önemin verilmediği söylenebilir (Doğan, 2016). Ancak ilgili çalışmalar dinleme becerisinin en sık ve en çok kullanılan dil becerisi olduğunu göstermektedir. Gonulal'a (2020) göre insanlar okuduklarından, konuştuklarından veya yazdıklarından daha fazla dinleme eğilimindedirler, bu da muhtemelen dinlemeyi dil öğrenme sürecinin merkezine koymaktadır. Pinnell ve Jaggar (2003), bir insanın gün içinde kurduğu iletişimin en az yarısında dinleme becerisini kullandığını vurgulamaktadır. Brent ve Anderson'a (1993) göre insanlar bilgilerinin %80'ini dinleme yoluyla kazanırlar buna rağmen birçok erişkinin dinleme verimliliğini %25'in üstüne çıkaramadığı ifade edilmektedir (aktaran Türkel, 2012, s.129). Dinleme edilgen bir beceri olarak düşünülür ve çoğunlukla herhangi bir yardım olmaksızın geliştirilebileceği düşünülmektedir (Osada, 2004). Dinleme becerisinin kendine kendine gelişebilecek bir beceri olduğu düşüncesi dinleme eğitiminin ihmal edilmesine neden olmuştur.

İnsan hayatındaki öğrenmelerin birçoğunda dinleme becerisi karşımıza çıkmaktadır (Doğan, 2016). İyi bir dinleyici olmak, başarının da anahtarıdır. Dinleme, iletişimin ve bilgi edinmenin temelidir. Gündelik hayatta ve akademik olarak okul yaşamında dil becerilerinden yararlanma oranlarıyla ilgili çeşitli çalışmalar gerçekleştirilmiştir. Bird (1953), dinlemeye %42, konuşmaya %25, okumaya %15, yazmaya %18 zaman ayrıldığını belirlemiştir. Üniversitede öğrenim gören öğrencilerle yapılan bir araştırmaya göre dinlemeye %53, okumaya %17, konuşmaya %16 ve yazmaya %14 vakit ayrıldığı ifade edilmektedir (Barker 1980; aktaran Cihangir, 2004, s.56). Tüm bu veriler bize dinleme becerisinin en çok kullanılan dil becerisi olduğunu, ihmal edilmemesi ve geliştirilmesi gereken bir beceri olduğunu göstermektedir.

Öz yeterlik algısı bireyin hayatını çok farklı yönlerden etkileyebilmektedir. Öz yeterlik inancı, bireyin belli bir başarıya ulaşmak için gerekli düzenleme ve uygulamaları gerçekleştirmede yapacakları işlere yönelik kendi yetenekleri hakkındaki yargılarıdır (Bandura, 1986; akt. Linnenbrink & Pitrinch, 2003). Öz yeterlik inancının yüksek veya düşük olması farklı şekillerde karşımıza çıkmaktadır. Aydın, Demircan ve İnnalı'ya (2015) göre yüksek öz yeterlik inancına sahip bireyler ilk kez karşılaştıkları ve çaba sarf etmeleri gereken durumlardan kaçmak yerine bu durumları başarılı bir biçimde sonuca ulaştırma konusunda kararlıdırlar. Öz yeterliği zayıf olan bireyler ise öz yeterliği yüksek bireylere göre daha fazla stres, gerginlik ve hoşnutsuzluk duygularına sahiptirler (Kılıçoğlu, Karakuş & Demir, 2011). Bu bağlamda öğrencilerin kendilerini dinleme konusunda ne düzeyde

yeterli gördükleri önemlidir. Dinleme öz yeterlik algısı yüksek öğrencilerin dinleme süreçlerindeki problemlerle başa çıkmak için daha çok çaba sarf edeceği, başarmak için kendilerine daha çok güvenecekleri söylenebilir. Dinleme öz yeterlik algısı düşük öğrencilerin ise dinleme süreçlerindeki problemlerle başa çıkmaktan kaçınacağı, dinleme etkinliklerinden kolay sıkılacağı, çabalarının sonucu değiştirmeyeceğini düşüneceği ifade edilebilir.

Dinleme becerisinin iletişim sürecinde büyük bir öneme sahip olduğu yaygın olarak kabul edilmektedir (Siegel, 2015). Bu becerinin geliştirilmesinde ana dili eğitiminden sorumlu olan Türkçe öğretmenlerine büyük görevler düşmektedir. Türkçe derslerinde dinlediği metin üzerinde düşünen, düşündüklerini soran, sorgulayan öğrencilerin daha iyi öğrenmeler gerçekleştirdiği göz önünde bulundurulmalıdır (Sever, Kaya & Aslan, 2013). Bu nedenle öğretmenler öğrencilere dinleme sürecinden daha etkin bir şekilde nasıl yararlanabilecekleri konusunda çeşitli teknik ve stratejileri öğretmeli, onlara bu konuda rehberlik etmelidirler. Bu amaçla çalışmada dinleme stratejileri öğretiminin öğrencilerin dinleme öz yeterlik algılarına ve dinleme başarılarına olan etkisi araştırılmıştır.

### **Kuramsal çerçeve**

İnsanlar arasındaki iletişimin gerçekleşmesini sağlayan en önemli unsur dildir. Etkili bir iletişim için de, bireyin etkili dinleme yeteneği ve alışkanlığına sahip olması gerekmektedir (Demir Atalay & Melanlıoğlu, 2016). İnsan ancak etkili bir dinleme becerisine sahip olursa diğer insanlarla sağlıklı iletişim kurabilir, çevresini, olayları ve yaşamı doğru algılayabilir (İzin, 2005). Bundan dolayı öğrencilerin akademik ve sosyal başarılarının yüksek olması, etkili bir dinleyici olmalarına dolayısıyla iyi bir dinleme eğitimi almalarına bağlıdır.

Dinleme etkinliği bir süreç içinde olmaktadır. Dinleyiciler bu süreç içinde bir takım bilişsel ve fiziksel faaliyetler gerçekleştirmektedir. Dolayısıyla dinleme bir anda başlayıp biten bir etkinlik değil, içerisinde birçok seçim barındıran bir süreç etkinliğidir. Bu süreç içerisinde doğru seçimler dinleyicinin anlam kurmasını kolaylaştırırken yanlış tercihler ise anlam kurmayı zorlaştırmaktadır (Yıldız, 2015). Hem eğitim sürecinde hem de günlük hayatta dinlemeyle geçirilen süreler göz önünde bulundurulduğunda dinlemenin sistemli bir şekilde ele alınması gerektiği ortaya çıkmaktadır. Dinleme stratejileri öğretiminin gerekliliği alan uzmanları tarafından vurgulanmıştır. Günümüzde öğretmenlerin hala en çok kullandığı yöntem düz anlatım yöntemidir. Bu durum da öğrencilerin dinlemeye ayırdıkları zamanı arttırmakta, öğrenciler öğrendiklerinin yaklaşık %83'ünü dinleme yoluyla elde etmektedirler (Çifçi, 2001). Dolayısıyla dinleme becerisi iyi olmayan bir öğrencinin, zihinsel kapasite açısından zayıf olmasa bile verimsiz bir öğrenme süreci yaşayacağı söylenebilir.

Dinleme stratejileri, bireylerin dinleme etkililiğini arttırmak için dinleme öncesinde, dinleme sırasında ve dinleme sonrasında kullandıkları birtakım fiziksel ve zihinsel etkinlikler olarak tanımlanabilir. Önceden dinlemenin pasif bir yetenek olduğu düşünülmekteydi (Jung, 2003; Vandergrift, 2004). Son zamanlarda ise bu görüş geçerliliğini kaybetmiş, dinlemenin dinleyicilerin dinlenen materyalle etkileşime girerek anlam oluşturmasını gerektiren aktif bir süreç olduğu görüşü kabul görmüştür (Bentley &

Bacon, 1996; Nunan, 1998; Holden, 2004). Böyle bir süreçte de dinleyicilerin birtakım stratejiler kullanması dinlenen materyalle aktif bir şekilde etkileşime girerek anlam kurmasını kolaylaştıracaktır. Dinleme stratejileri dinleme öncesinde, dinleme sırasında ve dinleme sonrasında kullanılan stratejilerdir. Bunlardan kısaca bahsetmek faydalı olacaktır.

Doğan'a (2016) göre dinleme öncesinde kullanılan stratejiler öğrencileri dinleme etkinliğine hazırlama amacı taşır. Bu hazırlık hem zihinsel hem de fiziksel boyuttur. Dinleme öncesi çalışmaların fiziksel boyutunda ilk sırada sessizliğin sağlanması yer alır. Fiziksel boyutlar arasında sayılabilecek diğer hususlara ses kaynağının tüm öğrenciler tarafından rahatlıkla duyulabilecek şekilde düzenlenmesi, sınıftaki tüm öğrencilerin sağlıklı bir şekilde duyabilecek biçimde oturması, ortam sıcaklığının dinlemeye uygun olarak düzenlenmesi, dışarıdan gelebilecek yabancı seslere karşı önlem alınması gibi örnekler sayılabilir. Dinleme öncesinde kullanılacak zihinsel stratejilere ise dinleme yöntemini ve amacını belirleme, ön bilgileri harekete geçirme, tahminde bulunma, dinlenecek içeriğe yönelik sorular oluşturma ve dinleme sırasında bu sorulara cevap arama gibi örnekler verilebilir.

Dinleme öncesinde olduğu gibi dinleme sırasında da kullanılan bazı stratejiler bulunmaktadır. Bu stratejiler dinlenen içerikteki önemli bölümlerin kayıt altına alınmasını sağlayan not alma stratejisi; dinleme anında ipuçlarından yola çıkarak dinlenen metne ilişkin tahminde bulunma; dinlenen içerikteki konuyla ilgili ipuçları veren anahtar kelimeleri belirleme stratejisi; konuşmacının veya ses kaynağının vurgu ve tonlamalarına dikkat ederek önemli noktaları belirleme; dinlenen içerikteki karakter ve olaylarla duygudaşlık kurmayı sağlayan empati kurma stratejisi; dinlenen içerikteki olay ve durumlarla gerçek hayat arasında bağ kurmayı sağlayan gerçek hayatla ilişkilendirme stratejisi; grafik, tablo, resim, şema vb. kullanarak dinlenen içeriğin somutlaştırılması; soru-cevap etkinliği; tekrar dinleme gibi stratejilerdir. Tüm bu stratejilerin amacı dinlenen içeriğin daha iyi anlaşılmasıdır.

Dinleme etkinliğinden sonraki süreçte öğrenciler dinleme öncesinde üzerinde durulan konular ve dinleme sırasında alınan notların yardımıyla, soru sorulmuşsa bu soruları yanıtlama, dinlenen içeriğin özetini yapma, metni çeşitli açılardan değerlendirme gibi etkinlikleri gerçekleştirip dinleme etkinliğinden en üst seviyede faydalanmaya çalışırlar (Doğan, 2016). Dinleme sonrası stratejilerine dinlenen içerikteki önemli bölümlerin ayrıntılara girilmeden ifade edildiği özetleme stratejisi; dinlenen içerikteki olayların, durumların, kişilerin vb. tartışılarak farklı görüşlerin ortaya çıkarıldığı tartışma stratejisi; dinleme öncesi ve sırasında yapılan tahminlerin doğruluğunu sorgulama; dinlenen içerikte yer alan bilgilerden yeni bilgilere ulaşıldığı çıkarım yapma stratejisi; neden-sonuç ilişkisi kurma stratejisi; dinleme sürecinde güçlü ve zayıf yönlerin belirlendiği öz değerlendirme stratejisi, olay metinlerinde olay, kişi, yer, zaman ve anlatıcı gibi yapı unsurlarının belirlenmesi gibi stratejiler örnek verilebilir.

Dinlediğini anlamada ve dinleme sürecinde yaşanan sorunların ortadan kaldırılmasında dinleme stratejileri hayati bir öneme sahiptir (Mendelsohn, 2006). Stratejik dinlemenin amacı, anlamanın derecesini yükseltmektir. Dinleme stratejisini kullanan bireylerin tahmin becerisi gelişmiştir ve metindeki ipuçlarını etkili bir şekilde

kullanabilirler (Akyol, 2006). Tüm bunlar bize dinleme stratejisi öğretiminin üzerinde önemle durulması gereken bir konu olduğunu göstermektedir.

### **Araştırmanın amacı ve önemi**

Bu araştırmanın temel amacı, dinleme stratejileri öğretiminin ilköğretim 7. sınıf öğrencilerinin dinleme öz yeterlik algılarına ve dinleme başarılarına bir etkisinin olup olmadığının belirlenmesidir. Dinleme becerisi, bireylerin günlük hayatta ve eğitim hayatlarında en çok kullandıkları beceridir. Bu becerinin tıpkı okuma, konuşma ve yazma becerileri gibi geliştirilmesi ve doğru yöntem ve stratejilerle kullanılması önem taşımaktadır. Dinleme becerisini doğru kullanan bireyler, hayatın her alanında da başarılı bireyler olarak karşımıza çıkmaktadır. Bu açıdan bakıldığında dinleme becerisini geliştirmenin ve dinleme stratejilerini kullanmanın bireylere yaşamın her alanında katkı sağlayacağı çalışmada varsayım olarak ileri sürülmüştür.

Alan yazın incelendiğinde dinleme stratejileri öğretiminin dinleme öz yeterlik algısına ve dinleme başarısına etkisine yönelik az sayıda araştırmaya rastlanmıştır. Bu çalışma ile alan yazındaki bu boşluğun doldurulması, alana katkı sunulması ve araştırmanın sonuçlarının bu alanda çalışma yapmak isteyen araştırmacılara ışık tutması hedeflenmektedir.

Araştırmanın kapsamına bağlı olarak problem cümlesi şu şekilde belirlenmiştir:

Dinleme stratejileri öğretiminin ilköğretim 7. sınıf öğrencilerinin dinleme öz yeterlik algılarına ve dinleme başarılarına etkisi var mıdır?

Problem cümlesine bağlı olarak oluşturulan alt problemler şunlardır:

1) Deney ve kontrol gruplarının,

a) dinleme öz yeterlik ön test sonuçları arasında anlamlı bir fark var mıdır?

b) öyküleyici metin dinleme başarısı ön test sonuçları arasında anlamlı bir fark var mıdır?

c) bilgilendirici metin ön test sonuçları arasında anlamlı bir fark var mıdır?

2) Deney ve kontrol gruplarının,

a) dinleme öz yeterlik son test sonuçları arasında anlamlı bir fark var mıdır?

b) öyküleyici metin dinleme başarısı son test sonuçları arasında anlamlı bir fark var mıdır?

c) bilgilendirici metin dinleme başarısı son test sonuçları arasında anlamlı bir fark var mıdır?

3)Deney ve kontrol gruplarının,

a) dinleme öz yeterlik ön test-son test sonuçları arasında anlamlı bir fark var mıdır?

b) öyküleyici metin dinleme başarısı ön test-son test sonuçları arasında anlamlı bir fark var mıdır?

c)bilgilendirici metin dinleme başarısı ön test-son test sonuçları arasında anlamlı bir fark var mıdır?

## Yöntem

### Araştırma deseni ve yayın etiği

Dinleme stratejileri öğretiminin ilköğretim 7. sınıf öğrencilerinin dinleme öz yeterlik algılarına ve dinleme başarılarına etkisini belirlemek amacıyla yapılan araştırmada ön test- son test kontrol gruplu yarı deneysel araştırma modeli kullanılmıştır. Karasar'a (2015: 97) göre öntest sonteste dayalı kontrol gruplu modelde rastgele atama ile oluşturulmuş iki grup vardır. Bu gruplardan biri deney biri kontrol grubu olarak kullanılır. Her iki gruptan da deney öncesinde ve sonrasında ölçümler alınır. Modelde öntest bulunması bu grupların deneysel işlem öncesindeki benzerlik seviyelerinin bilinmesine ve sontestten elde edilen sonuçların bu doğrultuda düzeltilmesine yardımcı olur. Araştırmanın her aşamasında gerekli etik ilkelere uyulmuştur. Ölçeklerin katılımcılara uygulanması için gereken etik kurul izni Kars Valiliği İl Milli Eğitim Müdürlüğünden 16/11/2018 tarihli ve 91782061-605.01-E21934428 sayılı belge ile alınmıştır.

### Katılımcılar

Araştırmanın katılımcı grubunu 2018-2019 eğitim-öğretim yılında Kars ili Arpaçay ilçesi Yatılı Bölge ortaokulunda öğrenim görmekte olan 7-C ve 7-D sınıflarındaki öğrenciler oluşturmuştur. Çalışmaya deney grubundan 30 kontrol grubundan 30 olmak üzere toplamda 60 öğrenci katılmıştır. Katılımcıların 25'i kadın, 35'i ise erkektir.

### Verilerin toplanması ve analizi

Verilerin toplanması sürecinde Aydın, Demircan ve İnnalı (2015) tarafından geliştirilen Dinleme Öz Yeterlik Ölçeği ile Katrancı (2012) tarafından geliştirilen Öyküleyici Metin Başarı Testi ve Bilgilendirici Metin Başarı Testi kullanılmıştır. Bu ölçekler deney ve kontrol grubu öğrencilerine ön test olarak uygulanmıştır. Daha sonra deney grubu öğrencileriyle 8 hafta boyunca dinleme stratejilerine dayalı uygulamalar yapılırken kontrol grubu öğrencileriyle öğretim programına göre ders işlenmeye devam edilmiştir. Uygulama sürecinin ardından deney ve kontrol grubu öğrencilerine aynı ölçekler son test olarak uygulanmıştır.

Araştırma kapsamında toplanan verilerin analizinde SPSS 22 (Statistic Package for Social Sciences) programı kullanılmıştır. Betimsel istatistiklerden yüzde, frekans, aritmetik ortalama; parametrik istatistiklerden bağımsız t-testi, bağımlı t-testi kullanılmıştır.

Grupların deney öncesi ve sonrası ön test-son test puanları karşılaştırılırken bağımsız t- testi, grupların kendi içindeki ön test ve son test puanlarının karşılaştırılmasında ise bağımlı t- testi kullanılmıştır. Ayrıca tüm alt problemlere yönelik yapılan analizlerde etki büyüklüğü açıklanmıştır. Etki büyüklüğü olarak isimlendirilen etakare ( $\eta^2$ ) bağımsız değişkenin bağımlı değişkendeki toplam varyansın ne düzeyde olduğunu açıklamaktadır (Büyüköztürk, 2016).

## Deneysel işlemler

Araştırmada dinleme stratejileri öğretiminin 7. sınıf öğrencilerinin dinleme öz yeterlik algılarına ve dinleme başarılarına olan etkisinin belirlenmesi amaçlanmıştır. Bu nedenle deney grubuna dinleme metinlerinden faydalanarak etkinlikler yoluyla dinleme stratejileri öğretimi yapılmıştır. Uygulama öncesinde hem deney hem de kontrol grubu öğrencilerine Dinleme Öz Yeterlik Ölçeği, Öyküleyici Metin Başarı Testi ve Bilgilendirici Metin Başarı Testi uygulanmıştır. Uygulamanın sonunda ön test olarak uygulanan ölçek ve testler iki gruba da son test olarak uygulanmıştır. Araştırmanın uygulama süreci toplam 8 hafta sürmüştür.

Uygulama sürecinde deney grubundaki katılımcılara haftada 2 ders saati dinleme stratejileri öğretilmiş ve buna dayalı etkinlikler yapılmıştır. Deney grubuyla yapılan etkinlikler bizzat araştırmacı tarafından planlanarak uygulanmıştır. Yapılan uygulamalar yoluyla öğrencilerin dinleme stratejileri yoluyla dinleme öz yeterliklerini ve dinleme başarılarını geliştirmek amaçlanmıştır. Bu amaçla deney grubundaki öğrencilere dinleyecekleri metinlere dayalı olarak hazırlanan etkinlik kağıtları dağıtılmıştır. Öğrenciler kendilerine dağıtılan etkinlik kağıtlarındaki çalışmaları dinledikleri metinlerden yola çıkarak yapmışlardır.

Dinleme stratejilerine dayalı olarak oluşturulan etkinliklerde 2 öyküleyici metin, 2 bilgilendirici metin olmak üzere toplam 4 metin kullanılmıştır. Kullanılan dinleme metinleri Türkçe Öğretim Programı'na uygun şekilde TTKB tarafından ders kitabı olarak onaylanmış kitaplardan alınmıştır. Metinler belirlenirken 5 öyküleyici, 5 bilgilendirici metinden oluşan bir metin havuzu oluşturulmuştur. Metinlerin seçiminde alan uzmanlarının görüşüne başvurulmuştur. Her metin iki hafta süreyle işlenmiştir. Kontrol grubundaki katılımcılara ise herhangi bir deneysel işlem uygulanmamış, MEB'in okullara göndermiş olduğu "7. Sınıf Türkçe Ders Kitabı"ndaki metinler ve bununla ilgili etkinlikler öğretim programına göre işlenmiştir.

## Bulgular

Araştırmanın bu bölümünde alt problemlere yönelik bulgular ele alınmış ve yorumlara yer verilmiştir.

### Araştırmanın Birinci Alt Problemine İlişkin Bulgular ve Yorumlar

Birinci alt problem,

A) Deney ve kontrol gruplarının dinleme öz yeterlik ön test sonuçları arasında anlamlı bir fark var mıdır? şeklinde ifade edilmiştir. Sonuçlar Tablo 1'de sunulmuştur.

**Tablo 1.** Deney ve Kontrol Grubu Dinleme Öz Yeterlik Puanlarının Ön Test Bağımsız t-Testi İstatistiği Sonuçları

Grup	N	$\bar{X}$	S	sd	t	p
Deney G.	30	193,000	31,061	58	,186	,853
Kontrol G.	30	191,566	28,579			

Tablo 1 incelendiğinde deney ve kontrol grubu ortalamalarının birbirine yakın olduğu görülmektedir. İstatistiksel olarak anlamlı bir fark bulunmamaktadır ( $t_{(58)}=-,186$ ,  $p>,05$ ). Deney grubu öğrencilerinin ortalaması ( $\bar{X}=193,000$ ) iken kontrol grubu öğrencilerinin ortalamasının ( $\bar{X}=191,566$ ) olduğu belirlenmiştir. Deneysel işlem sürecinden önce grupların dinleme öz yeterliği açısından birbirine denk olduğu kabul edilebilir. Etki büyüklüğü ( $\eta^2=,001$ ) küçük olarak hesaplanmıştır.

B) Deney ve kontrol gruplarının öyküleyici metin dinleme başarısı ön test sonuçları arasında anlamlı bir fark var mıdır? Sonuçlar Tablo 2’de sunulmuştur.

**Tablo 2.** Deney ve Kontrol Grubu Öyküleyici Metin Dinleme Başarısı Puanlarının Ön Test Bağımsız t-Testi İstatistiği Sonuçları

Grup	N	$\bar{X}$	S	sd	t	p
Deney G.	30	5,833	1,858	58	-,876	,385
Kontrol G.	30	6,233	1,675			

Tablo 2 incelendiğinde deney ve kontrol grubu ortalamalarının birbirine yakın olduğu görülmektedir. İstatistiksel olarak anlamlı bir fark bulunmamaktadır ( $t_{(58)}=-,876$ ,  $p>,05$ ). Deney grubu öğrencilerinin ortalaması ( $\bar{X}=5,833$ ) iken kontrol grubu öğrencilerinin ortalamasının ( $\bar{X}=6,233$ ) olduğu görülmektedir. Deneysel işlem öncesinde her iki grubun da öyküleyici metin dinleme başarısı açısından birbirine denk olduğu söylenebilir. Etki büyüklüğü ( $\eta^2=,001$ ) küçük olarak hesaplanmıştır.

C) Deney ve kontrol gruplarının bilgilendirici metin dinleme başarısı ön test sonuçları arasında anlamlı bir fark var mıdır? Sonuçlar Tablo 3’te sunulmuştur.

**Tablo 3.** Deney ve Kontrol Grubu Bilgilendirici Metin Dinleme Başarısı Puanlarının Ön Test Bağımsız t-Testi İstatistiği Sonuçları

Grup	N	$\bar{X}$	S	sd	t	p
Deney G.	30	6,666	2,186	58	,522	,604
Kontrol G.	30	6,366	2,266			

Tablo 3 incelendiğinde deney ve kontrol grubu ortalamalarının birbirine yakın olduğu görülmektedir. Sonuçlara bakıldığında grupların bilgilendirici metin dinleme başarısı ön test sonuçları arasında istatistiksel olarak anlamlı bir fark bulunmamaktadır ( $t_{(58)}=,522$ ,  $p>,05$ ). Deney grubu öğrencilerinin ortalaması ( $\bar{X}=6,666$ ) iken kontrol grubu öğrencilerinin ortalamasının ( $\bar{X}=6,366$ ) olduğu görülmektedir. Deneysel uygulama öncesinde grupların bilgilendirici metin dinleme başarısı açısından birbirine denk olduğu kabul edilebilir. Etki büyüklüğü ( $\eta^2=,001$ ) küçük olarak hesaplanmıştır.

Araştırmada deney ve kontrol gruplarının her üç ön ölçümde de birbirinden istatistiksel olarak anlamlı bir fark göstermemesi grupların deneysel işlem öncesinde

dinleme öz yeterliği ve dinleme başarısı açısından birbirine denk olduğunun kanıtı olarak ileri sürülebilir.

### **Araştırmanın İkinci Alt Problemine İlişkin Bulgular ve Yorumlar**

A) Deney ve kontrol gruplarının dinleme öz yeterlik son test sonuçları arasında anlamlı bir fark var mıdır? Sonuçlar Tablo 4'te sunulmuştur.

**Tablo 4.** Deney ve Kontrol Grubu Dinleme Öz Yeterlik Puanlarının Son Test Bağımsız t-Testi İstatistiği Sonuçları

Grup	N	$\bar{X}$	S	sd	t	p
Deney G.	30	220,533	28,962	58	4,892	,000
Kontrol G.	30	182,400	31,367			

Tablo 4 incelendiğinde deney grubu lehine istatistiksel olarak anlamlı bir fark olduğu görülmektedir ( $t_{(58)}=4,892$ ,  $p<,05$ ). Deney grubu öğrencilerinin ortalaması ( $\bar{X}=220,533$ ) iken kontrol grubundaki öğrencilerin ortalamasının ( $\bar{X}=182,400$ ) olduğu belirlenmiştir. Bu sonuçlara göre dinleme stratejileri öğretiminin dinleme öz yeterliğini geliştirdiği söylenebilir. Bu durum dinleme stratejilerini bilen ve etkin bir şekilde kullanan öğrencilerin kendilerini dinlemeye yönelik daha yeterli görmeleri ile de açıklanabilir. Etki büyüklüğü ( $\eta^2=,291$ ) büyük olarak hesaplanmıştır.

B) Deney ve kontrol gruplarının öyküleyici metin dinleme başarısı son test sonuçları arasında anlamlı bir fark var mıdır? Sonuçlar Tablo 5'te sunulmuştur.

**Tablo 5.** Deney ve Kontrol Grubu Öyküleyici Metin Dinleme Başarısı Puanlarının Son Test Bağımsız t-Testi İstatistiği Sonuçları

Grup	N	$\bar{X}$	S	sd	t	p
Deney G.	30	7,866	1,525	58	4,747	,000
Kontrol G.	30	5,833	1,728			

Tablo 5 incelendiğinde öyküleyici metin dinleme başarısı puan ortalamaları deney grubu lehine istatistiksel olarak anlamlı bulunmuştur ( $t_{(58)}=4,747$ ,  $p<,05$ ). Deney grubu öğrencilerinin ortalaması ( $\bar{X}=7,866$ ) iken kontrol grubu öğrencilerinin ortalamasının ( $\bar{X}=5,833$ ) olduğu görülmektedir. Öyküleyici metin başarı puanlarının deney grubu lehine anlamlı fark içermesi uygulanan dinleme stratejileri öğretiminin etkililiği ile açıklanabilir. Başka bir deyişle, dinleme stratejileri öğretimi öğrencilerin öyküleyici metin dinleme başarılarını arttırmıştır. Etki büyüklüğü ( $\eta^2=,279$ ) büyük olarak hesaplanmıştır.

C) Deney ve kontrol gruplarının bilgilendirici metin dinleme başarısı son test sonuçları arasında anlamlı bir fark var mıdır? Sonuçlar Tablo 6'da sunulmuştur.

**Tablo 6.** Deney ve Kontrol Grubu Bilgilendirici Metin Dinleme Başarısı Puanlarının Son Test Bağımsız t-Testi İstatistiği Sonuçları

Grup	N	$\bar{X}$	S	sd	t	p
Deney G.	30	9,400	1,220	58	5,805	,000
Kontrol G.	30	6,933	1,981			

Tablo 6 incelendiğinde bilgilendirici dinleme başarısı puan ortalamalarında deney grubu lehine istatistiksel olarak anlamlı fark gözlenmektedir ( $t_{(58)}=5,805$ ,  $p<,05$ ). Deney grubu öğrencilerinin ortalaması ( $\bar{X}=9,400$ ) iken kontrol grubu öğrencilerinin ortalamasının ( $\bar{X}=6,933$ ) olduğu görülmektedir. Bilgilendirici metin dinleme başarı puanları arasında deney grubu lehine olan fark uygulanan dinleme stratejileri öğretiminin etkililiği ile açıklanabilir. Diğer bir ifadeyle, dinleme stratejileri öğretimi öğrencilerin bilgilendirici metin başarılarını arttırmıştır.

Etki büyüklüğü ( $\eta^2 = ,367$ ) büyük olarak hesaplanmıştır.

Araştırmanın birinci alt probleminde deney ve kontrol gruplarının ön test sonuçları arasında anlamlı bir fark gözlenmemiştir. İkinci alt probleme yönelik son testlerde ise her üç bağımlı değişken sonuçlarında deney grubu lehine anlamlı fark gözlenmiştir. Bu durumda öğrencilerin dinlemeye yönelik başarılarının ve öz yeterliklerinin gelişiminde dinleme stratejileri uygulamalarının etkili olduğu söylenebilir. MEB tarafından öğretmenlere ve öğrencilere sunulan ders kitaplarında yer alan etkinliklerin öğrencilerin dinleme öz yeterliklerini ve dinleme başarılarını geliştirmede yeterli olmadığı ve geliştirilmesi gerektiği sonucuna da varılabilir.

### Araştırmanın Üçüncü Alt Problemine İlişkin Bulgular ve Yorumlar

Üçüncü alt problem,

A) Deney ve kontrol gruplarının dinleme öz yeterlik ön test – son test sonuçları arasında anlamlı bir fark var mıdır? şeklinde ifade edilmiştir. Bağımlı t-testi istatistik sonuçlarına göre elde edilen bulgular doğrultusunda araştırmanın üçüncü alt probleminde deney ve kontrol gruplarının grup içi değişimleri bağımlı t-testi ile ele alınarak tablo halinde sunulmuştur.

**Tablo 7.** Deney ve Kontrol Grubu Ön Test- Son Test Öz Yeterlik Ortalama Puanları Bağımlı t-Testi İstatistiği Sonuçları

Grup	Ölçüm	N	$\bar{X}$	S	sd	t	p
Deney G.	Ön Test	30	193,000	31,061	29	-8,500	,000
	Son Test	30	220,533	28,962			
Kontrol G.	Ön Test	30	191,566	28,579	29	2,730	,011
	Son Test	30	182,400	31,367			

Tablo 7’de görüldüğü gibi deney grubunda uygulanan dinleme stratejileri uygulamaları, öz yeterlik puanları ortalamasında yaklaşık %13’lük bir artış sağlamıştır. ( $t_{(29)}= -8,500$ ,  $p<,05$ ) Kontrol grubunda ( $t_{(29)}= 2,730$   $p<,05$ ) uygulanan MEB ders kitabına bağlı etkinliklerin ise öğrencilerin dinlemeye yönelik öz yeterliklerinin az

miktarda azalmasına neden olduğu anlaşılmaktadır. Bu durum dinleme stratejileri öğretiminin dinleme öz yeterliğini geliştirmede etkili olduğunun bir kanıtı olarak ileri sürülebilir. Türkçe ders kitabında yer alan metin ve buna dayalı etkinliklerin öğrencilerin dinlemeye yönelik öz yeterliklerini geliştirmesi beklenirken düşük oranda azalmasına neden olması ise ders kitaplarındaki dinleme etkinliklerinin yetersiz olması, öğrencilerin ilgi ve gereksinimlerine göre düzenlenmemiş olması gibi nedenlerle açıklanabilir. Etki büyüklüğü deney grubu ( $\eta^2 =,734$ ) ve kontrol grubu için ( $\eta^2 =,210$ ) büyük olarak hesaplanmıştır.

B) Deney ve kontrol gruplarının öyküleyici metin dinleme başarısı ön test-son test sonuçları arasında anlamlı bir fark var mıdır? Sonuçlar Tablo 8’de sunulmuştur.

**Tablo 8.** Deney ve Kontrol Grubu Ön Test-Son Test Öyküleyici Metin Dinleme Başarısı Ortalama Puanları Bağımlı t-Testi İstatistiği Sonuçları

Grup	Ölçüm	N	$\bar{X}$	S	sd	t	p
Deney G.	Ön Test	30	5,833	1,858	29	-6,506	,000
	Son Test	30	7,866	1,525			
Kontrol G.	Ön Test	30	6,233	1,675	29	1,054	,300
	Son Test	30	5,833	1,782			

Tablo 8’de görüldüğü gibi deney grubunda ( $t_{(29)} = -6,506$ ,  $p < ,05$ ) uygulanan dinleme stratejileri öğretimi öyküleyici metin dinleme başarısında yaklaşık %26’lık bir artış sağlamıştır. Bu sonuca göre uygulanan dinleme stratejileri öğretiminin deney grubundaki öğrencilerin öyküleyici metin dinleme başarılarını geliştirdiği söylenebilir. Kontrol grubunda ise ders kitabına bağlı olarak yapılan etkinliklerin öğrencilerin dinlemeye yönelik öz yeterliklerinde olduğu gibi öyküleyici metin dinleme başarısı ortalamalarının da az miktarda azalmasına neden olduğu anlaşılmaktadır. Azalma istatistiksel olarak anlamlı değildir. ( $t_{(29)} = 1,504$   $p > ,05$ )

Etki büyüklüğü deney grubu için ( $\eta^2 =,601$ ) büyük, kontrol grubu için ( $\eta^2 =,038$ ) küçük olarak hesaplanmıştır.

C) Deney ve kontrol gruplarının bilgilendirici metin dinleme başarısı ön test- son test sonuçları arasında anlamlı bir fark var mıdır?

**Tablo 9.** Deney ve Kontrol Grubu Ön Test-Son Test Bilgilendirici Metin Dinleme Başarısı Ortalama Puanları Bağımlı t-Testi İstatistiği Sonuçları

Grup	Ölçüm	N	$\bar{X}$	S	sd	t	p
Deney G.	Ön Test	30	6,666	2,186	29	-7,186	,000
	Son Test	30	9,400	1,220			
Kontrol G.	Ön Test	30	6,366	2,266	29	-1,255	,219
	Son Test	30	6,933	1,981			

Tablo 9’da belirtildiği gibi deney grubunda ( $t_{(29)} = -7,186$ ,  $p < ,05$ ) uygulanan dinleme stratejileri ve buna dayalı etkinlikler bilgilendirici metin dinleme başarısında yaklaşık %29’luk artış sağlamıştır. Kontrol grubunda ( $t_{(29)} = -1,255$   $p > ,05$ ) ise ders kitabına bağlı olarak yapılan etkinlikler öğrencilerin bilgilendirici metin dinleme başarı puanlarında artış sağlamıştır ancak bu artış anlamlı bir fark oluşturacak düzeyde değildir. Kontrol grubunda bilgilendirici metin başarı ortalamasının çok az da olsa artmış olması, öğrencilerin ön testteki deneyimlerini hatırlamış olmasından kaynaklanmış olabilir. Etki büyüklüğü deney grubu için ( $\eta^2 = ,648$ ) büyük, kontrol grubu için ( $\eta^2 = ,053$ ) küçük olarak hesaplanmıştır.

Üçüncü alt problemin sonuçları incelendiğinde deney grubunun her üç bağımlı değişken sonuçlarının da son test lehine anlamlı fark gösterdiği görülmüştür. Kontrol grubunun ise dinleme öz yeterliğinin ve öyküleyici metin dinleme başarısının son teste anlamlı fark oluşturmayacak şekilde düşüş gösterdiği, bilgilendirici metin dinleme başarısının ise anlamlı olmayan bir düzeyde artış gösterdiği belirlenmiştir. Bu sonuçlardan yola çıkarak yapılan dinleme stratejileri öğretimi ve buna dayalı etkinliklerin öğrencilerin dinleme başarılarını ve dinleme öz yeterlik algılarını arttırdığı söylenebilir.

### Sonuç ve tartışma

Dinleme becerisi ile ilgili alan yazında yapılan çalışmalar incelendiğinde çeşitli yöntem, teknik ve stratejilerin dinleme becerisinin gelişiminde olumlu katkı sağladığı ve dinleme başarısını olumlu yönde etkilediği görülmektedir (Kaplan, 2004; Doğan, 2007; Katrancı, 2012; Yıldız, 2015; Kassem, 2015; Simasangyaporn, 2016). Bu da yapılan çalışmanın sonuçlarını destekler niteliktedir.

Öz yeterlik inancı, bireyin bir görevi yerine getirmek için kendi yeteneğini değerlendirmesi ve öğrenmede zorluk çekilen konuları belirlemesini kapsar (Aydın, Demircan & İnnalı, 2015). Bandura’ya (1994) göre öz yeterlik bireyin becerilerinde ne düzeyde yetkin olduğu ile ilgili değil, kendi becerilerine ne kadar inandığıyla ilgilidir (akt. Akkoyunlu, Orhan ve Umay, 2005:1). Öz yeterlik inancı yüksek bireyler başarmak için daha çok çaba sarf ederken öz yeterlik algısı düşük bireyler kolay pes etmekte, çabuk vazgeçmekte, endişe ve kaygı gibi duygularla başa çıkmakta zorlanmaktadır. Yapılan birçok araştırmada çeşitli strateji, yöntem ve tekniklerin öğretiminin öğrencilerin öz yeterlik algılarında olumlu düzeyde artış sağladığı görülmektedir (Müldür, 2017; Ayaz, 2018; Korkmaz, 2015). Rahimi ve Abedini (2009) dinleme öz yeterliği ile dinleme başarısı arasında önemli ölçüde ilişki olduğunu belirlemiştir.

Deney grubundaki öğrencilerin dinleme öz yeterlik ölçeği ön test ve son test sonuçları karşılaştırıldığında son test lehine anlamlı bir fark olduğu görülmektedir. Deney grubundaki öğrencilerin öz yeterlik algısında yaklaşık %13’lük bir artış olduğu saptanmıştır. Kontrol grubundaki öğrencilerin dinleme öz yeterlik ölçeğinin ön test ve son testinden aldıkları sonuçlara bakıldığında ise anlamlı olmayan düzeyde azalma olduğu anlaşılmaktadır. Sonuç olarak dinleme stratejileri öğretiminin deney grubundaki öğrencilerin dinlemeye yönelik öz yeterlik algısını arttırdığı belirlenmiştir.

Deney grubu öğrencilerinin öyküleyici metin dinleme başarısı ön test ve son test sonuçları karşılaştırıldığında son test lehine anlamlı bir fark olduğu belirlenmiştir. Deney grubundaki öğrencilerin öyküleyici metin dinleme başarısında ön teste göre yaklaşık %26'lık bir artış sağlanmıştır. Kontrol grubu öğrencilerinin sonuçlarına bakıldığında ise öz yeterlikte olduğu gibi öyküleyici metin dinleme başarısında da son test sonuçlarında istatistiksel olarak anlamlı olmayan bir düşüş gözlenmiştir. Sonuç olarak dinleme stratejileri öğretimi ve buna dayalı etkinliklerin öyküleyici türdeki metinlere yönelik dinleme başarısını arttırdığı belirlenmiştir.

Deney grubu öğrencilerinin bilgilendirici metin dinleme başarısı ön test ve son test sonuçları karşılaştırıldığında son test lehine anlamlı bir fark bulunmuştur. Deney grubu öğrencilerinin bilgilendirici metin dinleme başarısı yaklaşık %29 artmıştır. Kontrol grubu öğrencilerinin sonuçları incelendiğinde bilgilendirici metin dinleme başarısında artış olduğu ancak bu artışın anlamlı bir fark oluşturmadığı belirlenmiştir. Buna göre dinleme stratejileri öğretimi ve bu stratejilere yönelik uygulanan etkinliklerin bilgilendirici türdeki metinlere yönelik başarıyı arttırdığı sonucuna ulaşılmıştır.

Deney ve kontrol gruplarının son testten aldıkları puanlar karşılaştırıldığında her üç ölçek türünde de son testlerde deney grubu lehine anlamlı bir fark olduğu görülmüştür. Araştırmanın sonuçlarıyla benzer sonuçları olan araştırmalardan söz edilirse, Yıldız (2015), dinleme stratejileri öğretiminin dinlediğini anlama becerilerine olan etkisini araştırmış, yapılan ön test ve son test başarı testlerinde son test lehine anlamlı bir farklılık olduğunu belirlemiştir. Katrancı (2012), üst biliş stratejileri öğretiminin dinlediğini anlama becerilerine olan etkisini incelemiş ve deney grubu lehine dinlediği anlama becerisi yönünden anlamlı fark olduğu sonucuna ulaşmıştır. Kocaadam (2011), not alarak dinleme eğitiminin dinleme becerisi üzerindeki etkisini araştırmış, deney grubu öğrencilerinin son test puanının kontrol grubu öğrencilerinin son test puanından anlamlı düzeyde daha yüksek olduğunu belirlemiştir. Kassem (2015), dinleme stratejileri kullanımı ile dinleme becerisi ve dinleme öz yeterlik algısı arasındaki ilişkiyi incelemiş ve dinleme stratejilerini sıklıkla kullanan öğrencilerin dinleme becerilerinin ve dinleme öz yeterlik algılarının da yüksek düzeyde olduğu sonucuna ulaşmıştır. Bu sonuçlarda da görüldüğü gibi dinlemeye yönelik yöntem ve stratejilerin öğretimi öğrencilerin dinleme başarısını ve öz yeterlik algılarını olumlu biçimde etkilemektedir.

Araştırmadan elde edilen sonuçlar doğrultusunda benzer araştırmaların eğitim kurumlarının farklı kademelerinde de yapılması, Türkçe öğretmenliği lisans programlarında yer alan “Dinleme Eğitimi” derslerinde öğretmen adaylarının dinleme stratejilerinin kullanımı konusunda yetkinliklerinin ve farkındalıklarının artırılması, görevdeki öğretmenlere dinleme stratejilerinin etkili kullanımı konusunda hizmet içi eğitimler verilmesi, Türkçe ders kitaplarında yer alan dinleme etkinliklerinin dinleme stratejilerinin kullanımına yönelik olarak düzenlenmesi önerilmektedir.

#### **Kaynakça**

Akkoyunlu, B., Orhan, F., & Umay, A. (2005). Bilgisayar Öğretmenleri İçin “Bilgisayar Öğretmenliği Öz Yeterlik Ölçeği” Geliştirme Çalışması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*. 29, 1-8.

- Akyol, H. (2006). *Türkçe öğretim yöntemleri*. Kök Yayıncılık.
- Ayaz, B. (2018). *Sanatsal etkinliklerle bütünleştirilmiş fen öğretiminin öğrencilerin fen akademik başarısına, öz yeterlik algısına ve motivasyonuna etkisi*(Yayımlanmamış Yüksek Lisans Tezi) Uşak Üniversitesi Fen Bilimleri Enstitüsü: Uşak.
- Aydın, İ. S., Demircan, U. ve İnnalı, H. Ö. (2015). Ortaokul Öğrencilerinin Dinleme/İzleme Öz Yeterlik Algılarına Yönelik Ölçek Geliştirme Çalışması. *International Journal of Languages' Education and Teaching*. 1420-1435.
- Bentley, S., ve Bacon, S. (1996). The all new, state-of-the-art ILA definition of listening: Now that we have it, what do we do with it?. *Listening Post*, 56, 1-5.
- Bird, D.E. (1953). Teaching Listening Comprehension. *Journal of Communication*, 3:2, 127.
- Brent, R., Anderson, P. (1993). Developing Children's Classroom Listening Strategies. *The Reading Teacher*, (47), 122-126.
- Büyüköztürk, Ş. (2016). *Sosyal Bilimler İçin Veri Analizi El Kitabı*. Pegem Akademi.
- Cihangir, Z. (2004). *Kişilerarası İletişimde Dinleme Becerisi*. Nobel Yayınevi.
- Çiğçi, M. (2001). Dinleme Eğitimi ve Dinlemeyi Etkileyen Faktörler. *AKÜ Sosyal Bilimler Dergisi*, 2(2), 165-177.
- Demir Atalay, T. ve Melanlıoğlu, D. (2016). "Ortaokul Öğrencileri için Dinleme Stratejileri Ölçeği"nin Geçerlilik ve Güvenilirlik Çalışması. *A.Ü. Türkiyat Araştırmaları Enstitüsü Dergisi*, 57, 1885-1904. <https://doi.org/10.14222/Turkiyat1600>
- Doğan, Y. (2007). *İlköğretim ikinci kademedeki dil becerisi olarak dinlemeyi geliştirme çalışmaları* (Yayımlanmamış Doktora Tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Doğan, Y. (2016). *Dinleme eğitimi*. Pegem Akademi.
- Gonulal, T. (2020). Improving listening skills with extensive listening using podcasts and vodcasts. *International Journal of Contemporary Educational Research*, 7(1), 311-320. <https://doi.org/10.33200/ijcer.685196>
- Güneş, F. (2007). *Türkçe Öğretimi ve Zihinsel Yapılandırma*. Nobel Yayınevi.
- Holden, W. (2004). Facilitating Listening Comprehension: Acquiring Successful Strategies. *Bulletion of Hokuriku University*, 28, 257-266.
- İzin, N. (2006). *Dil becerilerinin gelişiminde öz güven*(Yayımlanmamış Yüksek Lisans Tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Jung, E. (2003). The role of discourse signaling cues in second language listening comprehension. *The Modern Language Journal*, 87, 562-577.
- Kaplan, H. (2004). *İlköğretim 6. Sınıf Öğrencilerinin Dinleme Becerileri Üzerine Bir Araştırma*(Yayımlanmamış Yüksek Lisans Tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Karasar, N. (2015). *Bilimsel Araştırma Yöntemi*. Nobel Yayınevi.
- Kassem, H. M. (2015). The Relationship between Listening Strategies Used by Egyptian EFL College Sophomores and Their Listening Comprehension and Self-Efficacy. *Canadian Center of Science and Education*, Vol. 8, No. 2, 153-169. <https://doi.org/10.5539/elt.v8n2p153>
- Katrancı, M. (2012). *Üstbiliş Stratejileri Öğretiminin Dinlediğini Anlama Becerisine ve Dinlemeye Yönelik Tutuma Etkisi*(Yayımlanmamış Doktora Tezi). Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

- Kılıçoğlu, G., Karakuş, E.N. ve Demir, T. (2011). Sosyal Alanlar Öğretmenlerinin Kişilerarası Özyeterlik İnançlarının Değerlendirilmesi. *International Conference On New Trends in Education and Their Implications*, 27-29 April 2011, Antalya-Turkey.
- Kocaadam, D. (2011). *Not Alarak Dinleme Eğitiminin İlköğretim 7. Sınıf Öğrencilerinin Dinleme Becerilerini Geliştirmesine Etkisi*(Yayımlanmamış Yüksek Lisans Tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Korkmaz, G. (2015). *Yaratıcı yazma yönteminin 6. sınıf öğrencilerinin yazma öz yeterlik algularına, yazmaya ilişkin tutumlarına ve yazma becerisi akademik başarılarına etkisi*(Yayımlanmamış Yüksek Lisans Tezi). Gaziantep Üniversitesi Eğitim Bilimleri Enstitüsü, Gaziantep.
- Linnenbrink, E.A., Pintrich, P.R. (2003). The Role of Self-Efficacy Beliefs in Student Engagement and Learning in the Classroom. *Reading and Writing Quarterly*, 19, 119-137.
- Mendelsohn, D. J. (2006). *Learning How to Listen Using Listening Strategies. Current Trends in the Development and Teaching of the Four Language Skills*. Heinle & Heinle
- Müldür, M. (2017). *Öz düzenlemeye dayalı yazma eğitiminin ortaokul öğrencilerinin bilgilendirici metin yazma becerisine, yazmaya yönelik öz düzenleme becerisine ve yazma öz yeterlik algısına etkisi*(Yayımlanmamış Doktora Tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Nunan, D. (1998). *Approaches to Teaching Listening in the Language Classroom*. Paper presented at the Korea TESOL Conference, Seoul.
- Osada, N. (2004). Listening comprehension research: a brief review of the past thirty years. *Dialogue*, 3, pp. 53-66.
- Pinnell, G. S., Jaggar, A. M. (2003). Oral language: speaking and listening in elementary classrooms. *J. Flood, D. Lapp, J. R. Squire, & J. Jensen, Handbook of research on teaching the English language arts Mahwah, NJ: Erlbau*. pp. 881-913.
- Rahimi, A., Abedini, A. (2009). The Interface Between EFL Learners' Self-Efficacy Concerning Listening Comprehension and Listening Proficiency. *Novitas-ROYAL Research on Youth and Language, Vol. 3(1)*, 14-28.
- Sever, S., Kaya, Z., Aslan, C., & Düzçay, B. (Ed.). (2013). *Etkinliklerle Türkçe Öğretimi*. Tudem Yayınları.
- Siegel, J. (2015). *Exploring Listening Strategy Instruction Through Action Research*. Palgrave Macmillan.
- Simasangyaporn, N. (2016). *The effect of listening strategy instruction on Thai learners' self-efficacy, English listening comprehension and reported use of listening strategies*(Unpublished Doctoral Thesis). University of Reading Institute of Education: Reading.
- Türkel, A. (2012). Dinleme Eğitimine İlişkin Teknikler ve Değerlendirmeleri. *Buca Eğitim Fakültesi Dergisi*, (34), 128-141.
- Vandergrift, L. (2004). Listening to learn or learning to listen?. *Annual Review of Applied Linguistics*, 24, 3-25.
- Wolvin, A.D. (2012). Listening in the General Education Curriculum. *International Journal of Listening*, (26), 122-128.
- Yıldız, N. (2015). *Dinleme Stratejileri Öğretiminin Beşinci Sınıf Öğrencilerinin Dinlediğini Anlama Becerilerine Etkisi*(Yayımlanmamış Doktora Tezi). Onsekiz Mart Üniversitesi Eğitim Bilimleri Enstitüsü, Çanakkale.



## Silent Reading Fluency and Reading Comprehension: Two Halves of an Apple

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### ABSTRACT

The current study aims to differentiate reading fluency and reading comprehension abilities in Turkish, a fairly transparent language. The research in these abilities with regards to transparent languages is limited. Moreover, Turkish educators appeal for a more comprehensive knowledge of reading abilities and difficulties. To address these, a cross-sectional correlation study was designed. The silent reading fluency and reading comprehension skills of 257 Turkish monolinguals from 3<sup>rd</sup> to 7<sup>th</sup> grades were evaluated. The results demonstrated that there was a positive moderate correlation between these two skills. This moderate relationship was stable from 3<sup>rd</sup> to 7<sup>th</sup> grade. The finding that this relation is only moderate indicates a lack of one-to-one correspondence between these two skills, which suggests that difficulty with one of these skills does not necessitate difficulty with the other. Hence, students' reading fluency and reading comprehension skills should be independently monitored by teachers in order to support students efficiently.

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### Statement of Publication Ethics

This study has been conducted by following the publication ethics. Approval for this study with the identification code REDC # 2019/51 was obtained from the Research Ethics and Data Management Committee of Tilburg School of Humanities and Digital Sciences on the 18<sup>th</sup> of June 2019.

### Conflict of Interest

There are no conflicts of interest.

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## Introduction

The act of reading requires decoding written words and putting these words together to comprehend the text (for a review see Hoover & Tunmer, 1993). These two components of reading correspond to two skills, respectively reading fluency and reading comprehension. The subject of “reading” in education and education research in Turkey is riddled with inconsistencies. Some studies can define “reading” only as “comprehending and interpreting what is read” (e.g. Akin & Çeçen, 2014). Moreover, the curriculum on teaching reading in Turkish classes of elementary and middle schools illustrates a lack of emphasis on reading fluency skills, especially in older grades (Arı & Keskin, 2016; Kökçü & Demirel, 2017). On the other hand, when teachers are asked to evaluate “reading difficulties”, they mostly associate “reading” with reading fluently and phonological awareness (Doğan, 2013; Kodan, 2020). The current study aims to clarify the issues and definitions regarding reading skills of Turkish children. The subjects of reading fluency and reading comprehensions will be approached separately below. Moreover, the current study will investigate the relationship between these two skills.

### Reading Fluency

Teachers in Turkey associate reading difficulties with arduous reading, frequent pauses and reading mistakes (Doğan, 2013). However, these are only signs of reading fluency, one skill relevant for reading. Reading fluency can be defined as reading a text correctly and speedily (Fuchs, Fuchs, Hosp, & Jenkins, 2001). This section focuses on reading fluency, whereas the next section will focus on the other skill relevant for reading, namely reading comprehension.

Children acquire the ability to read in Turkish, which is a relatively transparent language (for more detail see Terziyan & Yıldız, 2020), faster than they do in English (Oney & Goldman, 1984). However, this does not mean that all children will easily figure out how to read in Turkish. In Erden, Kurdoğlu and Uslu’s (2002) study on over two thousand Turkish children in elementary schools, they have observed that 1.3% of the children had not acquired the ability to read. Since Turkish is easier to read due to the fact that it is mostly read the way it is written, Turkish children who have trouble reading stick out like sore thumbs among their peers. However, some children might have slight difficulties that make them harder to be noticed. The most assuring way of making sure all children with reading fluency difficulties are identified is to routinely monitor their reading fluency skills. Normative data on Turkish elementary students’ reading fluency skills can be found in two studies: Erden et al. (2002), and Bakır and Babür (2018).

Evaluations of oral reading fluency (i.e. reading out loud) as in these two studies cause feasibility issues in classrooms since they require children to be evaluated one at a time (Ülper & Yağmur, 2016). This suggests that expecting teachers to routinely monitor their students’ oral reading fluency is not realistic. The unfeasibility issue of oral reading fluency measures underlines the need for alternative methods of monitoring reading fluency, such as silent reading fluency evaluations (Ülper & Yağmur, 2016). Moreover, there is evidence that suggests silent reading fluency is more relevant for school since it

has been found to be more tightly related to comprehending what one's reading than oral reading fluency (Klauda & Guthrie, 2008).

Since reading fluency skills and academic performance are closely related (Rasinski et al., 2017), monitoring children's reading fluency in any method is especially crucial. An indication for such a relationship is found in investigations of children's reading processes. When children were asked to read aloud for the class, children with reading fluency difficulties dedicate their cognitive load to accurately reading rather than understanding what they are reading (LaBerge & Samuels, 1974). Therefore, the reluctance for reading among children with reading fluency difficulties (Torppa, Vasalampi, Eklund, Sulkunen & Niemi, 2020) is not surprising. This is troublesome because children who read as a hobby have been observed to be more successful not only in language courses but also in other courses such as science, math and history (Whitten, Labby & Sullivan, 2016). For these reasons, reading fluency of children should be monitored and children who are having difficulties should be immediately supported before their difficulties start affecting their academic performance.

### **Reading Comprehension**

Any English speaker can read "muh vee bohn jooek" /ma vi bon dzuk/ out loud fluently in their second try even if they struggle in their first try. However, English monolingual speakers can only sound it out but cannot comprehend the meaning behind them. On the other hand, a Turkish-English speaker might be able to see the meaning behind this phrase ("mavi boncuk" 'blue bead'). This example demonstrates how reading out loud fluently and reading comprehension are distinct processes. Accordingly, the act of reading requires the ability to decode words and to understand them. Despite that, teachers in Turkey associate reading difficulties only with reading fluency but not reading comprehension (Doğan, 2013). Furthermore, while reading fluency difficulties can be noticed by arduous reading with frequent mistakes, reading comprehension difficulties are much harder to notice (Kelso, Whitworth, Parsons & Leitão, 2020). The importance of reading comprehension increases significantly after the fourth grade since this marks the switch from learning-to-read to reading-to-learn (Sanacore & Palumbo, 2009). In other words, from fourth grade on teachers start expecting children to absorb knowledge from reading assigned texts, which require many levels of reading comprehension skills.

Reading comprehension is comprised of low-level skills such as recognizing words, and especially chunks as well as high-level skills such as inferring what is between the lines (Pressley, 2000). Skills of reading comprehension can be summarized from lower to higher levels as: (1) sentence comprehension, (2) putting together sentences to construct the meaning of the text, (3) incorporating background knowledge with information in the text, (4) discerning textual elements, (5) self-regulating their comprehension of the text (Irwin, 1983; 1991; 2006). Especially higher-level reading comprehension skills are strongly related to academic performance (Meneghetti, Carretti, & De Beni, 2006). Deficits in any variety of reading comprehension skills have been observed in children with reading comprehension difficulties (Williams, 1993).

In international reading comprehension assessments, all of these reading comprehension levels are specifically targeted. On such assessments, Turkish children have performed significantly lower than children from other countries (Mullis, Martin, Gonzalez & Kennedy, 2003). As a response to these results, Ministry of Education in Turkey has overhauled the education system but upon seeing consistently low performance of Turkish students in international assessments, some aspect of the education has reverted back (Savaş, 2017). Another country that has underperformed in these assessments was Portugal (Araújo, Folgado & Pocinho, 2009). When the possible underpinnings of their results were investigated, researchers came to the conclusion that an emphasis on lower-level reading comprehension skills and a lack of emphasis on higher-level reading comprehension skills in Portuguese education leads to the low performance of Portuguese children in international reading comprehension assessments (Araújo et al., 2009). Turkish education in elementary schools incorporates all levels of reading comprehension skills (Tüm, 2016); however, the prominence by far is on lower-level reading comprehension skills (Coşkun, 2013; Sarar Kuzu, 2013; İnce & Gözütok, 2017; Çeliktürk Sezgin & Gedikoğlu Özilhan, 2019). Moreover, when reading comprehension questions created by teachers were investigated, it was revealed that teachers tended to create lower-level reading comprehension questions (e.g. Polat & Dedeoğlu, 2020). Therefore, it can be surmised that Turkish children's low performance in international reading comprehension assessments might be explained by the lack of sufficient training in higher-level reading comprehension skills in line with the findings of the Portuguese researchers.

Considering children with reading comprehension difficulties struggle most with higher-level reading comprehension skills (Bowyer-Crane & Snowling, 2005), Turkish education focusing mostly on lower-level reading comprehension skills might conceal the difficulties these children might be having. It would be hard for teachers to notice difficulties children might be having in higher-level reading comprehension skills if such skills are almost never utilized in classes. Moreover, children with reading comprehension difficulties might be lost within Turkish children's overall low performance regarding reading comprehension. Therefore, monitoring children's reading comprehension skills consistently is essential for discerning the ones who are struggling.

Monitoring children's reading comprehension skills is also important for non-language courses as well. While math and science courses focus on lower-level reading comprehension skills such as retrieving explicitly stated information in Turkish elementary education (e.g. Taştekinöğlu & Aydın, 2014), same courses focus on higher-level reading comprehension skills such as applying or evaluating information stated in the text in Turkish middle school education (Özcan & Oluk, 2007; Gündüz, 2009; Biber & Tuna, 2017). Consequently, children with low reading comprehension skills might struggle in these courses as well. Therefore, it is not surprising that children with reading comprehension difficulties were observed to be unmotivated towards language courses as well as other courses and overall exhibiting symptoms of burnout syndrome (Torppa et al., 2020). Hence, it would be misguided to assume that reading comprehension difficulties only affect language courses because they affect academic performance across-the-board.

## Current Study

The literature on literacy abilities in children has demonstrated that the relationship between reading fluency and reading comprehension is positive, moderate and significant even in higher grades (e.g. Denton et al., 2011). However, as Ziegler and Goswami (2006) point out most studies on literacy acquisition has been focused on English but since English language is highly distinct from other languages, literacy research in English is not an appropriate lens for understanding literacy in other languages (for a review, see Share, 2008). Therefore, a relationship between reading fluency and reading comprehension in English does not necessitate such a relationship in Turkish as well. Research on languages more transparent than English have found that the strength of the relationship between these two skills diminishes over time as children grow older and increase their literacy skills (e.g. Torppa et al., 2016). Research on Turkish has found significant relationships in elementary school between oral reading fluency and reading comprehension (Baştuğ & Akyol, 2012; Baştuğ & Keskin, 2012; Yıldırım & Ateş, 2012; Kaya & Yıldırım, 2016) as well as silent reading fluency and reading comprehension (Yıldırım & Ateş, 2012; Çetinkaya, Ülper & Yağmur, 2015; Saraçlı Çelik, 2019). Considering other languages more transparent than English have demonstrated a decline in the strength of the relationship between reading fluency and reading comprehension (e.g. Torppa et al., 2016), there is a need for research demonstrating the relationship between these two skills in Turkish over time from elementary school to middle school.

The current study aims to provide insight to the relationship between silent reading fluency and reading comprehension in Turkish over time. This aim is relevant both for the researchers interested in children's literacy acquisition as well as the educators in Turkey. The current study adds to the body of research on children's literacy acquisition by investigating the relationship between these two skills between ages 7 and 11 in a fairly transparent language. Moreover, the current study is designed to provide support for teachers who find their education on literacy related issues inadequate and urge for increased education in these topics (Balci, 2019) by illustrating how these skills can be investigated and how much these skills are related throughout elementary and middle school. We expect to demonstrate a significant moderate positive correlation between silent reading fluency and reading comprehension in Turkish speaking typically developing children between third and seventh grades. However, in line with previous research on relatively transparent languages, this relationship is expected to decrease over time.

## Methodology

### Research design and publication ethics

The current study was a cross-sectional (between 3<sup>rd</sup> and 7<sup>th</sup> grades) correlation study with two variables (silent reading fluency and reading comprehension). The task evaluating silent reading fluency measures the speed of accurate reading. The task evaluating reading comprehension provides a text and measures participants' ability to comprehend and interpret the text at five levels detailed above. Approval for this study

with the identification code REDC # 2019/51 was obtained from the Research Ethics and Data Management Committee of Tilburg School of Humanities and Digital Sciences on the 18th of June 2019.

## Participants

Participants were collected from seven randomly chosen schools from two boroughs of Istanbul, namely Bakırköy and Şişli. Permissions have been obtained from the directors of Ministry of Education of Istanbul, Bakırköy and Şişli, school principals and the parents of the participants. Moreover, verbal consents have been obtained from the participants. The descriptive statistics on the participants are given in Table 1. The total number of participants is 257. However, one of the 5<sup>th</sup> grader's data has been removed from the study due to failure to complete the study.

**Table 1.** The participants' descriptive statistics

Grade	Number of Participants	Average Age (SS)	Percentage of Female Participants	Percentage of Male Participants
3	51	7;7 (0;4)	59	41
4	52	8;8 (0;5)	47	53
5	50	9;7 (0;5)	59	41
6	53	10;5 (0;4)	50	50
7	51	11;4 (0;4)	52	48

## Materials

Silent reading fluency task evaluated children's ability to read swiftly and accurately. This task, which was created for the current study, was inspired by established international assessments (Test of Silent Reading Efficiency and Comprehension, Wagner, Torgesen, Rashotte & Pearson, 2010; Kaufman Test of Educational Achievement III, Kaufman & Kaufman, 2014; Woodcock Johnson-IV: Tests of Achievement, Schrank, Mather, & McGrew, 2014). The silent reading fluency task was composed of 60 easily understandable sentences. The average number of letters in these sentences was 23.7. Sentences made up of two words was 8, three words 30, four words 15 and five words 7. Half of these sentences was true and the other half was false. The sentences were especially easy to judge. An example of a true sentence was "Limonlar ekşidir" 'Lemons are sour'. An example of a false sentence was "Çilek bir sebzedir" 'Strawberries are vegetables'. The motivation behind generating easily judged sentences laid with the purpose of this task was to evaluate their reading fluency and not reading comprehension.

The other task in the current study is the reading comprehension task, which evaluates children's ability to understand and critically think about a text. This task was created for the current study and was inspired by the international reading comprehension assessments such as PIRLS (Mullis, Martin, Foy & Drucker, 2012) and PISA (Schleicher, Zimmer, Evans & Clements, 2009). This task consists of an expository text and 15 questions about it. The questions fell into five categories and there were three questions from each category. The categories are as follows:

- i. Finding explicit information: These questions required children to find explicitly stated information in the text
- ii. Inference within a paragraph: These questions required children to integrate two explicitly stated information within a paragraph in order to make an inference
- iii. Inference across paragraphs: These questions required children to integrate two explicitly stated information in different paragraphs in order to make an inference
- iv. Background information: These questions required children to integrate information they already knew with a piece information explicitly stated information in the text
- v. Meta-linguistic and meta-textual knowledge: These questions required children to think about language use and authorial intent

### **Procedure and Data Analysis**

The author informed the schools about the study and discussed its details initially with the principals and/or vice-principles of the schools. Then, she explained the details of the study with either the school's counselor or the classroom teachers depending on the schools' preferences. The author was provided with randomly selected classrooms per grade level. She arranged the dates and times of testing with the school and supplied them with enough informed consent forms for the students in the designated classrooms. On the day of the testing, she collected the informed consent forms back. The author tested the participants in a classroom at their school as a group. Students whose parents did not give consent were given an assignment to work on by their teacher. The author obtained verbal consent from the rest of the students before testing began. The students whose parents consented but did not want to participate in the study were asked to complete the assignment given by their teacher. Each student participating in the study was given a set of stickers which all had the same number on them. They were asked to put a sticker on each piece of paper they were turning in and they were informed to not to write their names on the tasks. These numbers acted as the participants' identifiers.

For the silent reading task, they were explained that they needed to put a "T" next to true statements and "F" next to false statements. In order to make sure they understood the task, they were asked "What letter would you write for the sentence 'Our flag is blue and green'?", which they answered aloud as a group. Then, they were asked "What letter would you write for the sentence 'Our flag is red and white'?", which again they answered aloud as a group. Afterwards, they were given the opportunity to ask questions. When the experimenter was satisfied that all the participant understood the task, they were handed out printed version of the list of sentences in the silent reading fluency task. The print outs were upside down so that they could not see the sentences until the timer was started.

Third and fourth graders were told they had 3 minutes whereas fifth, sixth and seventh graders were told they had 2 minutes. They were explained that they needed to read and correctly assess as many sentences as they could in the allotted time. They were also explained that they were not expected to finish going through all the sentences and that the number of sentences were intentionally too many for them to be able to finish. Then, they were asked to turn over the print outs at which time the researcher started the timer. The participants were prompted when they had a minute left and another one when they had 15 seconds left. When their allotted time was up, they were asked to put their pens down and pass their print outs to the front of the class. The score each participant received from this task was calculated by determining the sentences they have correctly judged, counting the number of words in these sentences and dividing this number by the allotted time (3 for third and fourth graders but 2 for fifth, sixth and seventh graders). For example, if a fifth grader correctly assessed six sentences as true or false, the researcher would count the number of words in these six sentences and divide it by two. This value represents the number of words they correctly read in one minute.

For the reading comprehension task, the participants were explained that they were going to be asked to read a text and then answer questions about this text. They were told that they could go back to the text while answering the questions. They were asked to finish the task within 20 to 30 minutes. They were handed out the text and the questions. The time for this task was more flexible. While all participants started this task at the same time, some of them completed and turned in their papers before the allotted time was over. The score they received from this task was the number of questions they correctly answered.

Two separate one-way ANOVAs were conducted to determine whether there was a difference between grades. One was for the silent reading fluency and the other for the reading comprehension task. This analysis compares average score of each grade with each other. For example, the average score of the third graders is compared to the average score of fourth graders, and that of fifth graders, sixth graders and seventh graders. In order to explore the relationship between silent fluency skills and reading comprehension skills, a series of correlations between the scores of these two tasks were run. Due to the nature of the data (e.g. it is not continuous), Spearman's rank correlation was used (Khamis, 2008). A correlation was conducted per grade as well as overall across the grades.

## **Results**

The average scores participants received in the silent reading task by grade along with the standard deviation and the first quartile are given in Table 2. This table can be read as follows: Third graders on average read between 26.63 and 49.21 words in a minute; moreover, 75% of the third graders read more than 30.3 words in a minute. The ANOVA revealed a significant effect of grade,  $F(4, 254) = 42.394$ ,  $p < .001$ . Post-hoc comparisons revealed only the difference between the average scores of fourth and fifth graders was insignificant while all the other differences between grades were significant. This suggests that higher grades read more words per minute than lower grades.

**Table 2.** The Results of the Silent Reading Fluency Task

Grade	Average	Standard Deviation	First Quartile
3	37.92	11.29	30.3
4	48.03	11.91	36.0
5	51.18	15.61	40.9
6	62.08	18.61	51.0
7	74.27	17.59	62.0

The average scores participants received in the reading comprehension task by grade along with the standard deviation and the first quartile are given in Table 3. The ANOVA revealed a significant effect of grade,  $F(4, 254) = 16.01$ ,  $p < .001$ . All post-hoc comparisons revealed significant differences between grades except the difference between fifth and sixth grade. Moreover, the difference between fourth and sixth grade was found to be almost significant ( $p = .073$ ). There were five types of questions in this task and 3 questions for each type. In other words, there were fifteen questions total. Average scores on each type of question by grade are provided on Table 4.

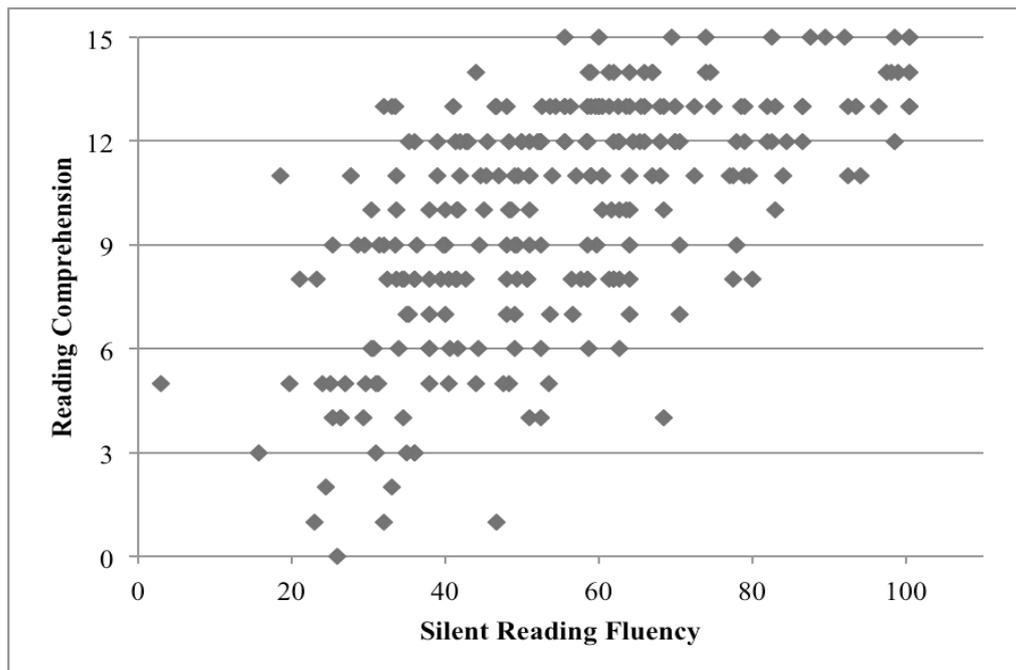
**Table 3.** The Results of the Reading Comprehension Task

Grade	Average	Standard Deviation	First Quartile
3	7.92	3.53	5
4	9.25	3.17	8
5	10.40	2.84	9
6	10.26	2.97	8.5
7	12.41	2.09	12

**Table 4.** The Results of the Reading Comprehension Task by Question Type

Grade	Finding Explicit Information	Inference within a Paragraph	Inference across Paragraphs	Background Information	Meta-linguistic and Meta-textual Knowledge
3	2.0	1.7	1.2	1.5	1.6
4	2.1	2.0	1.5	1.8	1.9
5	2.3	2.4	1.6	1.9	2.2
6	2.1	2.4	1.6	1.8	2.2
7	2.8	2.7	2.0	2.2	2.7

The overall correlation between silent fluency task and reading comprehension task revealed a positive and significant relationship between the tasks,  $r_s = .613$ ,  $p < .001$ , as illustrated in Figure 1. The strength of this relationship was considered to be moderate (Asaad & Hailaya, 2001, p. 105). Figure 1 includes all the participants. Each data point on the figure represents how that participant performed on the reading comprehension task (y-axis) and on the silent reading fluency task (x-axis). The correlations conducted per grade also revealed positive and moderate relationships (third grade,  $r_s = 0.55716$ ; fourth grade,  $r_s = 0.36184$ ; fifth grade,  $r_s = 0.53694$ ; sixth grade,  $r_s = 0.4608$ ; seventh grade,  $r_s = 0.4217$ ). All of these correlations were significant as well ( $p < .005$ ).

**Figure 1.** The overall relationship between silent fluency and reading comprehension

### Discussion and Conclusion

The current study cross-sectionally explored the development of silent reading fluency skills and reading comprehension skills of Turkish students between third and seventh grades. As expected, a positive moderate relationship has been found between these two skills. This finding is in line with research on the relationship between silent reading fluency and reading comprehension in other languages (e.g. Denton et al., 2011). Moreover, these findings from the current study complement other studies that explore this relationship in Turkish, which has mostly focused on elementary school students (Yıldırım & Ateş, 2012; Çetinkaya et al., 2015; Saraçlı Çelik, 2019) by illustrating this relationship exists in middle school as well.

There might be an inclination to interpret this correlation in terms of low fluency leading to low comprehension and high fluency leading to high comprehension. One might think if the child is not decoding words, how can they understand what they are reading so they might assume the reading fluency abilities of a child might determine their reading comprehension. There are, in fact, researchers that argue “fluency is one of the most necessary factors for comprehension” (Akyol & Kodan, 2016, p. 9). However, the opposite can be argued as well. One might think if the child comprehends what they are reading, they will activate relevant concepts in their minds, which will lead to recognizing the following words faster. Support for such an argument can be found in Jenkins and colleagues’ (2003) study that has found evidence for reading comprehension contributing to reading fluency. On the other hand, one can also argue, as some researchers do, that there is a reciprocal relationship between reading fluency and reading comprehension and that they both contribute to each other (e.g. Strecker, Roser, & Martinez, 1998). Alternatively, there can be a third variable that is contributing to both as in the example of

the correlation between ice cream sales and drowning cases for which the third variable is temperature (Babbie, 2004). The third variable affecting both reading fluency and reading comprehension could, for example, be vocabulary skills. Vocabulary skills of children have found to be predictors for both reading fluency (Lane et al., 2008) and reading comprehension (Ouellette, 2006). The current study's finding is a correlation and it is not capable of supporting any of the previously stated arguments. "Correlation does not equal causation, nor does it imply causation; it merely records the fact that 2... variables are not completely independent of one another," (Winters, Winters, & Amedee, 2010, p. 216).

If one cannot make such arguments listed above based on the current study's finding results, it begs the question what does this correlation indicate. Such a correlation is not surprising considering all the manners reading fluency and reading comprehension are interconnected as outlined above. What is perhaps surprising is that the level of this correlation is only moderate. Literacy curriculum deemphasizing reading fluency skills in older grades (Arı & Keskin, 2016; Kökçü & Demirel, 2017) treats reading fluency and reading comprehension either as the same skill (i.e. assuming that just working on reading comprehension would be enough to improve reading fluency) or as comprehension is the only relevant skill in older grades. Both such assumptions would be false. The correlation between reading comprehension and reading fluency is only moderate as the current study demonstrated, which suggests that they are not the same skill. If they were the same skill, the correlation would be much higher. The assumption that reading fluency is irrelevant in older grades is also an erroneous one according to studies that illustrate the importance of reading fluency for general academic success (e.g. Rasinski et al., 2005; Bigozzi et al., 2017). The findings of the current study suggest that both reading fluency and reading comprehension should be addressed in the literacy education curriculum even in older grades. This might be counterintuitive for educators or researchers because techniques often used for reading fluency in younger grades are not appropriate for older grades. For example, Öрге Yaşar (2019) finds reading out loud, a common activity in early grades, inappropriate for seventh graders. She recommends the solution of using age-inappropriate reading fluency activities and asserts that other activities such as closet drama are more appropriate for older students. Similarly, Rasinski and colleagues (2005) point out that techniques for improving reading fluency can be instigated through performative activities such as reciting poetry. Emphasizing both reading fluency and reading comprehension throughout education is necessary because the correlation between these two skills was found to be remain moderate over time in the current study.

This relationship between silent reading fluency and reading comprehension in Turkish remaining stable from third to seventh grade was contrary to the expectations. While there have been studies on fairly transparent languages that have found a significant relationship between reading fluency and reading comprehension in higher grades (for Spanish see Álvarez Cañizo, Cueva, Cuetos Vega, & Suárez Coalla, 2020), they have been cross-sectional studies with limited age ranges. Since those studies have limited age ranges, one cannot surmise whether the relationship between reading fluency and reading comprehension used to be higher but decreased with time. Longitudinal research with larger age ranges in fairly transparent languages, on the other hand, illustrated that in such

languages the relationship between reading fluency and reading comprehension decreases over time. For example, a study that investigated Finnish has found that the relationship between silent reading fluency and reading comprehension diminishes within the first couple of grades in elementary school (Torppa et al., 2016). They draw the conclusion that in transparent languages children get so good at reading fluency that it does not influence reading comprehension due to the ceiling effect. However, the methodology they use to determine reading fluency overlooks an important aspect of reading fluency: prosody. Prosody is reading “with appropriate expression or intonation coupled with phrasing that allows for the maintenance of meaning” (Kuhn, Schwanenflugel, & Meisinger, 2010, p. 233). The current study suggests that when prosody is included in reading fluency measures, the correlation between reading fluency and reading comprehension remains stable even in fairly transparent languages. This underlines the importance of methodology used to measure reading fluency and reading comprehension. Below various measurement tools will be described and appraised.

The measurement tools used by Torppa and colleagues (2016) to assess and evaluate silent reading fluency were focused on reading fluency at word level. One was a matching task where the students matched pictures with words. The other was similar to the Test of Silent Contextual Reading Fluency (Hammill, Wiederholt & Allen, 2006). In this task, children were presented with a string of letters and they were asked to put lines between words within the allotted time. For example, the string “moonpinkcatbook” is divided into “moon|pink|cat|book”. Studies on literacy acquisition in Turkish have used similar tasks (e.g. Yıldırım & Ateş, 2012). The current study has not used these types of task due to these tasks only assessing reading fluency at word level and excluding prosody as well as these tasks’ incompatibility with the agglutinative characteristics of Turkish. Since both of these measurement tools are at word level, they do not assess reading prosody. Moreover, neither of these tasks would embrace the agglutinative characteristic of Turkish. Any reading measurement tool in Turkish that avoids suffixes would not be naturalistic because a large portion of words one reads has suffixes on them. For the picture-matching tool, it would be impossible to have a picture for “kitabın” ‘of the book’. For the string-of-words tool, an attempt to cope with this issue would be using strings of words with suffixes (e.g. “aydan|pembemsi|kedim|kitaplar” ‘from the moon|pinkish|my cat|books’). However, this might lead to children drawing a line after the word root then noticing the suffix, which would necessitate the children to erase the line they drew after the word root and draw another line after the suffix. Hence, they might lose time, get confused and even become frustrated.

Another type of silent reading fluency measurement used in the literature on literacy acquisition in Turkish is asking children to read a passage and let the experimenter know when they are done (e.g. Saracaloğlu, Dedebali & Karasakaloğlu, 2011). Such a measurement tool assesses accuracy, speed and prosody and would be a better assessment of reading fluency. However, this measurement does not provide insight into whether the children actually read the whole passage or how accurately they read it (Fuchs et al., 2001). A child could just skim the passage or another child declare that they are done halfway through the passage and the experimenter wouldn’t really know unless a second

part is added to this measurement. Asking reading comprehension questions after the child reads the passage might be an appropriate way to judge whether the child has read the whole passage. However, in this case the data of children who fail the reading comprehension part would have to be thrown out. This might skew the data and such an action would be considered avoidable data loss.

A type of silent reading fluency measure commonly used in literature (e.g. Çetinkaya et al., 2015; Saraçlı Çelik, 2019) is the standardized “Doğru ve Akıcı Sessiz Okuma Testi” ‘Accurate and Fluent Silent Reading Test’ (Ülper & Yağmur, 2016), which has taken its inspiration from the Test of Critical Early Reading Skills (Torgeson, Wagner, Lonigan, & DeGraff, 2002). In this test, children are given a list of real and pseudowords and asked to find as many real words as possible given in the allotted time. The children’s score on this measurement is based on how many real words they have found in the given time. However, it should be noted that this score is not a direct representation of the actual number of items they read in this measurement because these children also read pseudowords, which are not accounted for in their score. The pseudowords in this measurement are generated from real Turkish words so that pseudowords are not obviously apparent and the children cannot immediately tell that they are not Turkish words. For example “kjfyua” would be very easy for children to recognize as “not a real Turkish word” and therefore this measurement avoids such highly obvious fake words. Examples of pseudowords used in this measure are “hespi” (from “hepsi” ‘all’), “cokşu” (from “coşku” ‘enthusiasm’), “izma” (from “imza” ‘signature’), “yeçrek” (from “çeyrek” ‘quarter’) and “tağık” (from “kağıt” ‘paper’) among many others (Saraçlı Çelik, 2019). If you know Turkish, you might have not even realized that the former three are pseudowords because our brains can “read” words if the all the letters are jumbled expect the initial and final letters. This phenomenon is called typoglycemia (Lower, 2014). Typoglycemia and vocabulary skills have been found to be positively correlated (Assa, 2017). This suggests that children with higher vocabulary would be better at recognizing words even if their middle letters are jumbled. In other words, such a child would see “hespi” and read “hepsi” and mark this pseudoword as a real word. This would mean that children with higher vocabulary skills would make more mistakes on this measure, and they would lose precious time marking down these wrong answers. Consequently, a child with higher vocabulary skills would get a lower score than a child with lower vocabulary skills but similar silent reading speed. Therefore, this measure might be biased against children with higher vocabulary skills. Moreover, this measurement tool also neglects prosody since it assesses children’s reading fluency as word level. For these reasons, the current study opted not to use this measure.

The current study has chosen to adapt another type of silent reading fluency measure into Turkish due to shortcomings of the types of measurements listed above. However, the current measurement also has potential limitations. The current measurement requires children to judge whether the sentence they read is true or false and such judgments inevitably involve reading comprehension skills. In order to lessen the effects of reading comprehension skills on this measurement, the sentences were constructed to be highly straightforward. Moreover, avoiding reading comprehension skills in silent reading

fluency is inescapable. All silent reading measures outlined above are also contingent on the children's ability to recognize words. When a person recognizes a word, they also think about its meaning which has been demonstrated by priming studies (for an overview, see Gulan & Valerjev, 2010). Such studies have shown that people tend to recognize words faster if they are shown related words before hand. For example, they recognize "dog" faster after seeing "cat" (a related word) than they do after seeing "salt" (unrelated word). Therefore, while the silent reading measurement of the current study involves reading comprehension skills, silent reading measurements cannot avoid reading comprehension skills in any event.

The other measurement of the study, the reading comprehension measurement, is similar to the one used by Torppa and colleagues (2016). This type of reading comprehension measurement, which consists of reading a text and answering questions about it, is frequently used on in the literature on literacy acquisition in Turkish (e.g. Baştuğ & Keskin, 2012; Çetinkaya et al., 2015; Kaya & Yıldırım, 2016; Saraçlı Çelik, 2019). An example of a much less infrequently used measurement for reading comprehension in the literature is confirming sentence meanings task (e.g. Yıldırım & Ateş, 2012). In this measurement tool, children are expected to compare various sentences and decide whether these sentences have the same meaning or not. The current study has chosen to utilize the more frequently used measurement since it is analogous to reading comprehension activities present in Turkish education books, which also revolves around reading texts and answering questions about them (Tüm, 2016).

The current study illustrated how reading skills of children can be evaluated by providing two measurement tools that focus on different reading skills, silent reading fluency and reading comprehension. Teachers' awareness of their students' reading skills is relevant for organizing their materials based on their classrooms' general strengths and weaknesses (Lane, Oakes, & Menzies, 2010). Measurement tools teachers can use to track their students' reading skills in Turkish are not widely available. They can use normative information on elementary students' oral reading fluency in Erden and colleagues' (2002) or Bakır and Babür's (2018) studies. There is no normative information on children's silent reading fluencies in the literature (Çetinkaya et al., 2015, p. 1000). On the other hand, a normative measurement on children's reading comprehension abilities is "Okuma-Anlama Testi" 'Test of Reading and Understanding' (Ülper, Çetinkaya, & Bayat, 2017); however, the author has failed to find information on this measurement online. There is another measurement tool on reading comprehension titled "Sesli Okuma Becerisi ve Okuduğunu Anlama Testi" 'Oral Fluency Skills and Reading Comprehension Test', which is still under the process of collecting normative information (Çelik, Erden, Özmen, & Tural Hesapçioğlu 2016, p. 108). Since children with reading difficulties referred to be specialist by their teachers (Cappa & Giolivi, 2014), the lack of widely available normative reading skills measurement is especially important because teachers have been found to be highly lacking in terms of their knowledge of and ability to recognize specific learning disorders, which includes reading difficulties (Clure, 2013; Flynn & Rahbar, 1998; Madelaine & Wheldall, 2005). They also can have misconceptions about reading difficulties (Dinç, 2017). However, when teachers were provided with appropriate

instruments to base their judgments on, teachers were highly reliable in their judgments of children's abilities (e.g. de Araújo Vilhena, & Vieira Pinheiro, 2016). The current study provides a sample of measurement tools for assessing and evaluating reading skills. Next, standardized measurement tools for assessing and evaluating Turkish reading skills with normative information should be developed and made wide available and free for teachers to use. An important finding of the current study is that different reading skills should be assessed and evaluated separately because as Figure 1 demonstrated a child can be good at one reading skill and poor at another.

In the literature on reading difficulties in Turkish, some studies assess both reading fluency and reading comprehension in order to determine which children have a reading difficulty (e.g. Sidekli, 2010) while others only assess one of them (e.g. Kodan & Akyol, 2018; Kuruoğlu & Şen, 2018). Moreover, some studies determine that a child has a reading difficulty only if they have both poor reading fluency and poor reading comprehension (e.g. Türkmenoğlu & Baştuğ, 2017). While all these studies are informative, the manner in which they defined reading difficulty criteria might have limited their findings. Studies that use only reading fluency as a reading difficulty criterion, for example, would overlook children who have reading difficulties due to poor reading comprehension. The current study's findings suggest that if one is using only reading comprehension or reading fluency while determining reading difficulties, one might miss children who have reading difficulties. This is in line with what Baydık (2011) observed in his study on reading difficulties, which was that 5.2% of the students with reading comprehension difficulties did not demonstrate reading fluency difficulties. Literature on reading difficulties in English also illustrated that children might have a reading difficulty due to issues regarding only reading comprehension, only reading fluency or both (e.g. Leach, Scarborough, & Rescorla, 2003). Similar to Baydık (2011), Clemens and colleagues (2017) observed that most children with reading comprehension difficulties in English also had reading fluency difficulties but not all. They conclude that "If assessment is limited to solely to tests of reading comprehension that do not allow for fine-grained analysis of component reading and language skills, it may be difficult to determine whether comprehension difficulties are constrained primarily by foundational skill deficits as opposed to difficulties in higher order text processing" (p. 794). In other words, assessing a child's reading difficulties is not only to determine a reading difficulty but also to determine a course of action for intervention. Therefore, the repercussions of not assessing children's both reading comprehension and reading fluency abilities are twofold. First, one might miss children who have reading difficulties due to the area not tested. Second, one can have an incomplete picture on what to work on in remediation or intervention in order to improve children's reading abilities.

Interventions for reading comprehension and reading fluency have quite different approaches. Intervention for reading fluency difficulties involves phonological awareness training (O'Shaughnessy & Lee Swanson, 2000), letter-sound training (Mercer et al., 2000), explicitly teaching sight words/phrases (Mercer et al., 2000), repeatedly reading the same text (Conderman & Strobel, 2008) and imitating teacher's reading (Young, Mohr, & Rasinski, 2015). On the other hand, intervention for reading comprehension difficulties

involves prereading (activating prior knowledge about the subject and making predictions about the text), summarizing the text, identifying main ideas of the text, self-monitoring comprehension, explicitly teaching narrative story structure and clarifying vocabulary (for an overview see Berkeley & Larsen, 2018). Since reading comprehension and reading fluency require different types of interventions, one would not expect intervention in one to improve the other. Ritchey, Palombo, Silverman and Speece (2017) investigated just that and found that reading comprehension intervention (while improving reading comprehension) did not improve reading fluency. Likewise, Soriano and colleagues (2011) found that reading fluency intervention (while improving reading fluency) did not improve reading comprehension. These studies underline the need for understand what a child is having difficulty with and addressing them directly instead of just providing a random reading intervention.

In conclusion, the current study demonstrates that silent reading fluency and reading comprehension skills are only moderately correlated two skills. A comprehensive view on a child's reading proficiency would require both reading fluency and reading comprehension skills to be assessed and evaluated because a child's one skill does not determine the other. As a matter of fact, there are children who have higher reading fluency skills but lower reading comprehension skills as well as children who are vice versa. This finding has consequences for education, diagnosis and intervention.

### References

- Akın, E., & Çeçen, M. A. (2014). Ortaokul öğrencilerinin okuma stratejileri üstbilişsel farkındalık düzeylerinin değerlendirilmesi (Muş-Bulanık örneği) [Secondary school students' metacognitive awareness of reading strategies level (Muş-Bulanık sample)]. *Turkish Studies: International Periodical For The Languages, Literature and History of Turkish or Turkic*, 9(8), 91-110.
- Akyol, H., & Kodan, H. (2016). Okuma güçlüğü olan bir öğrencinin okuma güçlüğü'nün giderilmesine yönelik bir uygulama: Akıcı okuma stratejilerinin kullanımı [A practice for eliminating reading difficulty: The use of fluent reading strategies]. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 35(2), 7-21.
- Álvarez Cañizo, M., Cueva, E., Cuetos Vega, F., & Suárez Coalla, M. P. (2020). Reading fluency and reading comprehension in Spanish secondary students. *Psicothema*, 32(1), 75–83.
- Araújo, L., Folgado, C., & Pocinho, M. (2009). Reading comprehension in primary school: Textbooks, curriculum and assessment. *L1 - Educational Studies in Language and Literature*, 9(4), 27-43.
- Arı, G., & Keskin, H. K. (2016) Türkçe dersi (1-8. sınıflar) öğretim programı okuma öğrenme alanındaki kazanımlarla ilgili eleştirel bir değerlendirme [A critical evaluating of acquisitions in reading learning areas of Turkish curriculum (grades 1-8)]. *Sakarya Üniversitesi Eğitim Fakültesi Dergisi*, 32, 144-169.
- Asaad, A. S., & Hailaya, W. M. (2001). *Statistics as applied to education and other related fields*. Rex Book Store, Inc.
- Assa, H. F. (2017). *The correlation between students' accuracy in reading typoglycemic words in sentences and vocabulary mastery* [Unpublished bachelor's thesis]. Universitas Brawijaya.
- Babbie, E. (2004). *The Practice of Social Research* (10th ed.). Belmont, CA: Wadsworth.

- Bakır, F. H., & Babür, N. (2018) Hızlı otomatik isimlendirme testi'nin Türkçeye uyarlanması [Adaptation of rapid automatized naming tests to Turkish]. *Boğaziçi Üniversitesi Eğitim Dergisi*, 35(2), 35-51.
- Balcı, E. (2019). Disleksi hakkında öğretmen görüşleri ve karşılaştıkları sorunlar [Teachers' opinions about dyslexia and the challenges they face]. *Ege Eğitim Dergisi*, 20(1), 162-179.
- Baştuğ, M., & Akyol, H. (2012). Akıcı okuma becerilerinin okuduğunu anlamayı yordama düzeyi [The level of prediction of reading comprehension by fluent reading skills]. *Kuramsal Eğitimbilim Dergisi*, 5(4), 394-411.
- Baştuğ, M., & Keskin, H., K. (2012). Akıcı okuma becerileri ile anlama düzeyleri (basit ve çıkarımsal) arasındaki ilişki [The relationship between fluent reading skills and comprehension level (literal and inferential)]. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 13(3), 227-244.
- Baydık, B. (2011). Okuma güçlüğü olan öğrencilerin üstbilişsel okuma stratejilerini kullanımı ve öğretmenlerinin okuduğunu anlama öğretim uygulamalarının incelenmesi [Examining the use of metacognitive reading strategies of students with reading difficulties and their teachers' reading comprehension instruction practices]. *Eğitim ve Bilim*, 36(162), 301-319.
- Berkeley, S., & Larsen, A. (2018). Fostering self-regulation of students with learning disabilities: Insights from 30 years of reading comprehension intervention research. *Learning Disabilities Research & Practice*, 33(2), 75-86.
- Biber, A. Ç., & Tuna, A. (2017). Ortaokul matematik kitaplarındaki öğrenme alanları ve Bloom taksonomisine göre karşılaştırmalı analizi [A comparative analysis of the exercise questions in secondary school mathematics books based on learning domains and Bloom's taxonomy]. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 36(1), 161-174.
- Bigozzi, L., Tarchi, C., Vagnoli, L., Valente, E., & Pinto, G. (2017). Reading fluency as a predictor of school outcomes across grades 4–9. *Frontiers in Psychology*, 8, 200.
- Bowyer-Crane, C., & Snowling, M. J. (2005). Assessing children's inference generation: What do tests of reading comprehension measure?. *British Journal of Educational Psychology*, 75(2), 189-201.
- Cappa, C., & Giolivi, S. (2014). *Dyslang Module 3: Dyslexia across Europe*. University of South Wales. [http://dyscovery.research.southwales.ac.uk/media/files/documents/2014-01-16/Module\\_3.pdf](http://dyscovery.research.southwales.ac.uk/media/files/documents/2014-01-16/Module_3.pdf)
- Clemens, N. H., Simmons, D., Simmons, L. E., Wang, H., & Kwok, O. M. (2017). The prevalence of reading fluency and vocabulary difficulties among adolescents struggling with reading comprehension. *Journal of Psychoeducational Assessment*, 35(8), 785-798.
- Clure, L. F. (2013). *Teacher judgments of student writing: Examining the accuracy of ratings for the identification of at-risk students* [Unpublished doctoral dissertation]. University of Nebraska-Lincoln.
- Conderman, G., & Strobel, D. (2008). Fluency flyers club: An oral reading fluency intervention program. Preventing School Failure: *Alternative Education for Children and Youth*, 53(1), 15-20.
- Coşkun, Y. D. (2013). Türkçe ders kitaplarının PISA sınavı okuma ölçütleri açısından incelenmesi [Examination of the Turkish textbooks in terms of PISA reading skills criteria]. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 26, 22-43.
- Çelik, C., Erden, G., Özmen, S., & Tural Hesapçıoğlu, S. (2017). Comparing two editions of Wechsler Intelligence Scales and assessing reading skills in children with attention deficit and hyperactivity disorder. *Turkish Journal of Psychiatry*, 28(2), 104-116.
- Çeliktürk Sezgin, Z. Ç., & Gedikoğlu Özilhan, Y. G. G. (2019). 1.-8. sınıf Türkçe ders kitaplarındaki metne dayalı anlama sorularının incelenmesi [Examining text-based

- comprehension questions in Turkish textbooks of the 1st- the 8st graders]. *Ana Dili Eğitimi Dergisi*, 7(2), 353-367.
- Çetinkaya, G., Ülper, H., & Yağmur, K. (2015). Öğrencilerin doğru ve akıcı sessiz sözcük okuma becerileriyle kavrama başarıları arasındaki ilişki [Relationship between students' accurate and fluent silent word reading skills and their comprehension]. *İlköğretim Online*, 14(3), 993-1004.
- de Araújo Vilhena, D., & Vieira Pinheiro, A. M. (2016). Revised version of the scale of evaluation of reading competence by the teacher: Final validation and standardization. *Universitas Psychologica*, 15(4), 1-13.
- Denton, C. A., Barth, A. E., Fletcher, J. M., Wexler, J., Vaughn, S., Cirino, P. T., Romain, M., & Francis, D. J. (2011). The relations among oral and silent reading fluency and comprehension in middle school: Implications for identification and instruction of students with reading difficulties. *Scientific Studies of Reading*, 15(2), 109-135.
- Dinç, R. (2017). Okuma güçlüğü yaşayan öğrencide okuma becerisini geliştirmeye yönelik bir eylem araştırması [Action research about development of reading and writing skills of dyslexic student]. *Kuramsal Eğitimbilim Dergisi*, 10(2), 320-334.
- Doğan, B. (2013). Türkçe ve sınıf öğretmenlerinin okuma güçlüğüne ilişkin bilgileri ve okuma güçlüğü olan öğrencileri belirleyebilme düzeyleri [Determining Turkish language and elementary classroom teachers' knowledge on dyslexia and their awareness of diagnosing students with dyslexia]. *Okuma Yazma Eğitimi Araştırmaları*, 1(1), 20-33.
- Erden, G., Kurdoglu, F., & Uslu, R. (2002). İlköğretim okullarına devam eden Türk çocuklarının sınıf düzeylerine göre okuma hızı ve yazım hataları normlarının geliştirilmesi [Development of grade level norms for reading speed and writing errors of Turkish elementary school children]. *Türk Psikiyatri Dergisi*, 13(1), 5-13.
- Flynn, J. M., & Rahbar, M. H. (1998). Improving teacher prediction of children at risk for reading failure. *Psychology in the Schools*, 35(2), 163-172.
- Fuchs, L. S., Fuchs, D., Hosp, M. K., & Jenkins, J. R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading*, 5(3), 239-256.
- Gulan, T., & Valerjev, P. (2010). Semantic and related types of priming as a context in word recognition. *Review of Psychology*, 17(1), 53-58.
- Gündüz, Y. (2009). İlköğretim 6, 7 ve 8. sınıf fen ve teknoloji sorularının ölçme araçlarına ve Bloom'un bilişsel alan taksonomisine göre analizi [Analysis of primary school 6, 7 and 8. grades science and technology questions according to measurement scales and Bloom's taxonomy of the cognitive domain]. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 6(2), 150-165.
- Hammill, D. D., Wiederholt, J. L., & Allen, E. A. (2006). *TOSCRF: Test of silent contextual reading fluency*. Pro-Ed.
- Hoover, W. A., & Tunmer, W. E. (1993). The components of reading. In G. B. Thompson, W. E. Tunmer & T. Nicholson (Eds.), *Language and education library: Reading acquisition processes* (pp. 1-19). Multilingual Matters.
- Irwin, J. (2006). *Teaching reading comprehension processes*. Allyn & Bacon.
- Irwin, J. W. (1983). Coherence factors in children's textbooks. *Reading Psychology: An International Quarterly*, 4(1), 11-23.
- Irwin, J. W. (1991). *Teaching reading comprehension processes* (2nd vol.). Prentice Hall.
- İnce, M., & Gözütok, F. D. (2017). Türkçe 6, 7, 8. sınıf ders kitaplarının PISA becerilerine göre incelenmesi [Investigation of Turkish 6th, 7th, 8th grade textbooks according to PISA

- reading literacy]. *Turkish Studies: International Periodical for the Languages, Literature and History of Turkish or Turkic*, 12(33), 213-225.
- Jenkins, J. R., Fuchs, L. S., Van Den Broek, P., Espin, C., & Deno, S. L. (2003). Sources of individual differences in reading comprehension and reading fluency. *Journal of Educational Psychology*, 95(4), 719.
- Kaufman, A. S., & Kaufman, N. L. (2014). *Kaufman test of educational achievement* (3rd ed.). NCS Pearson.
- Kaya, D., & Yıldırım, K. (2016) Dördüncü sınıf öğrencilerin akıcı okumalarının basit ve çıkarımsal anlama düzeylerine göre değerlendirilmesi [Evaluation of fourth grade students' reading fluency skills in regard to deep and literal comprehension levels]. *Ana Dili Eğitimi Dergisi*, 4(3), 416-430.
- Kelso, K., Whitworth, A., Parsons, R., & Leitão, S. (2020). Hidden reading difficulties: Identifying children who are poor comprehenders. *Learning Disability Quarterly*. Advance online publication.
- Khamis, H. (2008). Measures of association: How to choose?. *Journal of Diagnostic Medical Sonography*, 24(3), 155-162.
- Klauda, S. L., & Guthrie, J. T. (2008). Relationships of three components of reading fluency to reading comprehension. *Journal of Educational psychology*, 100(2), 310-321.
- Kodan, H. (2020). Okuma güçlüğüne ilişkin öğretmen görüşleri [Teachers opinions about reading disability]. *Bayburt Eğitim Fakültesi Dergisi*, 15(29), 204-222.
- Kodan, H., & Akyol, H. (2018). Effects of choral, repeated and assisted reading strategies on reading and reading comprehension skills of poor readers. *Education & Science/Eğitim ve Bilim*, 42(193) 159-179.
- Kökçü, Y., & Demirel, Ş. (2017). 5, 6, 7 ve 8. sınıf Türkçe dersi okuma kazanımlarının okuma modelleri ile ilişkisi üzerine bir inceleme [A research on the relation between reading acquisitions of 5, 6, 7 and 8th classes' Turkish courses and models of reading]. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi*, 6(2), 1133-1147.
- Kuhn, M. R., Schwanenflugel, P. J., & Meisinger, E. B. (2010). Aligning theory and assessment of reading fluency: Automaticity, prosody, and definitions of fluency. *Reading Research Quarterly*, 45(2), 230-251.
- Kuruoğlu, G., & Şen, N. (2018). Okuma güçlüğü yaşayan ortaokul öğrencilerin yaptıkları okuma hatalarının incelenmesi [Examination of reading mistakes of secondary school students who have reading difficulties]. *Eğitim Kuram ve Uygulama Araştırmaları Dergisi*, 4(2), 101-110.
- LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6(2), 293-323.
- Lane, H. B., Hudson, R. F., Leite, W. L., Kosanovich, M. L., Strout, M. T., Fenty, N. S., & Wright, T. L. (2008). Teacher knowledge about reading fluency and indicators of students' fluency growth in reading first schools. *Reading & Writing Quarterly*, 25(1), 57-86.
- Lane, K. L., Oakes, W., & Menzies, H. (2010). Systematic screenings to prevent the development of learning and behavior problems: Considerations for practitioners, researchers, and policy makers. *Journal of Disability Policy Studies*, 21(3), 160-172.
- Leach, J., Scarborough, H., & Rescorla, L. (2003). Late-emerging reading disabilities. *Journal of Educational Psychology*, 95, 211-224.
- Lower, A. (2014). *The effects of letter transposition and context on reading: Testing the myth of typoglycemia*. Unpublished manuscript. Retrieved from

<http://nebula.wsimg.com/36c1b5a6f3dedbf89d1729a7f06b9526?AccessKeyId=76A65F2DCAA5C8AA1A83&disposition=0&alloworigin=1>

- Madelaine, A., & Wheldall, K. (2005). Identifying low-progress readers: Comparing teacher judgment with a curriculum-based measurement procedure. *International Journal of Disability, Development and Education*, 52(1), 33-42.
- Meneghetti, C., Carretti, B., & De Beni, R. (2006). Components of reading comprehension and scholastic achievement. *Learning and Individual Differences*, 16(4), 291-301.
- Mercer, C. D., Campbell, K. U., Miller, M. D., Mercer, K. D., & Lane, H. B. (2000). Effects of a reading fluency intervention for middle schoolers with specific learning disabilities. *Learning Disabilities Research & Practice*, 15(4), 179-189.
- Mullis, I. V. S., Martin, M. O., Foy, P., & Drucker, K. T. (2012). *PIRLS 2011 international results in reading*. International Study Center.
- Mullis, I. V. S., Martin, M. O., Gonzalez, E. G., & Kennedy, A. M. (2003). PIRLS 2001 international report: IEA's study of reading literacy achievement in primary school in 35 countries. International Study Center.
- Oney, B., & Goldman, S. R. (1984). Decoding and comprehension skills in Turkish and English: Effects of the regularity of grapheme-phoneme correspondences. *Journal of Educational Psychology*, 76(4), 557-568.
- O'Shaughnessy, T. E., & Lee Swanson, H. (2000). A comparison of two reading interventions for children with reading disabilities. *Journal of Learning Disabilities*, 33(3), 257-277.
- Ouellette, G. P. (2006). What's meaning got to do with it: The role of vocabulary in word reading and reading comprehension. *Journal of Educational Psychology*, 98(3), 554.
- Örge Yaşar, F. (2019). 2018 Türkçe Dersi Öğretim Programına Göre Hazırlanmış 7. Sınıf Türkçe Ders Kitaplarındaki Metinlerin Okuma Yöntem ve Teknikleri Açısından İncelenmesi [Examination of texts in 7th grade Turkish textbooks prepared according to 2018 Turkish lesson education program according to reading method and techniques]. In D. K. Dimitrov, D. Nikoloski, & R. Yılmaz (Eds.) *Proceedings of the XI. International Balkan and Near Eastern Social Sciences Congress Series* (pp. 326-338). Cataloging-In-Publication Data.
- Özcan, S., & Oluk, S. (2007) İlköğretim fen bilgisi derslerinde kullanılan soruların Piaget ve Bloom taksonomisine göre analizi [Analysis of questions used in science lessons at primary school according to Piaget and Bloom taxonomy]. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, 8, 61- 68.
- Polat, İ., & Dedeoğlu, H. (2020). Sınıf öğretmenlerinin hazırladığı metin altı sorularının incelenmesi [Investigation of text-based reading comprehension questions prepared by primary school teachers]. *Ana Dili Eğitimi Dergisi*, 8(4), 1468-1482.
- Pressley, M. (2000). What should comprehension instruction be the instruction of?. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson & R. Barr (Eds.), *Handbook of reading research* (Vol 3, pp. 545–562). Erlbaum.
- Rasinski, T. V., Chang, S. C., Edmondson, E., Nageldinger, J., Nigh, J., Remark, L., Srsen Kenney, K., Walsh-Moorman, E., Yildirim, K., Nichols, W. D., Paige, D. D., & Rupley, W. H. (2017). Reading fluency and college readiness. *Journal of Adolescent and Adult Literacy*, 60(4), 453–460.
- Rasinski, T. V., Padak, N. D., McKeon, C. A., Wilfong, L. G., Friedauer, J. A., & Heim, P. (2005). Is reading fluency a key for successful high school reading?. *Journal of Adolescent & Adult Literacy*, 49(1), 22-27.
- Ritchey, K. D., Palombo, K., Silverman, R. D., & Speece, D. L. (2017). Effects of an informational text reading comprehension intervention for fifth-grade students. *Learning Disability Quarterly*, 40(2), 68-80.

- Sanacore, J., & Palumbo, A. (2009). Understanding the fourth-grade slump: Our point of view. *The Educational Forum*, 73, 67-74.
- Saracaloğlu, A., Dedeşali, N. C., & Karasakaloğlu, N. (2011). Sekizinci sınıf öğrencilerinin sessiz okuma hızları ve okuduğunu anlama düzeyleri [The 8th grade students' speeds silent reading and levels of reading comprehension]. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 12(3), 177-193.
- Saraçlı Çelik, S. (2019). *İlkokul 4. sınıf öğrencilerinin doğru ve akıcı sessiz sözcük okuma düzeyinin öğrencilerin okuduğunu anlama becerisi ve okuma motivasyonu ile ilişkisi* [Correlation between 4th grade primary school students' level of correct and fluent silence word reading and reading comprehension skills and reading motivation] [Unpublished master's thesis]. Menderes Üniversitesi.
- Sarar Kuzu, T. (2013). Türkçe ders kitaplarındaki metin altı sorularının yenilenmiş Bloom taksonomisindeki hatırlama ve anlama bilişsel düzeyleri açısından incelenmesi [Investigation of the text following questions in Turkish course books with respect to their remembering and understanding cognition levels of the revised Bloom taxonomy]. *Cumhuriyet Üniversitesi Sosyal Bilimler Dergisi*, 37(1), 58-76.
- Savaş, B. (2017). Yazma öğretiminin ilköğretim öğrencilerinin okuma-anlama becerileri üzerine etkilerinin incelenmesi: Dilbilimsel bir yaklaşım [An analysis of the influences of handwriting teaching on reading comprehension skills of primary school students: A linguistic approach]. *Uluslararası Eğitim Bilimleri Dergisi*, 13, 120-140.
- Schleicher, A., Zimmer, K., Evans, J., & Clements, N. (2009). *PISA 2009 assessment framework: Key competencies in reading, mathematics and science*. OECD Publishing.
- Schrank, F. A., Mather, N., & McGrew, K. S. (2014). *Woodcock-Johnson IV Tests of Achievement*. Riverside.
- Share, D. L. (2008). On the Anglocentricities of current reading research and practice: The perils of overreliance on an "outlier" orthography. *Psychological Bulletin*, 134(4), 584.
- Sidekli, S. (2010). Eylem araştırması: İlköğretim dördüncü sınıf öğrencilerinin okuma ve anlama güçlüklerinin giderilmesi [Action research: Compensation of reading and comprehension difficulties of fourth grade elementary school children]. *TÜBAR*, 27, 563-580.
- Soriano, M., Miranda, A., Soriano, E., Nievas, F., & Félix, V. (2011). Examining the efficacy of an intervention to improve fluency and reading comprehension in Spanish children with reading disabilities. *International Journal of Disability, Development and Education*, 58(1), 47-59.
- Taştekinöğlü, E., & Aydın, G. (2014). 4. sınıf matematik sınav sorularının TIMSS 2011 bilişsel alanları ve öğretim programlarıyla karşılaştırılması [A comparison of 4th grade math exam questions with the cognitive areas and the education programs of TIMSS 2011]. In N. Kayar & Ü. Güneş (Eds.), *III. Türkiye Lisansüstü Çalışmalar Kongresi Bildiriler Kitabı* (Vol 1, pp. 247-264). Sakarya Üniversitesi Basımevi.
- Terziyan, T. L., & Yıldız, E. (2020). *Türkçede telaffuz edildiği gibi yazılmayan kelimeler* [Words that are not spelled in the manner they are pronounced in Turkish] [Manuscript submitted for publication]. Department of Culture Studies, Tilburg University & School of Foreign Languages, Yıldız Teknik University.
- Torgeson, J. K., Wagner, R. K., Lonigan, C. J., & DeGraff, A. (2002). Test of critical early reading skills [Unpublished manuscript]. Department of Psychology, Florida State University.
- Torppa, M., Georgiou, G. K., Lerkkanen, M. K., Niemi, P., Poikkeus, A. M., & Nurmi, J. E. (2016). Examining the simple view of reading in a transparent orthography: A longitudinal study from kindergarten to Grade 3. *Merrill-Palmer Quarterly*, 62, 179-206.

- Torppa, M., Vasalampi, K., Eklund, K., Sulkunen, S., & Niemi, P. (2020). Reading comprehension difficulty is often distinct from difficulty in reading fluency and accompanied with problems in motivation and school well-being. *Educational Psychology, 40*(1), 62-81.
- Tüm, G. (2016). 5. ve 6. sınıf ilköğretim Türkçe ders kitaplarında yer alan metin önu ve sonu sorularının Bloom taksonomisi'ne göre değerlendirilmesi [An evaluation of pre- and post-reading questions in the 5th and 6th grade Turkish books, used in the primary and secondary education in terms of Bloom's taxonomy]. *Turkish Studies: International Periodical for the Languages, Literature and History of Turkish or Turkic, 11*(14), 731-748.
- Türkmenoğlu, M., & Baştuğ, M. (2017). İlkokulda akran öğretimi aracılığıyla okuma güçlüğü'nün giderilmesi [The overcoming reading difficulty through peer tutoring in primary school]. *Eğitimde Nitel Araştırmalar Dergisi, 5*(3), 36-66.
- Ülper, H., & Yağmur, K. (2016). Akıcı Sessiz Sözcük Okuma Testinin Geliştirilmesi [Developing silent word reading fluency test]. *İlköğretim Online, 15*(2), 581-593.
- Ülper, H., Çetinkaya, G., & Bayat, N. (2017). Okuduğunu anlama testinin geliştirilmesi [Developing reading comprehension test]. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, 18*(1), 175-187.
- Wagner, R. C., Torgesen, J. K., Rashotte, C. A., & Pearson, N. A. (2010). *Test of silent reading efficiency and comprehension*. Pro Ed.
- Whitten, C., Labby, S., & Sullivan, S. L. (2016). The impact of pleasure reading on academic success. *Journal of Multidisciplinary Graduate Research, 2*(1), 48-64.
- Williams, J. P. (1993). Comprehension of students with and without learning disabilities: Identification of narrative themes and idiosyncratic text representations. *Journal of Educational Psychology, 85*(4), 631-641.
- Winters, R., Winters, A., & Amedee, R. G. (2010). Statistics: A brief overview. *Ochsner Journal, 10*(3), 213-216.
- Yıldırım, K., & Ateş, S. (2012). Silent and oral reading fluency: Which one is the best predictor of reading comprehension of Turkish elementary students. *International Journal on New Trends in Education and Their Implications, 3*(4), 79-91.
- Young, C., Mohr, K. A., & Rasinski, T. (2015). Reading together: A successful reading fluency intervention. *Literacy Research and Instruction, 54*(1), 67-81.
- Ziegler, J. C., & Goswami, U. (2006). Becoming literate in different languages: Similar problems, different solutions. *Developmental Science, 9*(5), 429-436.



## The Impact of Reciprocal Teaching on Pre-Service English-as-a-Foreign-Language Teachers' Reading Comprehension Skills

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### ABSTRACT

This quasi-experimental study explored the impact of a seven-week intervention in reciprocal teaching (RT) on improving pre-service English-as-a-foreign-language (EFL) teachers' (PSEFLT's) reading comprehension skills. The experimental group ( $N = 56$ ) were subjected to an intervention designed to help them understand and apply the steps in RT while the control group ( $N = 53$ ) attended to reading classes taught conventionally. Data was collected from a pre-reading test administered prior to the commencement and a post-reading test administered following the intervention, and a semi-structured interview. The findings revealed there was no statistically significant difference in experimental and control group participants' reading comprehension skills in the pre-reading test; nevertheless, the experimental group outperformed the control group in the post-reading test. Analysis of the qualitative data demonstrated the PSEFLT's viewed the RT intervention as effective in developing their reading comprehension skills and would implement it in their future teaching.

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#### Statement of Publication Ethics

Hatay Mustafa Kemal University Social and Human Sciences Research and Publication Ethics Board stated in its document numbered 21817443-050.99-09 and dated March 6, 2020 that ethical standards were followed in this research.

#### Authors' Contribution Rate

First author obtained the ethical approval, conducted the intervention and drafted the manuscript. Both authors wrote and proofread the manuscript. Second author reviewed the journal policy. Percentage contributions are as follows: First Author = 60%, Second Author = 40%.

#### Conflict of Interest

We declare no conflict of interest.

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## Introduction

Developing reading comprehension skills of students at any level of education performs a fundamental role in the success they will achieve in their current and prospective educational lives, which illustrates that enhanced reading skills also underlie the achievements students gain in any course they take at tertiary level. Parallel to this, improving reading skills in a target language adds to the development of skills in using it. The considerable weight carried by reading skills has led to the production of a plethora of research on it thus far (Datta & Ross, 2002, Ersanlı & Çakır, 2017; Ferrer et al., 2017; Huang et al., 2014; Kingston & George, 2014; Moon et al., 2016; Nayak & Sylva, 2013; Sahan, 2012).

Tertiary students are underprepared for fulfilling reading requirements of university education (Feller et al., 2020), which could have its origin in their prior educational lives (Wulfemeyer, 2019). To illustrate, undergraduate students' academic reading proficiency was reported not to vary according to their class level and not to show improvement toward their graduation in the study by Gorzycki et al. (2016). Therefore, taking Reading Skills course is construed to exert a profound impact on underprepared tertiary students' success in college (Cox et al., 2003). Nonetheless, the positive impact to be created by taking Reading Skills course on gaining academic achievement cannot be constrained merely to underprepared tertiary students because its beneficial effect can also be extended to the short- and long-term success to be achieved by pre-service English-as-a-foreign-language (EFL) teachers (PSEFLTs). Given the fact that enhancing reading comprehension skills plays a pivotal role in the successful completion of the initial English language teacher education program, reciprocal teaching (RT), developed by Brown and Palincsar (1982) notably with a view to improving reading skills by virtue of promoting the interaction amidst students, could be resorted in the attempts made to hone PSEFLTs' reading comprehension skills (e.g., Slater & Horstman, 2002; Zender & Reile, 2018). Nevertheless, review of the literature on RT unravels that the relationship between the implementation of it and PSEFLTs' reading comprehension skills in the target language is in need of research to be enlightened. For this reason, the present study has the potential to fill the gap of concern in the literature.

## Literature review

### Teaching reading to tertiary and EFL students

College students, who are aware of the significance of developing their reading skills (Howard et al., 2018), have been exposed to a variety of treatments such as following a structured reading curriculum (Alamprese et al., 2011), extensive reading programs (Cockerill et al., 2019; Morshedien et al., 2017; Nhapulo et al., 2017; Shore et al., 2015), the provision of critical literacy instruction (Taşpınar & Çubukçu, 2020), and the application of Cognitive Academic Language Learning Approach (Albashtawi, 2019) to help them develop their reading skills. As well as these, improving vocabulary skills (Ari, 2016; Khezrlou et al., 2017) and interventions in reading strategies are exhibited to be useful for enhancing reading proficiency (Okkinga et al., 2018). The effect of the

teaching of strategic reading on tertiary students' reading skills has been the topic of an indispensable number of research, one of which was carried out by Caverly et al. (2004). The study reported the development in tertiary students' reading scores as a result of strategic reading instruction. Training students in metacognitive reading strategies was demonstrated to promote their self-regulation as reading (Ditzel, 2010). A correlation between metacognitive strategy use and reading proficiency was reported in Kim's (2016) paper. In the same vein, Kung's (2019) study revealed that advanced EFL students preferred to use cognitive and metacognitive knowledge as reading English texts. Furthermore, the findings in that study illustrated that authentic texts increased learner motivation. Increasing tertiary students' motivation for reading, and thus, developing their reading comprehension skills can be enabled by placing university students in the center of the teaching of reading (Douglas et al., 2016). To exemplify, giving them a chance to have a say in the choice of texts they will read could foster their reading comprehension (Durmin & Sherman, 2008), which can gain meaning keeping in mind their age and maturity.

Teaching of reading strategies, playing a vital part in improving reading comprehension skills, should be based on a set of criteria like what strategies to teach, when to teach them (Taraban et al., 2004) and how to teach them. Explicit strategy instruction is presented in the literature to be effective in enhancing reading comprehension (e.g., Ghavamnia, 2019). Explicitly taught cognitive and metacognitive reading strategies were demonstrated to lead to improvement in EFL students' reading comprehension in the research undertaken by Aghaie and Zhang (2012). Individual differences among adult learners should be taken into account as examining their reading skills (Macaruso & Shankweiler, 2010) though it was indicated in Song et al.'s (2020) study that English as-a-second language readers utilized similar strategies. The study by Tsai, Ernst and Talley (2010) demonstrated that skilled Chinese EFL readers as against less skilled ones used more strategies in reading English texts. The impact of modified collaborative strategic reading on EFL college students' reading comprehension was examined in the research by Zoghi et al. (2010), which showed the intervention did not result in significant gains in reading comprehension skills. In addition to the investigations into the influence of the implementation of reading strategies on the reading comprehension development, collaborative learning is yielded to contribute to reading achievement (Ghaith, 2003). For instance, the research by Jalilifar (2010) revealed that cooperative learning techniques were more effective than traditional ones in EFL students' reading comprehension.

The effect exerted by technology integration on the development in reading skills is also investigated (e.g., Chen & Chen, 2014; Kuehner, 1999; Wang, 2017). The study by Kealey and Mather (2019) revealed that computer-assisted instruction helped college students develop positive attitudes towards reading and increase their reading gains. Likewise, implementation of blended learning was exhibited to be influential in improving college students' reading proficiency in Yang's (2012) research. In line with that study, the research carried out by Liu (2020) reported that online teaching of reading resulted in more reading gains than traditional way of teaching reading. Additionally, it was indicated that

online teaching of reading motivated students more via stimulating learning conditions. Similarly, mobile assisted online instruction enhanced EFL students' reading comprehension in Chang and Hsu's (2011) study. The research by Chang and Millett (2015) reported that audio-assisted extensive reading produced higher levels of EFL student reading comprehension when compared to silent reading. The level of reading comprehension of students exposed to online-based reading strategy instruction was higher than the one of students receiving paper-based reading strategy instruction in the research by Huang (2016). The use of blogging was shown to increase the interaction amongst tertiary students and to improve retention rate, yet it did not bring about a positive effect on their reading achievement in Hsu and Wang's (2010) paper.

### **Reciprocal teaching**

RT, consisting of four consecutive stages: summarizing, questioning, clarifying and predicting, enhances reading comprehension (King & Johnson, 1998; Seymour & Osana, 2003) through fostering student interaction in a structured way (Gruenham, 2012). The research carried out by Soonthornmanee (2002) revealed that RT facilitated EFL students' reading skills. Another study exploring the influence of RT on reading skills was undertaken by Chang and Lan (2019) who based the technique on Moodle. The results indicated that Moodle-based RT enabled EFL students to perform better on the post-reading test. The study done by Palincsar and Brown (1984) demonstrated that implementation of RT brought about improvement in reading comprehension. Similarly, the participants being exposed to RT training developed their reading comprehension more and scored higher in the post- and follow-up-tests in the study undertaken by Spörer et al. (2009). Pointing out the value of RT, Gilbert (2018) drew the attention to the importance of placing it within a wide spectrum of reading strategies by implementing it in disparate reading communities. The research by Tarchi and Pinto (2016) indicated that RT could create a learning environment that is rich of interaction. In addition, integrating RT into an online learning environment contributed to enhancing EFL students' reading comprehension (Tseng & Yeh, 2018; Yang, 2010).

The review of literature unearths that there is no study investigating the influence of RT on developing reading comprehension skills of PSEFLTs, who will need to implement reading strategies to improve their prospective students' reading skills. Keeping in mind this gap in the literature, this study aims to find answers to the following research questions.

1. Does the intervention in RT impinge upon PSEFLTs' reading comprehension skills?
  - 1a. Is there a statistically significant difference between pre-reading test results of the experimental and control groups?
  - 1b. Is there a statistically significant difference between post-reading test results of the experimental and control groups?
2. What are PSEFLTs' views about the intervention in RT they have been subjected to?

## Methodology

### Resign design

This research was designed as a quasi-experimental study. As suggested by Creswell (2012), pre- and post-test design approach was adopted in this study. Prior to the start of the study, ethical approval was obtained from the ethics board of the university in which this research was carried out. One of the two freshman groups, already formed at the beginning of the academic year by the head of the department of English language teaching, was selected as the experimental group and the other as the control group, explicating why the present study is a quasi-experimental research.

### Participants

A total of 109 freshman PSEFLT's studying at a state university took part in this study. Table 1 below displays the demographic information about them.

**Table 1.** Demographic Information about the Participants

Group	N	Age ( $\bar{x}$ )	Gender	
			Female	Male
Experimental	56	19.4	44	12
Control	53	19.1	43	10

As can be seen in the Table, the number of the participants in the experimental group ( $n = 56$ ) is close to the one in the control group ( $n = 53$ ). The mean age of the experimental group participants was 19.4 while that of the control group was 19.1 when this research was undertaken. The number of the female participants in the experimental and control group ( $n = 44$ ,  $n = 43$ , respectively) is higher than the male participants in the experimental and control group ( $n = 12$ ,  $n = 10$ , respectively).

The PSEFLT's were informed about the purpose of the study and their right about withdrawing from the study any time they desired. No information that can reveal the identity of the participants will be presented throughout this research to maintain the anonymity and confidentiality in the research.

### Context

In the context of this study, freshman PSEFLT's take two-hour Reading Skills I course in the fall term of the first academic year in the program and two-hour Reading Skills II course in the spring term of the same academic year. One midterm exam, comprising 40% of the final grade and final exam constituting its 60% are administered to assess how much PSEFLT's have learned from Reading Skills courses. Below are the objectives of Reading Skills I and II course.

#### *Objectives of reading skills I course*

This course is designed to help PSEFLT's develop their reading skills comprising reading between lines and guessing the main idea of a text. Additionally, this course aims at helping them acquire high-level reading skills involving digging out the main idea of a text, being able to use semantic connections amongst sentences, and becoming aware of

various perspectives by reading authentic texts. Aside from these, another objective of this course is to provide guidance to PSEFLT's in picking up critical thinking skills (Higher Education Board, 2018).

#### *Objectives of reading skills II course*

This course is designed to help PSEFLT's develop their skills of drawing logical inferences via deductive and inductive reasoning, reading between lines, and comprehending literal and figurative meaning through analyzing the information provided in passages. This course, additionally, aims at supporting PSEFLT's in developing their ability to express personal opinions regarding the reading either orally or in written form. This course also targets raising the awareness of PSEFLT's of the fact that what is comprehended by the reader may vary from the meaning intended to be conveyed by the author (Higher Education Board, 2018).

#### **Procedure**

This study was conducted when the study participants were enrolled in Reading Skills II course and had passed Reading Skills I course successfully in the fall term. One of the researchers taught the course in both groups. A pre-reading test was administered to find out if there was a statistically significant difference between reading comprehension achievements of the experimental and control group before the start of the intervention. Then, the intervention in RT in the experimental group was commenced. Seven articles on foreign language reading skills and PSEFLT education were selected by the researchers. The PSEFLT's in the experimental and control groups were asked to read the articles to be worked on during class hours. The first article dealt with in the first week of the intervention catered for helping the experimental group comprehend the stages of the RT technique in the light of the explanations provided by the researcher and modelling done by her. Following the elucidation as to employing the RT technique, the participants in the experimental group were told to form groups of four. Each group member assumed a different role in accordance with the stages of RT: summarizer, questioner, clarifier and predictor. The researcher helped the participants who could not join a group form separate groups. The experimental group participants wanting to change their groups were given the permission to do so on the condition that such a change did not damage the equal distribution of roles in the groups. The participants performing the role of summarizer were also allocated as the moderator of the group. Nonetheless, other members adopting a role other than that of summarizer could also perform the role of the moderator by expressing their wish for that to their group members.

The summarizers were responsible for providing a synopsis of each article. Then, the questioners asked questions about the topics covered in the article but were unclear and therefore needed more clarification. Not only did the questioners ask the questions but also the other three group members asked the questions they had in their minds. Afterwards, the clarifiers tried to answer the posed questions; nonetheless, it was not only the clarifiers who attempted to answer them but also other group members did it when they had answers to them. Thereafter, the predictors verbalized their ideas about how the claims stated either overtly or covertly in the texts could be reconsidered and/or suggested techniques could be

applied to their own context. While the groups were fulfilling their roles, the lecturer monitored and scaffolded them whenever they needed. Subsequent to the completion of all the stages, the researcher handed out five open-ended questions about the text that functioned as a tool to check participants' comprehension of it. The groups were given ten minutes to answer them, at the end of which they offered their answers to the questions. Different answers given by the groups provoked the whole-class discussion. All the procedures in the implementation of the RT technique were completed in two class hours. When the experimental group worked on the articles in compliance with the RT technique, the participants in the control group focused on the same articles in a traditional way. They read the texts in class hours and then answered the questions relating to them individually. Afterwards, the teacher got the answers from the control group participants. At the end of the intervention lasting seven weeks, a post-reading test was administered. A semi-structured interview was carried out with eight experimental group participants to learn about their conceptions of the RT intervention.

### **Data collection tools and analysis**

#### *Pre- and post-reading tests*

A pre-reading test containing five open-ended questions relating to an expository text was developed by the researchers. The objective of administering the pre-reading test was to make sure there was no statistically significant difference between reading comprehension skills of the experimental and control group participants. The test and a short description of the study including its purpose and research questions were e-mailed to two EFL teacher educators to ensure it measured what it intended to measure. Slight changes were made in the questions in view of their comments. Participants' test papers were marked by the two researchers. Inter-rater reliability was assessed to reveal the level of agreement between the markers (Fink, 2010). Cronbach's alpha value was .906 for the pre-reading test. The data obtained from pre-reading test were analyzed by running independent samples t-test. A post-reading test was administered, subsequent to the RT intervention, with an eye to finding out whether or not there occurred a statistically significant difference in reading comprehension achievement of the experimental and control groups. The post-reading test was e-mailed to the same two EFL teacher educators to make sure if the test was valid. The post-reading test papers were also marked by the researchers. Inter-rater reliability was assessed for the post-reading test as well, which demonstrated that Cronbach's alpha value was .804. PSEFLT's scores on the post-reading test were analyzed performing independent samples t-test. To increase the credibility of this study, peer debriefing (Lincoln & Guba, 1985) was realized by requesting the two EFL teacher educators mentioned in the preceding sentences to check the processes gone through from the beginning till the end of this research.

#### *Semi-structured interview*

Following the intervention and administration of the post-reading test, eight semi-structured interviews, each lasting 25-35 minutes, were conducted. The questions asked in the interviews were checked by the teacher educators referred to in the previous paragraph

in an effort to make sure the interview questions served for the purpose of unearthing PSEFLT's' conceptions of the intervention in the RT technique. An interview protocol was kept for each interviewee to take notes of interviewees' responses to the questions. Below-stated questions are the ones produced for the interview:

1. What do you think about the effectiveness of the RT technique in the development in your reading comprehension?
2. If you faced any problems during the intervention, could you please give information about them?
3. As an English language teacher candidate, will you use the RT technique to help your future students develop their reading skills?

Member checking was used in an attempt to validate the qualitative data (Birt et al., 2016) and to increase the credibility of the study (Lincoln & Guba, 1985). The findings gathered from the interviews were shared with the interviewees to ensure they mirrored what they had in their minds about the RT intervention they were subjected to.

## Findings

### Findings in relation to the impact of the RT Intervention on PSEFLT's' reading comprehension

The probable effect of the RT intervention on PSEFLT's' reading comprehension skills was explored through analyzing the scores the experimental and control group got on the pre- and post-reading tests. Table 2 below illustrates independent samples t-test results of the pre-and post-reading tests.

**Table 2.** Independent Samples T-Test Results of Pre- and Post-Reading Tests

Test	Group	<i>N</i>	Mean	SD	t-test
Pre-reading test	Experimental	56	78.57	12.18	.093
	Control	53	75.00	10.19	
Post-reading test	Experimental	56	87.67	8.81	.000
	Control	53	79.90	11.79	

Table 2 shows that there was no statistically significant difference between the pre-reading test results of the experimental and control group participants ( $p = .093$ ). In agreement with that, the mean values of the pre-reading test results for the experimental group ( $M = 78.57$ ) and for the control group ( $M = 75.00$ ) appear to be close to each other. However, the difference in the mean values of the experimental ( $M = 87.67$ ) and control group ( $M = 79.90$ ) is higher in the post-reading test and the  $p$  value,  $.000$ , indicates a statistically significant difference between the experimental and control groups, which occurred following the intervention. The mean value belonging to the experimental group is bigger than that of the control group in the post-reading test, showing that the PSEFLT's in the experimental group outperformed the ones in the control group.

### Findings with respect to PSEFLT's' Views about the RT Intervention

A semi-structured interview was conducted so as to unpack PSEFLT's' perceptions regarding their experiences of the RT intervention. The first question in the interview provided insights into the experimental group participants' conceptions concerning the

effectiveness of the intervention in their reading comprehension skills. Interviewees' responses to the first question showed that all the interviewees found the intervention as effective at developing their reading comprehension skills. Contributing to enhancing group members' comprehension of the selected texts through carrying out their duties, the experimental group participants felt motivated to perform them competently. In addition, qualitative data analysis indicates that listening to questions posed about the texts by the questioner and other group members and answers given to them enabled the PSEFLTs to develop their reading comprehension skills. Interviewee 3 stated: *"I believe RT helped me improve my reading comprehension skills. Especially, exploring the texts together developed my reading skills. I looked at the texts from different angles thanks to the discussions in my group"*. Similarly, interviewee 7 said: *"I think my reading skills improved more owing to the RT technique because I asked my questions about the things I could not understand in the texts and got answers to them from my group members"*.

Interviewees' responses to the second question indicate that the intervention in the RT technique was not free of problems for them. The common problem stated by the interviewees was related to group members' performances on their roles. They claimed that not all group members fulfilled their responsibilities fully. Interviewee 4 stated: *"I had few problems during the intervention. For example, one of the members in my group did not do her best to meet her duties"*. In line with the views of interviewee 4, interviewee 8 said: *"The clarifier in my group did not try to clarify the questions asked by the questioner or us. This really damaged the soul of teamwork and demotivated me"*. Another issue raised in the interviews was related to the problems with having to be involved in a group in which they were unhappy. Interviewee 3 said:

*I wanted to change my group after two weeks because I was unhappy about my group. I couldn't find another group to join and I think the intervention could have been more effective if I had become a member of a group in which I could feel more comfortable.*

The third question in the interview served for unveiling interviewees' views as to applying the RT technique as teaching reading to their future students. All the interviewees stated that they would implement the RT technique in their prospective lessons. According to them, the RT technique could be effective in teaching reading to students of different ages since students needed to be more active in RT, which could make lessons more interesting and enjoyable for them. Interviewee 7 said: *"I will apply the RT technique in my lessons in the future because students are not passive in RT; on the contrary, they are active and do most of the work in the reading lesson"*. Interviewee 2 directed the attention to her prior learning experiences to expound why she would implement RT in teaching reading to her students in the future:

*I had learnt reading in English in a traditional way. I mean the teacher reads the passage and/or the teacher nominates students to read it, and then, tells them to answer the questions about the passage individually. The RT technique could change this monotonous and traditional way of teaching reading because it is student-centered and students are more active in reading lessons. I believe it is more effective than traditional way of teaching reading. Because of that, I will definitely use it to teach reading to my students in the future.*

## Discussion

The findings showed that the question of whether or not implementing the RT technique in Reading Skills course enhances PSEFLT's reading comprehension skills was answered in the affirmative. The non-existent statistically significant difference between the reading comprehension skills of the experimental and control group participants in the pre-reading test changed into a statistically significant difference in the post-reading test. The experimental group performed better in the post-reading test as the intervention in the RT technique ended in more improvement in their reading comprehension skills. This finding parallels a number of studies carried out with the same purpose of exploring the effect of the RT technique on students' reading skills (Palincsar & Brown, 1984; Soonthornmanee, 2002; Spörer et al., 2009; Tseng & Yeh, 2018; Yang, 2010). This result suggests that the RT technique could be implemented in reading courses in PSEFLT education not only to support them in developing their reading skills but also to help them realize that RT can work with younger students, in other words, with their prospective students. Because RT is a technique that is particularly developed for teaching reading, the stages in the RT technique could be applied to other courses necessitating a close reading of several texts. Such a technique producing desired outcomes in developing PSEFLT's reading skills could be considered to be promising in that tertiary students are presented in the literature to be underprepared for tertiary level reading (Feller et al., 2020). Considering the assertion that high level of reading comprehension skills positively impinges on tertiary students' success in their academic education (Cox et al., 2003), and the findings presented in this study, it could be recommended that the RT technique should be implemented as much as it could be in the courses offered in the first academic year to help them develop their reading skills, which could directly affect their success in the following academic years.

The qualitative data revealed PSEFLT's perceptions pertaining to the RT intervention. The interviewees deemed it as effective in developing their reading comprehension skills. The interviewees stated RT fostered student-centered teaching and learning as they did almost all the work via interacting within their groups and the lecturer provided help and guidance solely when they needed. Similarly, the phenomenon that student interaction is facilitated as the RT technique is applied is also demonstrated in other studies (Gruenham, 2012). Moreover, as is indicated in the literature (Douglas et al., 2016), it is important for tertiary students to take control of the process of reading to be proficient in reading. Likewise, the participants viewed RT as effective inasmuch as they were more active through collaborating with their group members in the reading lessons taught in compliance with the RT technique. In compliance with this finding, the related literature entails studies reporting the positive effect of collaborative learning on students' reading comprehension (Ghaith, 2003; Jalilifar, 2010). The positive conceptions the PSEFLT's held about the impact of RT on their reading skills were linked to their past learning experiences of reading in that their prior reading experiences in English were structured upon conventional teaching of reading. Associated with that, Wulfemeyer (2019) pointed out the influence of tertiary student's prior educational experiences on their current low level of reading comprehension skills. The results obtained from the

qualitative data indicate that joining a group in which PSEFLT's could work collaboratively and efficiently might be hard for some of them. For this reason, as it is highlighted in Macaruso and Shankweiler's (2010) study, examinations on adult learners' reading skills require taking into consideration individual traits. Therefore, lecturers applying the RT technique should support PSEFLT's confronting group-related problems more to help them make the most of it.

The qualitative data also showed that the interviewees would apply RT while teaching reading to their prospective students. This finding shows that the way Reading Skills courses are offered at tertiary level is likely to shape pre-service teachers' prospective teaching of reading. Providing they are introduced and taught in line with the methods and techniques maximizing their participation, they may tend to design their teaching in accordance with them when they begin to teach.

### **Conclusions, limitations of the study and further research**

This quasi-experimental study makes a major contribution to the literature with the findings it has demonstrated. Implementing the RT technique in Reading Skills course led to bigger improvement in experimental group's reading comprehension skills. Since they did almost all the work during the intervention, they felt highly motivated to shoulder responsibility for developing their reading skills. The findings indicate that university reading teachers must refrain from conducting the teaching of reading conventionally and fine-tune how they teach reading according to teaching methods encouraging interaction among students and facilitating student autonomy.

This study is not free of limitations. First and foremost, duration of the intervention should be extended because it lasted for seven weeks in this research. Longitudinal studies need to be conducted to explore in detail the effect of the intervention in the RT technique on developing PSEFLT's reading comprehension skills. In addition, more comprehensive qualitative data could be gathered to gain illuminating insights into students' experiences of the RT intervention. This could be achieved by interviewing study participants not only at the end of the intervention but also in the middle of it to make necessary amendments in the intervention so that they can derive substantial benefit from it. The participants are PSEFLT's in this study but the RT technique could be employed by reading teachers teaching at different levels of education. Moreover, female and male students may not benefit from the RT technique equally. Therefore, further research could be carried out to explore the effect of the technique on female and male students.

### **References**

- Aghaie, R. & Zhang, L. J. (2012). Effects of explicit instruction in cognitive and metacognitive reading strategies on Iranian EFL students' reading performance and strategy transfer. *Instructional Science*, 40, 1063-1081.
- Alamprese, J. A., MacArthur, C. A., Price, C. & Knight, D. (2011). Effects of a structured decoding curriculum on adult literacy learners' reading development. *Journal of Research on Educational Effectiveness*, 4, 154-172.

- Albashtawi, A. H. (2019). Improvement of EFL students' academic reading achievement through the Cognitive Academic Language Learning Approach (CALLA). *Reading Psychology, 40*, 679-704.
- Ari, O. (2016). Word recognition processes in college-age students' reading comprehension achievement. *Community College Journal of Research and Practice, 40*(8), 718-423.
- Birt, L., Scott, S., Cavers, D., Campbell, C. & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research, 26*(13), 1802-1811.
- Brown, A. L. & Palincsar, A. S. (1982). Inducing strategic learning from texts by means of informed, self-control training. *Topics in Learning and Learning Disabilities, 2*(1), 1-17.
- Caverly, D. C., Nicholson, S. A. & Radcliffe, R. (2004). The effectiveness of strategic reading instruction for college developmental readers. *Journal of College Reading and Learning, 35*(1), 25-49.
- Chang, C. K. & Hsu, C. K. (2011). A mobile-assisted synchronously collaborative translation–Annotation system for English as a foreign language (EFL) reading comprehension. *Computer Assisted Language Learning, 24*(2), 155-180.
- Chang, A. C. & Millett, S. (2015). Improving reading rates and comprehension through audioassisted extensive reading for beginner learners. *System, 52*, 91-102.
- Chang, M. M. & Lan, S. W. (2019). Exploring undergraduate EFL students' perceptions and experiences of a Moodle-based reciprocal teaching application. *Open Learning: The Journal of Open, Distance and e-Learning*. DOI: 10.1080/02680513.2019.1708298
- Chen, C. M. & Chen, F. Y. (2014). Enhancing digital reading performance with a collaborative reading annotation system. *Computers & Education, 77*, 67-81.
- Cockerill, M., Thurston, A. & Taylor, A. (2019). Protocol: An efficacy randomized controlled trial of Reciprocal Reading in high schools. *International Journal of Educational Research, 97*, 99-106.
- Cox, S. R., Friesner, D. L. & Khayum, M. (2003). Do reading skills courses help underprepared readers achieve academic success in college? *Journal of College Reading and Learning, 33*(2), 170-196.
- Creswell, J. W. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research*. Boston, MA: Pearson.
- Datta, S. & Ross, M. M. (2002). Reading skills and reading habits: A study of new Open University undergraduate reserves. *Open Learning, 17*(1), 69-88.
- Ditzel, S. N. (2010). Metacognitive reading strategies can improve self-regulation. *Journal of College Reading and Learning, 40*(2), 45-63.
- Douglas, K., Barnett, T., Poletti, A., Seaboyer, J. & Kennedy, R. (2016). Building reading resilience: re-thinking reading for the literary studies classroom. *Higher Education Research & Development, 35*(2), 254-266.
- Durmin, C. C. & Sherman, W. M. (2008). Does choice of college textbook make a difference in students' comprehension? *College Teaching, 56*(1), 28-34.
- Ersanlı, C. Y. & Çakır, A. (2017). Developing pre-service English language teachers' comprehension of reading texts with humorous elements. *Journal of Language Education and Research, 13*(1), 123-145.
- Feller, D. P., Magliano, J., Sabatini, J., O'Reilly, T. & Kopatich, R. D. (2020). Does choice of college textbook make a difference in students' comprehension? *Discourse Processes, 57*(5-6), 473-490.

- Ferrer, A., Abarca, E. V., Serrano, M. A. & Gilabert, R. (2017). Impact of text availability and question format on reading comprehension processes. *Contemporary Educational Psychology, 51*, 404-415.
- Fink, A. (2010). Survey research methods. In P. Peterson, E. Baker & B. McGraw (Eds.), *International encyclopedia of education (pp. 152-160)*. Elsevier Ltd.
- Ghaith, G. (2003). Effects of the learning together model of cooperative learning on English as a foreign language reading achievement, academic self-esteem, and feelings of school alienation. *Bilingual Research Journal, 27*(3), 451-474.
- Ghavamnia, M. (2019). Improving Iranian graduate students' performance in reading scientific articles in English through explicit strategy instruction. *Reading Psychology, 40*, 612-637.
- Gilbert, F. (2018). Riding the reciprocal teaching bus. A teacher's reflections on nurturing Collaborative learning in a school culture obsessed by results. *Changing English, 25*(2), 146-162.
- Gorzycki, M., Howard, P., Allen, D., Desa, G. & Rosegard, E. (2016). An exploration of academic reading proficiency at the university level: A cross-sectional study of 848 undergraduates. *Literacy Research and Instruction, 55*(2), 142-162.
- Gruenham, E. A. (2012). Common literacy struggles with college students: Using the reciprocal teaching technique. *Journal of College Reading and Learning, 42*(2), 109-116.
- Higher Education Board. (2018). <https://bit.ly/3aDLGY6>
- Howard, P. J., Gorzycki, M., Desa, G. & Alan, D. D. (2018). Academic reading: Comparing students' and faculty perceptions of its value, practice, and pedagogy. *Journal of College Reading and Learning, 48*, 189-209.
- Hsu, H. Y. & Wang, S. (2010). The impact of using blogs on college students' reading comprehension and learning motivation. *Literacy Research and Instruction, 50*(1), 68-88.
- Huang, S., Capps, M., Blacklock, J. & Garza, M. (2014). Reading habits of college students in the United States. *Reading Psychology, 35*(5), 437-467.
- Huang, H. (2016). Online Versus Paper-based Instruction: Comparing Two Strategy Training Modules for Improving Reading Comprehension. *RELC Journal, 45*(2), 165-180.
- Jalilifar, A. (2010). The effect of cooperative learning techniques on college students' reading comprehension. *System, 38*, 96-108.
- Kealey, M. B. & Mather, N. (2019). Use of an online reading intervention to enhance the basic reading skills of community college students. *Community College Journal of Research and Practice, 43*(9), 631-647.
- Khezrlou, S., Ellis, R. & Sadeghi, K. (2017). Effects of computer-assisted glosses on EFL learners' vocabulary acquisition and reading comprehension in three learning conditions. *System, 65*, 104-116.
- Kim, H. (2016). The relationship between Korean university students' reading attitude, reading strategy use, and reading proficiency. *Reading Psychology, 37*, 1162-1195.
- King, C. M. & Johnson, L. M. P. (1998). Constructing meaning via reciprocal teaching. *Literacy Research and Instruction, 38*(3), 169-186.
- Kingston, A. J. & George, C. E. (2014). The effects of special reading training upon the development of college students' reading skills. *The Journal of Educational Research*. <https://doi.org/10.1080/00220671.1957.10882399>
- Kuehner, A. V. (1999). The effects of computer instruction on college students' reading skills. *Journal of College Reading and Learning, 29*(2), 149-165.

- Kung, F. W. (2019). Teaching second language reading comprehension: The effects of classroom materials and reading strategy use. *Innovation in Language Learning and Teaching*, 13(1), 93-104.
- Lincoln, Y. & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- Liu, Y. (2020). Online English reading instruction in the ESL classroom based on constructivism. *Journal of Educational Technology Systems*, 48(4), 539-552.
- Macaruso, P. & Shankweiler, D. (2010). Expanding the simple view of reading in accounting for reading skills in community college students. *Reading Psychology*, 31, 454-471.
- Moon, A. L., Wold, C. M. & Francom, G. M. (2016). Enhancing Reading Comprehension with Student-Centered iPad Applications. *TechTrends*, 61, 187-194.
- Morshedian, M., Hemmati, F. & Sotoudehnama, E. (2017). Training EFL Learners in Self-Regulation of Reading: Implementing an SRL Model. *Reading & Writing Quarterly*, 33(3), 290-303.
- Nayak, G. & Sylva, K. (2013). The effects of a guided reading intervention on reading comprehension: A study on young Chinese learners of English in Hong Kong. *The Language Learning Journal*, 41(1), 85-103.
- Nhapulo, M. A., Simon, E. & Herreweghe, M. V. (2017). Enhancing academic reading skills through extensive reading. *Southern African Linguistics and Applied Language Studies*, 35(1), 17-40.
- Okkinga, M., Steensel, R. V., Gelderen, A. J. S. V., Schooten, E. V., Slegers, P. J. C. & Arends, L. R. (2018). Effectiveness of reading-strategy interventions in whole classrooms: A meta-analysis. *Educational Psychology Review*, 30, 1215-1239.
- Palincsar, A. S. & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction*, 1(2), 117-175.
- Sahan, A. (2012). Cognitive reading comprehension strategies employed by ELT students. *Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 1(33), 1-22.
- Seymour, J. R. & Osana, H. P. (2003). Reciprocal Teaching procedures and principles: two teachers' developing understanding. *Teaching and Teacher Education*, 19, 325-344.
- Shore, J., Sabatini, J., Lentini, J., Holtzman, S. & McNeil, A. (2015). Development of an evidence-based reading fluency program for adult literacy learners. *Reading Psychology*, 36, 86-104.
- Slater, W. H. & Horstman, F. R. (2002). Teaching reading and writing to struggling middle school and high school students: the case for reciprocal teaching. *Preventing School Failure: Alternative Education for Children and Youth*, 46(4), 163-166.
- Song, K., Na, B. & Kwon, H. J. (2020). A comprehensive review of research on reading comprehension strategies of learners reading in English-as-an-additional language. *Educational Research Review*, 29, 1-12.
- Soonthornmanee, R. (2002). The effect of the reciprocal teaching approach on the reading comprehension of EFL students. *RELC Journal*, 33(2), 125-141.
- Spörer, N., Brunstein, J. C. & Kieschke, U. (2009). Improving students' reading comprehension skills: Effects of strategy instruction and reciprocal teaching. *Learning and Instruction*, 19, 272-286.
- Taraban, R., Kerr, M. & Rynearson, K. (2004). Analytic and pragmatic factors in college students' metacognitive reading strategies. *Reading Psychology*, 25(2), 67-81.
- Tarchi, C. & Pinto, G. (2016). Reciprocal teaching: Analyzing interactive dynamics in the co-construction of a text's meaning. *The Journal of Educational Research*, 109(5), 518-530.

- Taşpınar, H. K. & Çubukçu, F. (2020). The impact of critical literacy instruction on adult EFL learners' reading comprehension. *Language Teaching and Education Research*, 3(1), 34-55.
- Tsai, Y. R., Ernst, C. & Talley, P. C. (2010). L1 and L2 strategy use in reading comprehension of Chinese EFL readers. *Reading Psychology*, 31, 1-21.
- Tseng, S. S. & Yeh, H. C. (2018). Integrating reciprocal teaching in an online environment with an annotation feature to enhance low-achieving students' English reading comprehension. *Interactive Learning Environments*, 26(6), 789-802.
- Wang, Y. H. (2017). Integrating self-paced mobile learning into language instruction: Impact on reading comprehension and learner satisfaction. *Interactive Learning Environments*, 25(3), 397-411.
- Wulfemeyer, J. (2019). Modeling metacognition and providing background knowledge via guided reading videos. *Journal of College Reading and Learning*, 49, 75-88.
- Yang, Y. F. (2010). Developing a reciprocal teaching/learning system for college remedial reading instruction. *Computers & Education*, 55, 1193-1201.
- Yang, Y. F. (2012). Blended learning for college students with English reading difficulties. *Computer Assisted Language Learning*, 25(5), 393-406.
- Zendler, A. & Reile, S. (2018). The effect of reciprocal teaching and programmed instruction on learning outcome in computer science education. *Studies in Educational Evaluation*, 58, 132-144.
- Zoghi, M., Mustapha, R. & Maasum, T. N. R. B. T. M. (2010). Collaborative strategic reading with university EFL learners. *Journal of College Reading and Learning*, 41(1), 67-94.



## Trends in Studies to Improve Reading Skills for Students with Reading Difficulties\*

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### ABSTRACT

Reading difficulty can be defined as the inability of the individual to read in proportion to his/her intelligence level and physical characteristics. There are many studies aimed at addressing the reading difficulties of students with inability to read. This research, which was carried out in accordance with the qualitative research approach, seeks to determine the trends in studies which aimed at improving the reading skills of students with reading difficulties in Turkey. The data of the research were collected through qualitative document review and analyzed by the descriptive analysis. Within the scope of the research, Dergipark Academic, EBSCOhost, Google Academic and National Thesis Center databases were scanned and 53 studies were reached that met the predefined criteria. The studies identified were processed into the data processing template developed based on sub-problems. As a result of the research, it was seen that; the studies increased in 2019 and 2020, the majority of studies consist of articles, action research is preferred more as a research model, studies are concentrated at the 3rd and 4th grades of primary school, the vast majority of applications are performed with a single participant, implementation time in studies is often in the range of 26-50 course hours, repetitive reading and echo reading methods are much more preferred to improve reading skills, "The Informal Reading Inventory" was frequently used in the evaluation of reading skills.

#### Statement of Publication Ethics

#### Authors' Contribution Rate

#### Conflict of Interest

Ethical approval is not required for this type of study

The authors contributed equally to the research.

We have no conflicts of interest

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## Introduction

Despite adequate intelligence level and a suitable learning environment, some students may have difficulties in basic skills such as speech, reading, writing and mathematics even in later grades. These difficulties are known as “special learning difficulties”. The Ministry of National Education (MoNE, 2008: 3) defines the individual with special learning disabilities as follows: Despite the sufficient level of intelligence in the formal education program, individuals who have experienced negativity in understanding and using the language in writing or verbally, intensifying their attention, mathematics, reasoning, motor-organization skills, and for these reasons have low academic success compared to their peers. It is not possible to talk about a typical concept for an individual with learning difficulties. Each of these students also has different characteristics in terms of academic, social or behavioral characteristics. Some of the students have difficulties in only one area, while others may have difficulties in multiple areas (Gargiulo, 2003; Pierangelo & Giuliani, 2006; as cited in Melekoğlu, 2010: 92). In recent years, the number of children with learning disabilities has increased significantly. One of the reasons for this is that people are thought to have more awareness of these problems (Pollock et al., 2004: 1).

## Literature review

Skills related to the reading process; decoding of the word, reading/recognizing words, fluent reading, reading comprehension (Bender, 2012: 183). Any problem that may occur within these skills is known as “reading difficulties” among learning difficulties. Kuruyer (2014: 12-13) stated that although some students do not have any lack of intelligence, visual-hearing impairment, attention deficit and hyperactivity disorder (ADHD), they are not able to perform the same performance in terms of reading ability compared to their peers, and these difficulties can be called reading difficulty. A child's difficulties with reading are the first point to realize that they have certain educational needs (Pollock et al., 2004: 52). Because the reading difficulties are reflected in the language, and this indicates a problem within the language system (Shaywitz & Shaywitz, 2004). In this context, it can be said that the difficulties experienced with reading will be reflected in the academic difficulties in many fields along with language problems.

According to the “Simple View of Reading”, decoding and comprehension are required for a good read (Hoover & Gough, 1990). When children start reading, they are new to word reading and may differ in the speed at which they gain the ability to decode. Initially, children's competence in decoding words is almost identical to the comprehension of reading. Over time, as children become proficient in decoding words, comprehension will become more important (Oakhill, Cain & Elbro, 2019: 84). Even if children with certain comprehension problems are good at reading words, they are often known as weak understanders. Children with such problems are usually noticed before the 3rd and 4th grades of primary school. Good readers are readers who have no difficulty in word reading and language comprehension (Oakhill, Cain & Elbro, 2019: 84-85). Some children may be deprived of reading because they are in a culturally disadvantaged environment, or sensory problems such as hearing and vision may cause reading problems. Only mental functions

may not be at the root of reading problems. Such children can overcome reading difficulties after a period of exposure to a literacy environment (Pas, 2009: 9).

Another concept that comes up in the literature when it comes to reading difficulty is dyslexia. Dyslexia is a term often used for poor reading ability. It is used to describe a very specific reading difficulty (Pas, 2009: 3) and refer to problems in the perception of letters and words due to perceptual problems in the brain and central nervous system, and these problems are assumed to cause reading difficulties (Bender, 2012: 183). Another concept that comes up in the literature when it comes to difficulty reading is dyslexia. When we looked at the researches on the subject in Turkish, it was seen that the concepts of “reading difficulty” and “dyslexia” were used together or in place of each other. Therefore, it is worth explaining dyslexia and its properties within the scope of reading difficulties.

There are many different views about what dyslexia is and what it is caused by. The most widely accepted view of dyslexia is that it relates to difficulties with reading and spelling. In fact, these challenges are easily visible from the outside and are exhibited only with the start of reading. Also, not every reading and spelling difficulty can be considered as dyslexia. In order to be considered dyslexia; there should be main features such as reading, speaking, writing, mind, coordination, organizational difficulties, information processing, phonological difficulties, visual difficulties, inconsistencies (Peer & Reid, 2003: 9-13). It is always important to make sure that a dyslexic child does not have a physiological (ear, eyes, IQ) problem (Pollock et al., 2004: 52). In Stanovich's “Phonological-Core Variable Difference Model” (1988), he claimed that the most important difference between normal and weak readers was due to the sound scientific field in cognitive functions (Tracey & Morrow, 2006: 155).

Diagnosis, understanding and determination of appropriate learning approaches to dyslexia is an issue that has been raised in many government reports of different countries. But despite the fact that there is a lot of information and resources about dyslexia, the increase in this knowledge and resources may distract teachers and parents from an agreeable point and cause some confusion (Reid, 2011: 4). The concepts of reading difficulty /dyslexia have been raised more frequently in recent years than before. However, there is not enough information on how to diagnose and identify students with reading difficulties and how to implement an individualized curriculum (Çeliktürk Sezgin & Akyol, 2015: 7). The importance of early intervention in reading problems has been clearly established (Christo et al., 2009: 3). In this context, the literature review indicated the existence of many studies on the subject. The collection, review and interpretation of such subject-specific studies in the field will contribute to future studies in terms of guiding and presenting recommendations in the context of research, implementation and policies (Davies, 2000; as cited in Yıldız et al., 2019: 1052).

Researches on reading difficulties in Turkey can be grouped into the following themes; diagnosis/causes of reading difficulties, research on diagnosis/evaluation (Balıcı, 2017; Bingöl, 2003), research on the elimination of reading difficulties and the development of reading skills (Akyol & Ketenoğlu Kayabaşı, 2018; Çeliktürk Sezgin & Akyol, 2015; Deniz & Aslan, 2020; Dinç, 2017; Duran & Sezgin, 2012; İşler & Şahin, 2016; Kodan, 2015; Sağlam, 2019; Sidekli, 2010; Yamaç, 2014) and teacher research on reading difficulties

(Balcı, 2019; Doğan, 2013; Kodan, 2020; Sirem & Baş, 2021; Yurdakal & Susar Kırmızı, 2019).

In this research, studies aimed at improving the reading skills of students with reading difficulties were discussed. In the relevant literature, it has been determined that there are many interventional studies aimed at eliminating reading difficulties in Turkey and different methods-applications are used in these researches. It was also determined that the number of participants and implementation time in these studies differed. The aim of this study is to examine the research trends of studies carried out in Turkey in order to improve the reading skills of students with reading difficulty. In this way, it is aimed to reveal the general appearance of the studies in Turkey in order to solve the reading problems of students with reading difficulties. In addition, it is thought that the study may provide the regular classroom teachers and Turkish-language teachers who are practitioners of the field, new ideas about the educational practices, materials and measurement tools that they can apply in the classroom environment for their students with difficulty reading. In this context, the following questions were sought in the “studies to improve the reading skills of students with difficulty reading”;

1. What is the distribution of studies by year?
2. What are the publication types of studies?
3. What are the research models of the studies?
4. What is the grade level of the participants of the studies?
5. What is the number of participants in the studies?
6. How long is the implementation time/period of the studies?
7. What are the reading methods and techniques of the studies?
8. What are the measuring tools of the studies?

## Methodology

### Model of research and publication ethics

This research which was carried out in accordance with the qualitative research approach, seeks to determine the trends in studies carried out in Turkey aimed at improving the reading skills of students with reading difficulties. Data was obtained based on one of the qualitative data collection methods, document review method. Document review is a method of data collection based on the examination of written materials containing the subjects or events intended to be investigated (Yıldırım & Şimşek, 2013: 217). This study titled “Trends in Studies to Improve Reading Skills for Students with Reading Difficulties” is a comprehensive literature review. Ethical approval is not applicable, because this article does not contain any human or animal subjects.

### Data source

For the purposes of research, thesis and articles “aimed at improving the reading skills of students with difficulty reading” were included in the scope of the research. Related studies were obtained using the databases “Dergipark Akademik”, “EBSCOhost”, “Google

Academic” and “CoHE National Thesis Center”. Database queries were performed using the keywords “reading difficulty”, “dyslexia” and “dyslexic” to find relevant research.

### **Data collection**

Within the scope of the research, literature was scanned from the databases determined. 2 January 2021 is the deadline for scans from related databases. A data pool was obtained as a result of the literature review. From the data pool obtained, some criteria were taken into account in determining the studies to be selected for analysis. Initial inclusion criteria;

- being a study aimed at improving the reading skills of students with reading difficulty
- the study has not been published as different types of publications. If the same study was published as both a research paper and a thesis, the primary source, i.e. thesis, was included in the research.

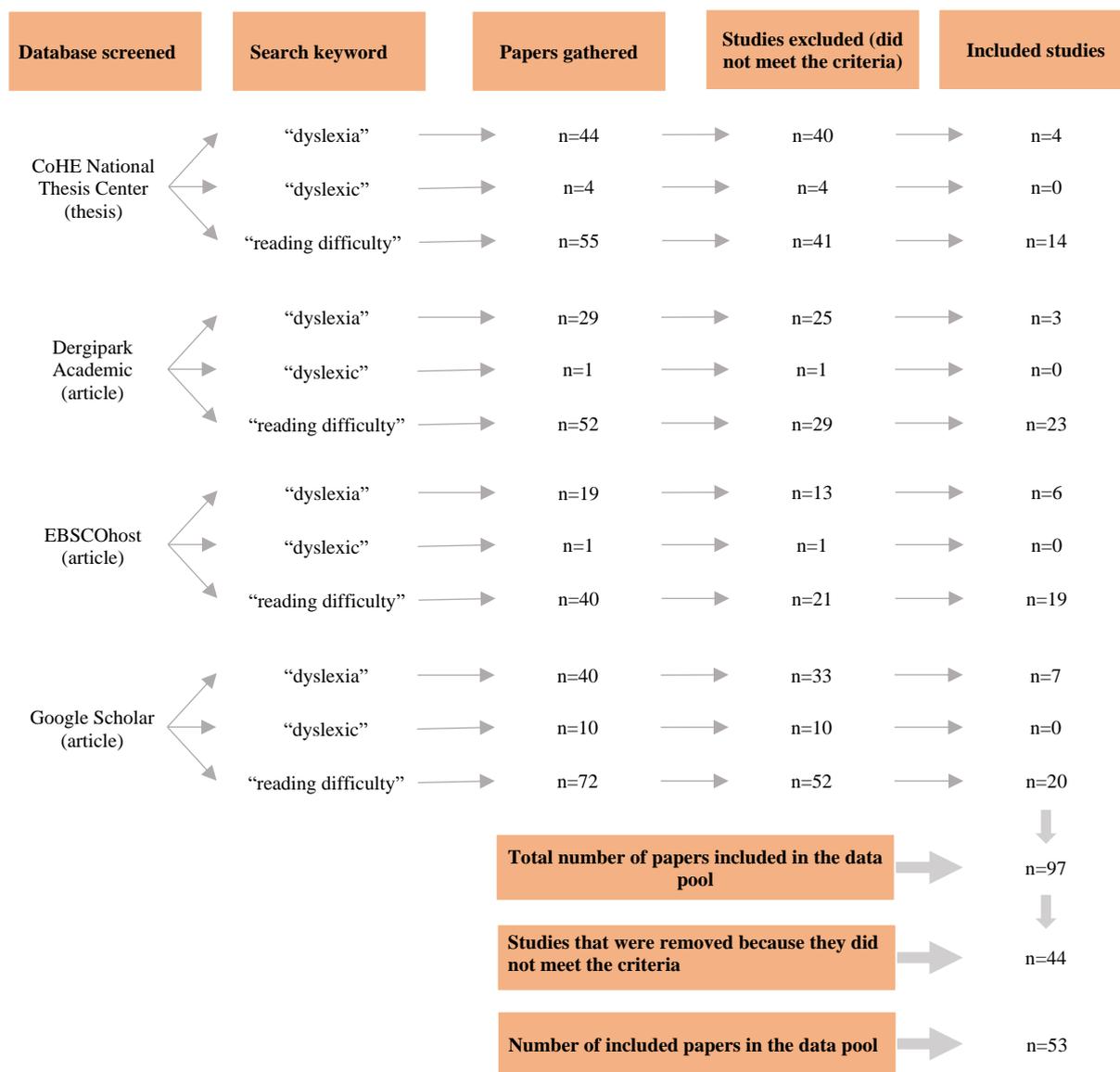
Other criteria for inclusion:

- Studies carried out in Turkey.
- Studies for students with reading difficulties
- Intervention research to address reading difficulties.
- Studies at the elementary level (1.-8. grades)
- Studies aimed at addressing the reading difficulties of students whose native language is Turkish.

Exclusion criteria:

- Studies carried out abroad.
- Non-school-based studies.
- Studies on diagnosing reading difficulties.
- Theoretical studies on reading difficulties and dyslexia.

The data collection process carried out to determine the studies to be analysed within the scope of the research according to the inclusion-exclusion criteria obtained is summarized in Figure 1.

**Figure 1.** Tracked Path to the Paper Inclusion Process

As shown in Figure 1, a total of 367 studies were reached in the first phase of the research. The total number of studies included in the data pool is 97. In the next stage, 44 studies were excluded from the scope because they did not meet the criteria. At the end of all these procedures, the final number of included studies in the data pool was determined as 53 (18 thesis, 35 articles).

### Data analysis

The data of this research were analyzed using the descriptive analysis technique. In the descriptive analysis, the data is organized and interpreted according to predetermined themes (Yıldırım & Şimşek, 2013: 256). In order to analyze the data, a data processing template consisting of predefined categories has been created based on sub-problems. This template contains information about the year of the studies, publication type, research

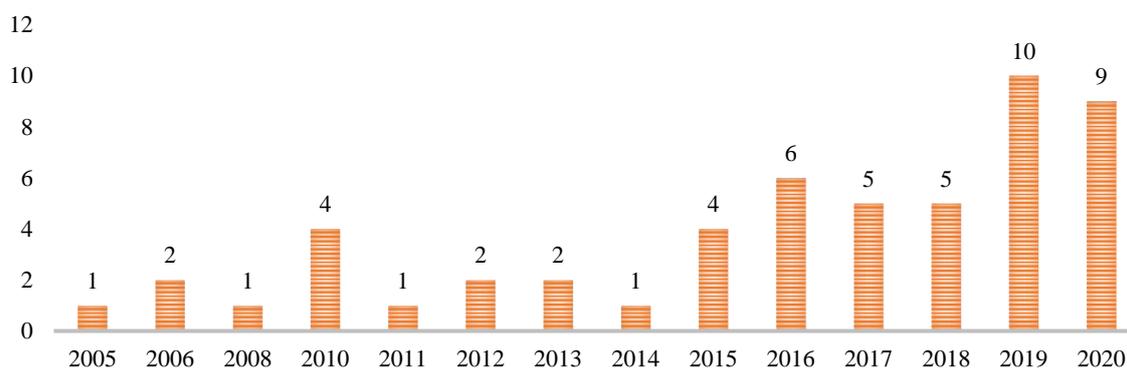
models, grade level of participants, number of participants, implementation time/period, reading methods/techniques and measurement tools used.

During the analysis of the data, both researchers independently processed the studies examined in the research into the data processing template. Later, the researchers compared the similarities and differences between subheadings and contents, and at the end of the comparison, the data with disagreement was revised and consensus was reached. Thus, the reliability of the research was tried to be increased.

### Findings

The findings of this study were examined based on the sub-problems discussed in the study. The first sub-problem of the study was determined as “*What is the distribution of the studies by year?*”. In this context, the distribution of the studies examined is shown in Figure 2.

**Figure 2.** Distribution of the Studies by Year



When the graph in Figure 2 is examined, one study in 2005 (1.88%), two studies in 2006 (3.77%), one study in 2008 (1.88%), four studies in 2010 (7.54%), one study in 2011 (1.88%), two studies in 2012 (3.77%), two studies in 2013 (3.77%), two studies in 2014 (3.77%), four studies in 2015 (7.54%), six studies in 2016 (11.32%), five studies in 2017 (9.43%), five studies (9.43%) were carried out in 2018, 10 studies (18.86%) in 2019 and nine studies (16.98%) in 2020. It has been seen that the number of studies on the subject has increased in recent years.

The second sub-problem of the study was determined as “*What are the publication types of studies?*”. In this context, the distribution of the studies examined is shown in Figure 3.

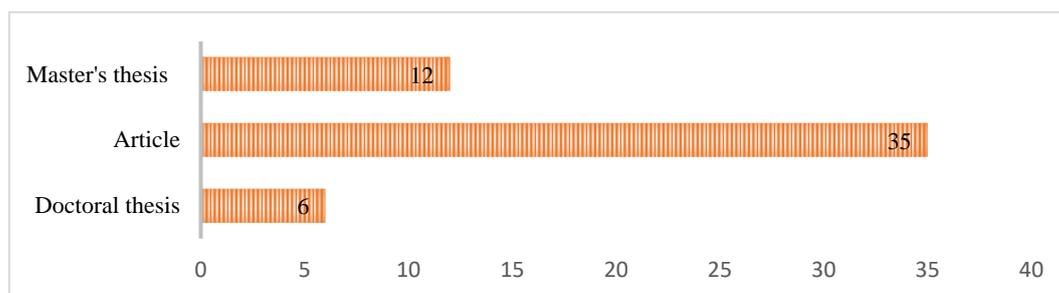
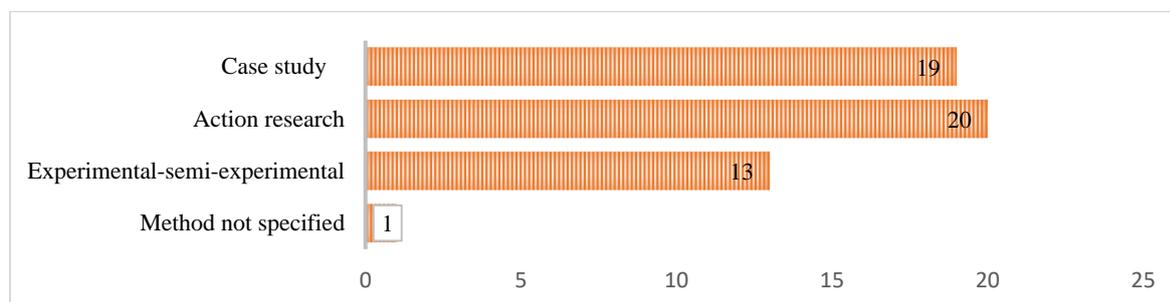
**Figure 3.** Distribution of the Studies Examined According to the Publication Type

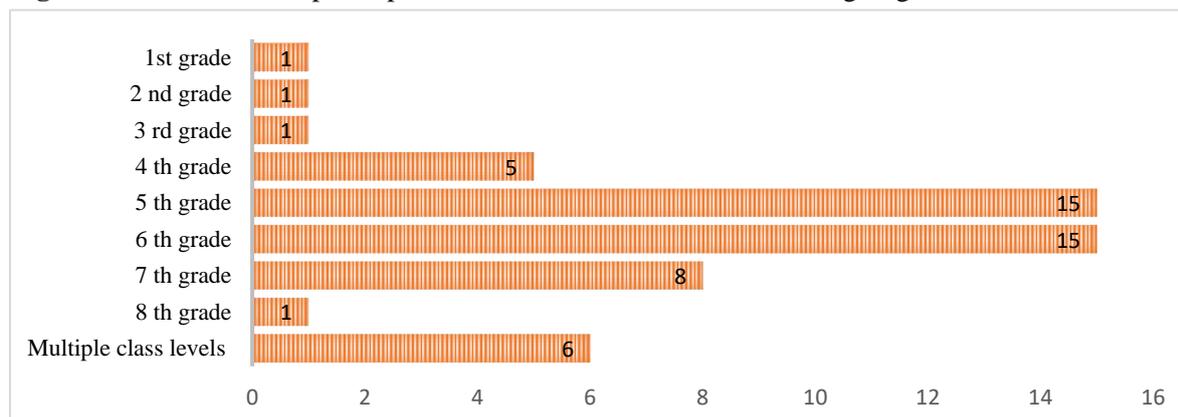
Figure 3 shows that 12 of the studies consist of master's (22.64%), 6 doctoral thesis (11.32%), and 35 articles (66.04%). It has been identified that the majority of the studies are of the type of article.

The third sub-problem of the study was determined as “*What are the research models of the studies?*”. In this context, the distribution of the studies examined is shown in Figure 4.

**Figure 4.** Distribution of the Studies Examined According to the Research Models

When Figure 4 is examined, it is seen that 19 of the related studies (35.84%) used case study method, 20 (37.73%) used action research method and 13 (24.52%) used experimental research methods. In a publication, the method is not specified. It is identified that more action research is used in the studies.

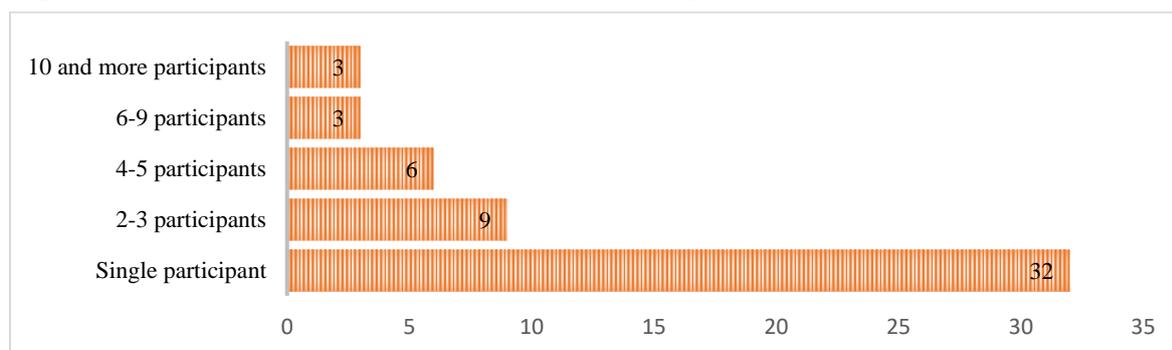
The fourth sub-problem of the study was determined as “*What is the grade level of the participants of the studies?*”. In this context, the distribution of the studies examined is shown in Figure 5.

**Figure 5.** Distribution of participants in the studies examined according to grade level.

As shown in Figure 5, studies aimed at improving the reading skills of students with reading difficulties, It is understood that it was done 1 time (1.88%) at the first grade (1.88%), 8 times at the second grade (15.09%), 15 times at the third grade (28.3%), 15 times at the fourth grade (28.3%), 5 times at the fifth grade (9.43%), 1 time at the sixth, seventh and eighth grades (1.88%). 6 of the publications were carried out at more than one grade (11.32%). It is understood that the studies were carried out mostly at the 3rd and 4th grades.

The fifth sub-problem of the study was determined as “*What is the number of participants in the studies?*”. In this context, the distribution of the studies examined is shown in Figure 6.

**Figure 6.** Distribution of the Studies Examined According to the Number of Participants



When Figure 6 is examined, it is understood that 32 (60.37%) studies with a single participant, 9 studies with two or three participants (16.98%), 6 studies with four-five participants (11.32%), 3 studies with six to nine participants (5.66%), 3 (5.66%) with ten or more participants were carried out. has been determined that most of the studies were carried out with a single participant.

The sixth sub-problem of the study was determined as “*How long is the implementation time/period of the studies?*”. In this context, the distribution of the studies examined is shown in Figure 7.

**Figure 7.** Distribution of the Studies Examined According to the Implementation Time

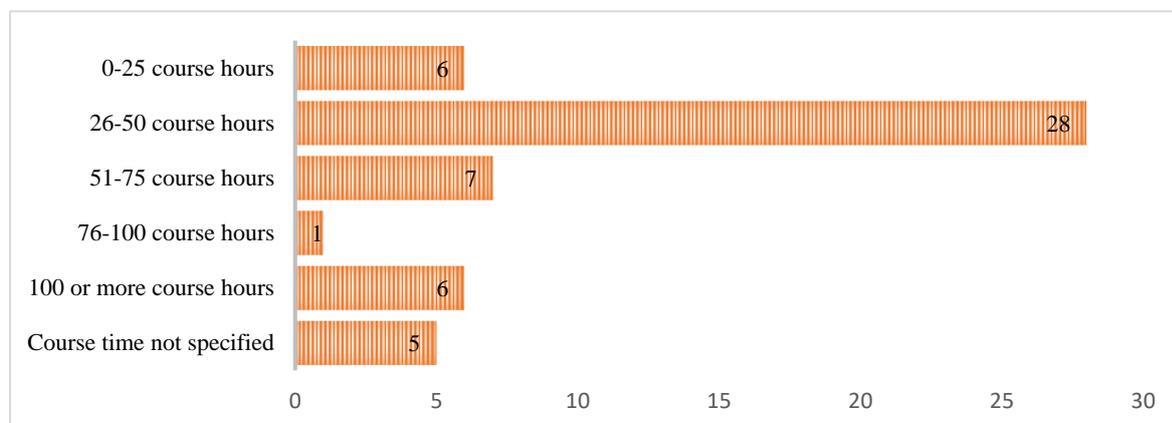
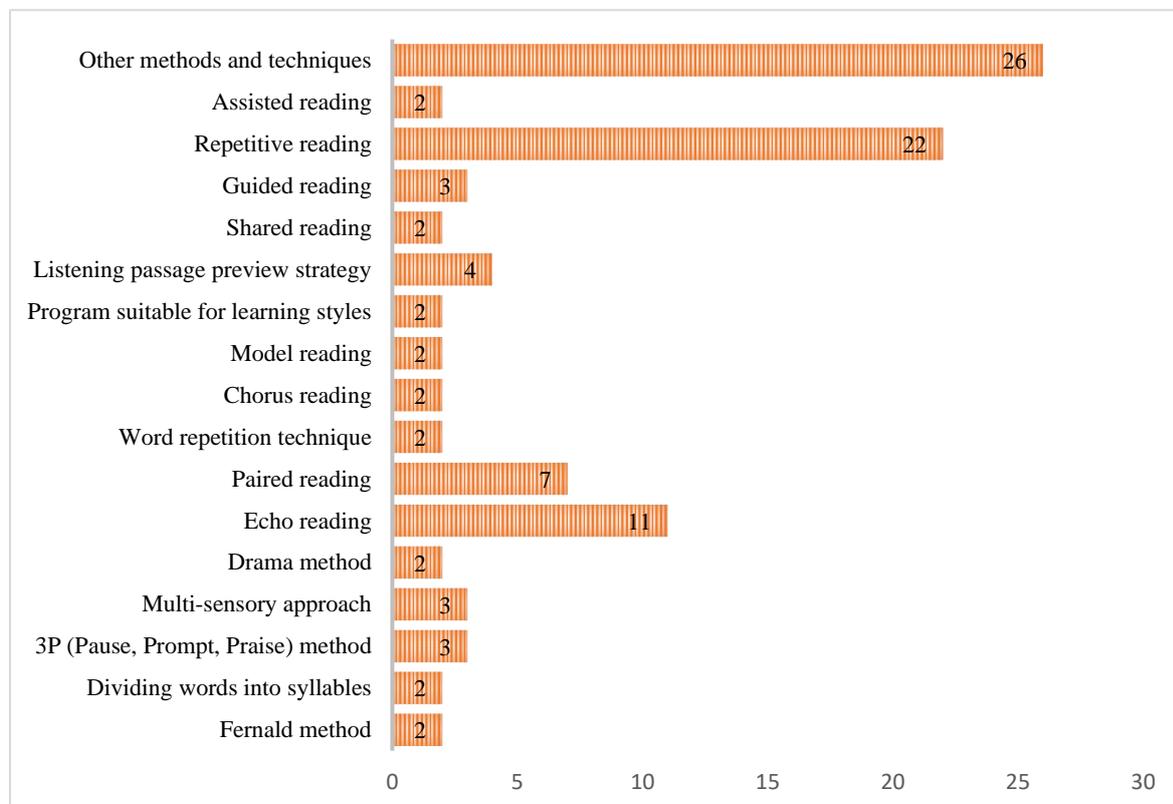


Figure 7 shows that 6 (11.32%) studies in the range of 0-25 course hours, 28 (52.83%) studies were conducted in the 26-50 course hours range, 7 (13.2%) in the 51-75 course hours range, 1 (1.88%) in the 76-100 hours range, and 6 (11.32%) in the range of 100 course hours and above. In addition, the implementation performed in 5 of the studies (9.43%) are not specified as course hours. In researches whose course time is not specified,

information is available in the form of 12 weeks (2 papers), 17 weeks, 5 weeks, 7 weeks. It is understood that the implementation time of most of the studies is between 26-50 course hours.

The seventh sub-problem of the study was determined as “*What are the reading methods and techniques used in the studies?*”. In this context, the distribution of the studies examined is shown in Figure 8.

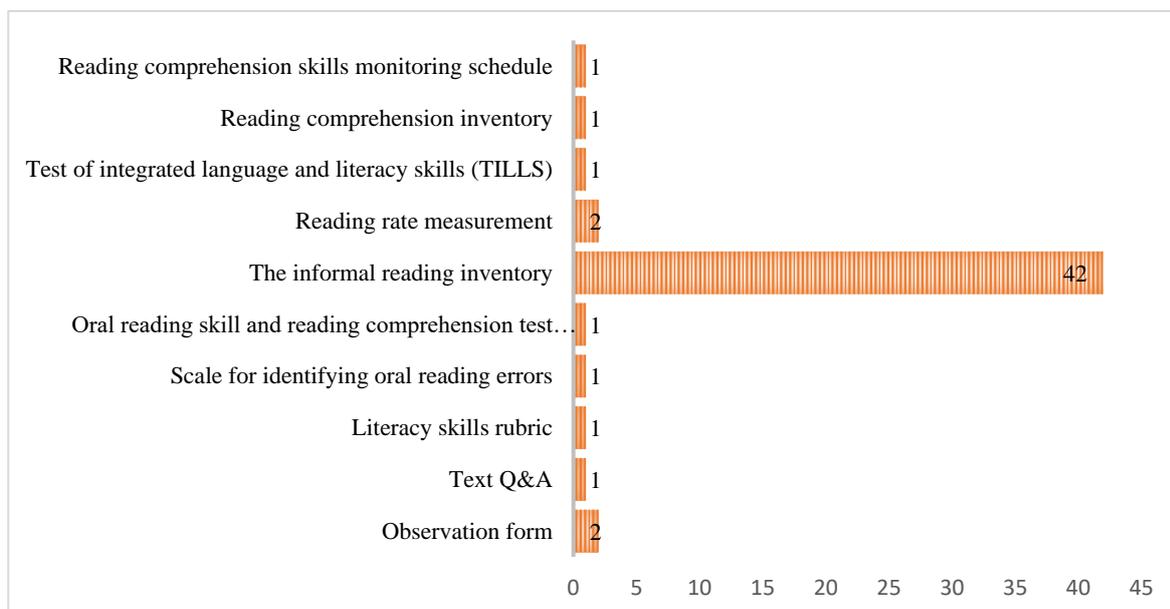
**Figure 8.** Distribution According to Reading Methods and Techniques Used in the Studies Examined.



When Figure 8 is examined it was seen that; in 2 studies (2.06%) the “Fernald method”, in 2 studies (2.06%) “Dividing words into syllables”, in 3 studies (3.09%) “3P (Pause, Prompt, Praise) method”, in 3 studies (3.09%) “Multi-sensory approach”, in 2 studies (2.06%) “Drama method”, in 11 studies (11.34%) “Echo reading method” was used. Also “Paired reading strategy” in 7 studies (7.21%), “Word repetition technique” in 2 studies (2.06%), “Chorus reading” in 2 studies (2.06%), “Model reading” in 2 studies (2.06%), “Program suitable for learning styles” in 2 studies (2.06%), “Listening passage preview strategy” in 4 studies (4.12%), “Shared reading” in 2 studies (2.06%), “Guided reading” in 3 studies (3.09%), “Repetitive reading” in 22 studies (22.68%), and “Assisted reading” in 2 studies (2.06%) were identified. In addition, it was observed that 26 “Other methods and techniques” (26.8%) were used in the researches examined. Within these 26 methods and techniques, the maximum frequency number is one and because it is too long to write on the figure individually, it is presented all in one. In studies, it has been observed that repetitive reading and echo reading methods are used more.

The eighth sub-problem of the study was determined as “*What are the measuring tools of the studies?*”. In this context, the distribution of the studies examined is shown in Figure 9.

**Figure 9.** Distribution of the Studies Examined According to the Measurement Tools Used



As shown in Figure 9, “Observation form” was used 2 (3.77%) times and “Text Q&A” was used 1 (1.88%) times to measure the improvement in reading skills. Also, “Literacy skills rubric” 1 (1.88%), “Scale for identifying oral reading errors” 1 (1.88%), “Oral Reading Skill and Reading Comprehension Test (SOBAT-2)” 1 (1.88%), “The Informal Reading Inventory” 42 (79.24%), “Reading rate measurement” 2 (3.77%), “Test of integrated language and literacy skills (TILLS)” 1 (1.88%), “Reading comprehension inventory” 1 (1.88%) and “Reading comprehension skills monitoring schedule” 1 (1.88%) times used. It has been determined that “The Informal Reading Inventory” is often preferred in studies.

## Discussion

The aim of this study is to determine the research trends of studies carried out in Turkey to improve the reading skills of students with difficulty reading. Thus, it was thought to be discussed with a holistic perspective of the general view and prominent publication types/research models/ participants/ implementation time/period/ reading methods/ measurement tools. As a result of the review, 53 studies (18 thesis, 35 articles) were included in the study.

According to results, when looking at the distribution of research by year, especially in 2019 and 2020 the number of researches increased. In addition to this finding, it was determined that the first study on the subject was in 2005. After the 2004-2005 academic year in Turkey, a constructive education approach was introduced and with it, sound-based sentence method was used in elementary school writing instruction in first grades. According to the sound-based sentence method, first reading and writing instruction is

started with sounds. After giving a few sounds to the learner, an instruction is provided in such a way that sounds to syllables, syllables to words and words to sentences are reached (Akyol, 2006: 86). For students who have distinctive difficulties in learning to read, teachers should be based on sound-based sentence method. It should pay attention to the stages of sound unit skills, the determination of a small number of skills for teaching, the individual handling of skills and the general principles of the sound unit, such as the use of phoneme sounds (Bender, 2012: 186). In this sense, it can be said that the primary school reading and writing instruction applied in Turkey is an appropriate approach to addressing reading difficulties.

When the distribution of the studies within the scope of the study according to the publication types was examined, 6 doctoral thesis, 12 master's thesis and 35 articles were determined. This situation shows that there is a greater orientation to articles than postgraduate research on reading difficulties in Turkey.

According to another research result, it was determined that the action research method was used more frequently than other methods in the researches examined. This finding suggests that qualitative research methods are mostly preferred in studies aimed at eliminating reading difficulties. Action research is a method that has become popular again in recent years, especially in order to improve the practice in the field of education (Glesne, 2012: 32). In addition to filling the gap between theory and practice, action research creates opportunities for teachers to facilitate their competence and create development and experience for teachers (Johnson, 2015: 23). In this context, it can be said that action research is one of the appropriate method in the researches to be carried out in order to eliminate reading difficulties.

When sample groups were analyzed within the scope of the study, it was observed that the sample grade consisted mostly of 3rd and 4th grades. The first grade is the period when reading and writing are learned for the first time, also the reading and writing process is completed at the end of the first grade. In the second year, studies are included to improve the reading and writing skills of the students (MoNE, 2019: 14). After the completion of the primary school and writing phase, students' reading levels are expected to move to "independent level". Akyol (2020: 98) explained the free level as reading and making sense of material suitable for the child's level without the help of anyone else. The inadequacies of reading in the 3rd and 4th grades suggest difficulty reading. Therefore, there may have been a trend towards this sample group in the research. Another conclusion obtained from the research is that 8 studies were reached for middle school students (5th, 6th, 7th and 8th grade). Based on this result, it can be said that there are students with reading difficulties at the secondary school level in Turkey. However, it is vital to detect reading problems early and to make necessary interventions. According to Balcı (2015: 230), it is very difficult to talk about early diagnosis of dyslexia in our country. There are students who cannot read or have difficulty reading texts at the 3rd and 4th grade, or even at the middle school level.

When we looked at the number of participants in the studies, it was determined that most of the studies were carried out with a single participant. It is noticeable that the number of studies carried out with 10 or more participants is quite small. The ability to conduct such research in larger sample groups requires costs in subjects such as the number of researchers,

time and equipment. Therefore, it is thought that the researches were carried out mostly with a single participant. On the other hand, it should be noted that the applications to be made for students' reading difficulties should be in the form of individual or small group teaching (EACEA, 2011; as cited in Çeliktürk Sezgin & Akyol, 2015: 7). This proposal supports the tendency to work with a single or small number of participants in the studies.

It was understood that the implementation time of most of the studies examined within the scope of the study was between 26-50 course hours. This result indicates to us that this period may be appropriate for an individualized program to be prepared to address reading difficulties. It is recommended that this period be taken as a reference in the researches to be carried out after this.

When we looked at the distribution of reading methods and techniques used in the studies included in the study, it was seen that repetitive reading and echo reading methods were used more. This result indicates a tendency in major reading methods and techniques in the related research field. The method of repetitive reading is based on the reader reading a short and meaningful text several times until he/she reaches a certain level of fluency (Samuels, 1979: 377). It increases children's understanding of re-reading stories several times (Yaden, 1988). Echo reading is a strategy based on the teacher reading the line of a story and then the students reading the same line by mimicking the teacher's intonation and sentences (Vacca et al., 2015: 227). In these techniques, the aim is to reach a certain level of fluency. Students with reading difficulties experience comprehension problems as well as fluent reading problems. Kuruyer (2014: 25) stated that students with reading difficulties miss the meaning because they spend a lot of time recognizing and distinguishing words, which is due to the fact that short-term memory spends more performance than it is capable of decoding and distinguishing words. Studies have shown that there is not much focus on methods to improve the comprehension skills of students with reading difficulties. Future research also recommends strategies to improve comprehension skills. In this context, it is recommended that future research on the subject include strategies to improve comprehension skills.

In the studies examined, it was determined that "The Informal Reading Inventory" was often preferred. This inventory was adapted into Turkish by Akyol (2020) using the studies of Harris and Sipay (1990), Ekwall and Shanker (1988) and May (1986). The frequency of orientation to a measuring tool in the research topic indicates that the measurement tools are inadequate at the point of measurement and evaluation in this field. In evaluating the student's reading performance, word recognition, fluency and comprehension are important critical areas (Akyol et al., 2014: 3). In this context, these critical skill areas should be taken into account in the evaluation of reading skills of students with reading difficulties.

### **Conclusion**

When "the studies aimed at improving the reading skills of students with reading difficulties" were examined in Turkey, it was determined that there was an increase in the number of researches carried out, especially in recent years. However, it can be said that more studies are needed because reading difficulties are an important learning disability

domain that affects a child's academic skills as well as his/her entire life. Additionally, when the distribution of studies on the subject according to the type of publication was examined, it was seen that graduate studies were outnumbered according to the articles. In this context, it is seen as important to guide and direct graduate students to studies that address the issue of difficulty reading.

In the studies examined, it was observed that the duration of interventional applications to eliminate reading difficulties is usually 25-50 course hours. It is thought that longitudinal research on the subject is needed in order to evaluate the reading skills of students with reading difficulties over a wider period of time. It has also been observed that repetitive reading and echo reading methods are often used in studies. In line with this, in future research, it is recommended to use different reading methods and techniques. In the study, it was determined that a limited number of measuring instruments were used to identify reading difficulties. Accordingly, it is thought that various measuring tools should be developed for the detection and evaluation of reading difficulties of the students. In this study, papers on reading difficulties in the Turkish sample were examined. Therefore, it seems important to include international studies in the research sample in future studies.

### References

#### \* Studies Examined within the Scope of Research

- \*Aktepe, V. & Akyol, H. (2015). Okuma güçlüğü ve giderilmesi: Tek örneklemlili bir durum çalışması. *International Journal of Eurasia Sciences*, 6(19), 111-126.
- Akyol, H. (2006). *Türkçe ilkokuma yazma öğretimi*. (5. Baskı). Ankara: Pegem Akademi Yayınları.
- Akyol, H. (2020). *Programa uygun Türkçe öğretim yöntemleri*. (10. Baskı). Ankara: Pegem Akademi Yayınları.
- Akyol, H. & Ketenoğlu Kayabaşı, Z. E. (2018). Okuma güçlüğü yaşayan bir öğrencinin okuma becerilerinin geliştirilmesi: Bir eylem araştırması. *Eğitim ve Bilim*, 43(193), 143-158. Doi: 10.15390/EB.2018.7240
- \*Akyol, H. & Ketenoğlu Kayabaşı, Z. E. (2018). Okuma güçlüğü yaşayan bir öğrencinin okuma becerilerinin geliştirilmesi: Bir eylem araştırması. *Eğitim ve Bilim*, 43(193), 143-158. Doi: 10.15390/EB.2018.7240
- \*Akyol, H. & Kodan, H. (2016). Okuma güçlüğü'nün giderilmesine yönelik bir uygulama: Akıcı okuma stratejilerinin kullanımı. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 35(2), 7-21. doi: 10.7822/omuefd.35.2.1
- \*Akyol, H. & Sever, E. (2019). Okuma yazma güçlüğü ve bir eylem araştırması: İkinci sınıf örneği. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 34(3), 685-707. Doi: 10.16986/HUJE.2018040667
- \*Akyol, H. & Çoban Sural, Ü. (2020). Okuma, okuduğunu anlama ve okuma motivasyonunun geliştirilmesi: Bir eylem araştırması. *Eğitim ve Bilim*, Çevrimiçi Ön Yayın. doi:10.15390/EB.2020.8977
- Akyol, H., Yıldırım, K., Ateş, S., Çetinkaya, Ç. & Rasinski, T. V. (2014). *Okumayı değerlendirme öğretmenler için kolay ve pratik bir yol*. Ankara: Pegem Akademi Yayınları.
- Balcı, E. (2015). *Amerika Birleşik Devletleri'nde disleksili bireylere uygulanan eğitim ve öğretim programlarının Türkiye'de yapılan çalışmalara katkısı açısından değerlendirilmesi*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.

- Balcı, E. (2017). Dyslexia: definition, classification and symptoms. *SDU International Journal of Educational Studies*, 4(2), 166-180.
- Balcı, E. (2019). Disleksi hakkında öğretmen görüşleri ve karşılaştıkları sorunlar. *Ege Eğitim Dergisi*, 20(1), 162-179. DOI: 10.12984/eegeefd.453922
- \*Balcı, E. & Çayır, A. (2017). Çoklu duyuşal öğrenme'nin disleksi riski olan bir ilkokul 4. sınıf öğrencisinin fonolojik farkındalık becerisine etkisi. *Ana Dili Eğitimi Dergisi*, 5(2), 201-216.
- \*Baştuğ, M. & Öncü, B. (2020). İkinci sınıf öğrencilerinin akıcı okuma becerilerini geliştirmede pratik stratejilerle erken okuryazarlığa yardım programı'nın (HELPS) kullanılması üzerine bir durum çalışması. *Eğitimde Nitel Araştırmalar Dergisi - ENAD*, 8(4), 1147-1164. doi: 10.14689/issn.2148-2624.8c.4s.4m
- Bender, W. N. (2012). *Öğrenme güçlüğü olan bireyler ve eğitimleri*. (Çev. Ed. H. Sarı). Ankara: Nobel Akademik Yayıncılık.
- Bingöl, A. (2003). Ankara'daki ilkokul 2. ve 4. sınıf öğrencilerinde gelişimsel disleksi oranı. *Ankara Üniversitesi Tıp Fakültesi Mecmuası*, 56(2), 67-82.
- Christo, C., Davis, J. M. & Brock, S. E. (2009). *Identifying, assessing, and treating dyslexia at school*. New York: Springer Science & Business Media.
- \*Çaycı, B. & Demir, M. K. (2006). okuma ve anlama sorunu olan öğrenciler üzerine karşılaştırmalı bir çalışma. *Türk Eğitim Bilimleri Dergisi*, 4(4), 437-458.
- \*Çayır, A. & Balcı, E. (2017). Bireyselleştirilmiş okuma programının disleksi riski olan bir ilkokul öğrencisinin okuma becerileri üzerindeki etkisi. *Uluslararası Türkçe Edebiyat Kültür Eğitimi (TEKE) Dergisi*, 6(1), 455 - 470.
- Çeliktürk Sezgin, Z. & Akyol, H. (2015). Okuma güçlüğü olan dördüncü sınıf öğrencisinin okuma becerilerinin geliştirilmesi. *Turkish Journal of Education*, 2(4), 4-16.
- \*Çeliktürk Sezgin, Z. & Akyol, H. (2015). Okuma güçlüğü olan dördüncü sınıf öğrencisinin okuma becerilerinin geliştirilmesi. *Turkish Journal of Education*, 4(2), 4-16.
- \*Çolak, Y. (2019). *Disleksi teşhisi konmuş öğrencilere drama ile okuma yazma öğretimi*. Yayımlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Dağ, N. (2010). Okuma güçlüğü'nün giderilmesinde 3P metodu ile boşluk tamamlama (cloze) tekniğinin kullanımı üzerine bir çalışma. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 11(01), 63-77.
- Deniz, S. & Aslan, Y. (2020). Özel öğrenme güçlüğü olan bir öğrencide hikâye haritası tekniğinin okuduğunu anlamaya etkisinin değerlendirilmesi. *Millî Eğitim Dergisi*, 49(228), 241-261. <https://doi.org/10.37669/milliegitim.824841>
- \*Deniz, S. & Aslan, Y. (2020). Özel öğrenme güçlüğü olan bir öğrencide hikâye haritası tekniğinin okuduğunu anlamaya etkisinin değerlendirilmesi. *Millî Eğitim Dergisi*, 49(228), 241-261. <https://doi.org/10.37669/milliegitim.824841>
- Dinç, R. (2017). Okuma güçlüğü yaşayan öğrencide okuma becerisini geliştirmeye yönelik bir eylem araştırması. *Kuramsal Eğitim Bilim Dergisi*, 10(2), 320-334. <http://dx.doi.org/10.5578/keg.27774>
- \*Dinç, R. (2017). Okuma güçlüğü yaşayan öğrencide okuma becerisini geliştirmeye yönelik bir eylem araştırması. *Kuramsal Eğitim Bilim Dergisi*, 10(2), 320-334. <http://dx.doi.org/10.5578/keg.27774>
- Doğan, B. (2013). Türkçe ve sınıf öğretmenlerinin okuma güçlüğüne ilişkin bilgileri ve okuma güçlüğü olan öğrencileri belirleyebilme düzeyleri. *Okuma Yazma Eğitimi Araştırmaları*, 1(1), 20-33.

- \*Doğuyurt, M. F. & Doğuyurt, S. B. (2016). Okuma güçlüğü çeken öğrencilerin okuma becerisinin geliştirilmesine yönelik bir çalışma: Bir eylem araştırması. *21. Yüzyılda Eğitim ve Toplum Eğitim Bilimleri ve Sosyal Araştırmalar Dergisi*, 5(14), 275-286.
- Duran, E. & Sezgin, B. (2012). Rehberli okuma yönteminin akıcı okumaya etkisi. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi*, 32(3), 633-655.
- \*Duran, E. & Sezgin, B. (2012). Rehberli okuma yönteminin akıcı okumaya etkisi. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi*, 32(3), 633-655.
- Duran, E. & Sezgin, B. (2012). Yankılayıcı okuma yönteminin akıcı okumaya etkisi. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 31(2), 145-164.
- \*Duran, E. & Sezgin, B. (2012). Yankılayıcı okuma yönteminin akıcı okumaya etkisi. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 31(2), 145-164.
- \*Ege, B. (2019). *Okuma güçlüğüünün giderilmesinde akıcı okuma stratejilerinin etkisi*. Yayımlanmamış Yüksek Lisans Tezi, Bayburt Üniversitesi, Lisansüstü Eğitim Enstitüsü, Bayburt.
- \*Ekiz, D., Erdoğan, T. & Uzuner, F. G. (2011). Okuma güçlüğü olan bir öğrencinin okuma becerisinin geliştirilmesine yönelik bir aksiyon araştırması. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 11(2), 111-131.
- Glesne, C. (2012). *Nitel araştırmaya giriş*. (Çev.Eds. A Ersoy & P. Yalçınoğlu). Ankara: Anı Yayıncılık.
- \*Gökbulut, Ö. D., Akçamete, G. & Güneşli, A. (2020). Birlikte öğretim uygulamalarının özel gereksinimli ilkökul öğrencilerinin okuduğunu anlama becerilerine etkisi. *Elektronik Sosyal Bilimler Dergisi*, 19(74), 879-894. doi:10.17755/esosder.592673
- \*Gül, M. (2019). *Okuma güçlüğü yaşayan ilkökul 4.sınıf öğrencisinin öğrenme stiline uygun zenginleştirilmiş öğretim yöntemleriyle okuma güçlüğüünün giderilmesi*. Yayımlanmamış Yüksek Lisans Tezi, Zonguldak Bülent Ecevit Üniversitesi, Sosyal Bilimler Enstitüsü, Zonguldak.
- \*Gürbüz, A. (2015). *Altı dakika yönteminin akıcı okumaya etkisi*. Yayımlanmamış Yüksek Lisans Tezi, Uşak Üniversitesi, Sosyal Bilimler Enstitüsü, Uşak.
- Hoover, W. A. & Gough, P. B. (1990). The simple view of reading. *Reading and Writing: An Interdisciplinary Journal*, 2(2), 127-160. <https://doi.org/10.1007/BF00401799>
- İşler, N. K. & Şahin, A. E. (2016). Bir ilkökul 4. sınıf öğrencisinin okuma bozukluğu ve anlama güçlüğü: Bir durum çalışması. *Ana Dili Eğitimi Dergisi*, 4(2), 174-186.
- \*İşler, N. K. & Şahin, A. E. (2016). Bir ilkökul 4. sınıf öğrencisinin okuma bozukluğu ve anlama güçlüğü: Bir durum çalışması. *Ana Dili Eğitimi Dergisi*, 4(2), 174-186.
- Johnson, A. P. (2015). *Eylem araştırması el kitabı*. (Çev. Eds. Y. Uzuner & M. Özten Anay). (2. Baskı). Ankara: Anı Yayıncılık.
- \*Kanık Uysal, P. & Akyol, H. (2019). Okuma güçlüğü ve giderilmesi: Bir eylem araştırması. *Eğitim ve Bilim*, 44(198), 17-35. <http://dx.doi.org/10.15390/EB.2019.8032>
- \*Karakaya, B. & Altuntaş, O. (2017). Disleksisi olan çocuklarda görsel algı becerilerinin, okuma becerileri üzerine etkisinin incelenmesi. *Ergoterapi ve Rehabilitasyon Dergisi*, 5(3), 161-168.
- \*Karacakaloğlu, N. & Saraçlı Çelik, S. (2018). Rehberle okuma yönteminin ilkökul öğrencilerinin dinlediğini anlama düzeyleriyle akıcı okuma becerilerine etkisi. *Turkish Studies-Educational Sciences*, 13(19), 1083-1100. <http://dx.doi.org/10.7827/TurkishStudies.14096>
- \*Kaşdemir, B. (2020). *Özel öğrenme güçlüğü olan bir öğrencinin okuduğunu anlama becerisinin tahmin-inceleme-özetleme örgütlenme- değerlendirme (TİÖD) okuduğunu*

- anlama stratejisi ile geliştirilmesi*. Yayınlanmamış Yüksek Lisans Tezi, Zonguldak Bülent Ecevit Üniversitesi, Sosyal Bilimler Enstitüsü, Zonguldak.
- Kodan, H. (2015). *Koro, tekrarlı ve yardımcı okuma yöntemlerinin zayıf okuyucuların okuma ve anlama becerileri üzerine etkisi*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Kodan, H. (2015). *Koro, tekrarlı ve yardımcı okuma yöntemlerinin zayıf okuyucuların okuma ve anlama becerileri üzerine etkisi*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Kodan, H. (2020). Okuma güçlüğüne ilişkin öğretmen görüşleri. *Bayburt Eğitim Fakültesi Dergisi*, 15(29), 204-222. DOI: 10.35675/befdergi.644534
- Kuruyer, H. G. (2014). *Zenginleştirilmiş okuma programının okuma güçlüğü olan öğrencilerin bilişsel süreç ve nöral yapılarına etkisi*, Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Küçükköy, M. E. (2020). *Effects of syllable segmentation on reading on children with reading difficulty: A helpful technique for poor readers*. Yüksek Lisans Tezi, Orta Doğu Teknik Üniversitesi, Enformatik Enstitüsü, Ankara.
- Melekoğlu, M. A. (2010). Öğrenme güçlüğü, dikkat eksikliği/hiperaktivite bozukluğu, duygu/davranış bozukluğu. İ. H. Diken. (Ed.). *İlköğretimde kaynaştırma* (p.89-118). Ankara: Pegem Akademi Yayınları.
- Millî Eğitim Bakanlığı (MEB). (2008). *Özel eğitim ve rehabilitasyon merkezi özel öğrenme güçlüğü destek eğitim programı*. Erişim Adresi: [https://orgm.meb.gov.tr/meb\\_iys\\_dosyalar/2013\\_09/04010347\\_zelrenmeogldestekeitimprogram.pdf](https://orgm.meb.gov.tr/meb_iys_dosyalar/2013_09/04010347_zelrenmeogldestekeitimprogram.pdf)
- Millî Eğitim Bakanlığı (MEB). (2019). *Türkçe dersi öğretim programı* (İlkokul ve Ortaokul 1,2,3,4,5,6,7 ve 8. Sınıflar). Erişim Adresi: <https://mufredat.meb.gov.tr/Programlar.aspx>
- Oakhill, J., Cain, K. & Elroy, C. (2019). Reading comprehension and reading comprehension difficulties. D. A. Kilpatrick, R. M. Joshi & R. K. Wagner (Eds). *Reading Development and Difficulties* (p. 83-115). Springer, Cham.
- \*Okur, A. & Öztürk, D. (2018). Okuma becerisinin geliştirilmesinde grafiksel sembollerin kullanımına yönelik örnek olay çalışması. *AKRA Kültür Sanat ve Edebiyat Dergisi*, 235-251. <https://doi.org/10.31126/akrajournal.356872>
- \*Örs, E. (2019). Bir ilkokul dördüncü sınıf öğrencisinin okuma-yazma öğrenimi üzerine durum çalışması. *HAYEF: Journal of Education*, 16(1), 68-88. DOI: 10.26650/hayef.2019.18008
- \*Özdemir, O. (2013). *İlköğretim öğrencilerinin öğrenme stillerine göre okuma güçlüklerinin giderilmesi*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Özkara, Y. (2010). Okuma güçlüğü olan öğrencilerin okuma düzeylerinin geliştirilmesine yönelik bir uygulama. *Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 5, 109-119.
- Pas, J. P. (2009). *Reading difficulties and dyslexia*. Sage Publicationas.
- Peer, L. & Reid, G. (2003). *Introduction to dyslexia*. London: David Fulton Publishers.
- \*Peksoy, M. (2018). *Okuma güçlüğü çeken öğrencilerin okuma becerilerini geliştirmede tekrarlı okuma tekniğinin kullanımı üzerine bir durum çalışması*. Yayınlanmamış Yüksek Lisans Tezi, Gaziantep Üniversitesi, Eğitim Bilimleri Enstitüsü, Gaziantep.
- Pollock, J., Waller, E. & Politt, R. (2004). *Day-to-day dyslexia in the classroom*. (2th Edition). RoutledgeFalmer.
- Reid, G. (2011). *Dyslexia*. (3th Edition). London: Continuum Publishing.

- Sağlam, Ö. (2019). *Tekrarlı ve yankılayıcı okuma yöntemlerinin 3. Sınıf öğrencilerinin okuma becerilerine etkisi*. Yayınlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Sağlam, Ö. (2019). *Tekrarlı ve yankılayıcı okuma yöntemlerinin 3. Sınıf öğrencilerinin okuma becerilerine etkisi*. Yayınlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Samuels, S. J. (1979). The method of repeated readings. *The Reading Teacher*, 50(5), 376-381.
- \*Sert, C. (2019). *Okuma güçlüğü olan öğrencilerin okuma akıcılığının artırılmasında model okuma, tekrarlı okuma, hata düzeltme ve kendini izleme stratejisi sağaltım paketinin etkisi*. Yayınlanmamış Yüksek Lisans Tezi. Ankara: Gazi Üniversitesi.
- Sidekli, S. (2010). *İlköğretim 5. sınıf öğrencilerinin okuma ve anlama becerilerini geliştirme (Eylem araştırması)*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Sidekli, S. (2010). *İlköğretim 5. sınıf öğrencilerinin okuma ve anlama becerilerini geliştirme (Eylem araştırması)*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Sidekli, S. & Yangın, S. (2005). Okuma güçlüğü olan öğrencilerin okuma becerilerinin geliştirilmesine yönelik bir uygulama. *Atatürk Üniversitesi Kazım Karabekir Eğitim Fakültesi Dergisi*, 0(11), 393 - 413.
- \*Sirem, Ö., Bağbaşı, G. N. & Baş, Ö. (2020). Okuma güçlüğüne yönelik bir uygulama: Fernald yönteminin kullanımı. *Tarih Okulu Dergisi (TOD)*, 13(XLV), 1209-1227. doi:10.29228/Joh42107
- Sirem, Ö. & Baş, Ö. (2021). Okuma güçlüğü yaşayan öğrencilerin sınıftaki davranışlarının incelenmesi üzerine nitel bir araştırma. *Milli Eğitim Dergisi*, 50, (230), 645-662. DOI: 10.37669/milliegitim.699644
- \*Sözen, N. (2017). *Okuma güçlüğü olan öğrencilerin anlama becerilerinin geliştirilmesinde rehberli okuma yöntemi'nin etkisi*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü., Ankara.
- \*Şahin, F. & Çakır, R. (2018). Çoklu ortam materyallerinin okuma-yazma güçlüğü çeken öğrencilerin okuma-yazma becerileri üzerinde etkisi. *Öğretim Teknolojileri ve Öğretmen Eğitimi Dergisi*, 7(2), 75 - 90.
- \*Şahin, M. & Baştuğ, M. (2020). Okuma güçlüğüne gidermede nörolojik etki yönteminin rolü. *Academy Journal of Educational Sciences*, 4(2), 93-101. <http://dx.doi.org/10.31805/acjes.814139>.
- \*Şen, N. (2016). *Okuma güçlüğü çeken ortaokul öğrencilerinin okuma becerilerinin incelenmesi*. Yayınlanmamış Yüksek Lisans Tezi, Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü., İzmir.
- Shaywitz, S. E. & Shaywitz, B. A. (2004). Reading disability and the brain. *Educational Leadership*, 61(6), 6-11.
- \*Topalca, S. (2019). *Drama yönteminin dislekside sesbilgisel farkındalık becerisine etkisi*. Yayınlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Tracey, D. H. & Morrow, L. M. (2006). *Lenses on reading: An introduction to theories and models*. New York: The Guilford Press.
- \*Türkmenoğlu, M. (2016). *İlkokulda akran öğretimi aracılığıyla okuma güçlüğüne giderilmesi*. Yayınlanmamış Yüksek Lisans Tezi, Niğde Üniversitesi, Eğitim Bilimleri Enstitüsü, Niğde.

- \*Ulu, H. & Akyol, H. (2016). Okuma becerisinin gelişiminde tekrarlayıcı okuma ve GSOÖ stratejisinin etkisi. *Eurasian Journal of Educational Research*, 63, 225-242. <http://dx.doi.org/10.14689/ejer.2016.63.13>
- \*Urfalıoğlu Eroğlu, G. (2020). *Improving reading abilities in dyslexia with neurofeedback and multi-sensory learning*. Yayınlanmamış Doktora Tezi, Sabancı Üniversitesi, Mühendislik ve Fen Bilimleri Enstitüsü, İstanbul.
- \*Uzunkol, E. (2013). Akıcı okuma sürecinde karşılaşılan sorunların tespiti ve giderilmesine yönelik bir durum çalışması. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 9(1), 70-83.
- Vacca, J. L., Vacca, R. T. Gove, M. K., Burkey, L. C., Lenhart, L. A. & Mckee, C. A. (2015). *Reading & learning to read*. (9th Edition). Pearson Publication.
- Yaden, D. (1988). Understanding stories through repeated read-alouds: How many does it take?. *The Reading Teacher*, 41(6), 556-560.
- Yamaç, A. (2014). İlkokul dördüncü sınıf düzeyinde bir öğrencinin sesli okuma akıcılığını artırmaya yönelik bir uygulama. *Kastamonu Eğitim Dergisi*, 23(2), 631-644.
- \*Yamaç, A. (2014). İlkokul dördüncü sınıf düzeyinde bir öğrencinin sesli okuma akıcılığını artırmaya yönelik bir uygulama. *Kastamonu Eğitim Dergisi*, 23(2), 631-644.
- Yıldırım, A. & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri*. (Genişletilmiş 9. Baskı). Ankara: Seçkin Yayıncılık.
- Yıldız, M., Çoban Sural, Ü. & Boz, İ. (2019). Türkiye’de okuduğunu anlamayı geliştirmeye dönük ilköğretim düzeyindeki çalışmaların sistematik incelenmesi. *Gazi Eğitim Fakültesi Dergisi*, 39(2), 1049-1086. <https://doi.org/10.17152/gefad.548457>
- \*Yılmaz, M. (2006). *İlköğretim 3. sınıf öğrencilerinin sesli okuma hatalarını düzeltmede ve okuduğunu anlama becerilerini geliştirmede tekrarlı okuma yönteminin etkisi*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Yılmaz, M. (2008). Kelime tekrar tekniğinin akıcı okuma becerilerini geliştirmeye etkisi. *Türk Eğitim Bilimleri Dergisi*, 6(2), 323-350.
- \*Yılmaz, M. & Kadan, Ö. F. (2019). Okuma güçlüklerini gidermede eşli okuma yönteminin etkisine yönelik bir eylem araştırması. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 8(1), 231-244. DOI: 10.14686/buefad.432501
- Yurdakal, İ. H. & Susar Kırmızı, F. (2019). İlkokullarda okuma güçlüğüne sağaltmaya yönelik kullanılan öğretimsel düzenlemelere ilişkin öğretmen görüşleri. *Kastamonu Eğitim Dergisi*, 27 (2), 853-867. DOI: 10.24106/kefdergi.2893
- \*Yüksel, A. (2010). Okuma güçlüğü çeken öğrencilerin okuma becerisinin geliştirilmesine yönelik bir çalışma: Bir eylem araştırması. *Kuramsal Eğitim Bilim Dergisi*, 3(1), 124-134.



*Araştırma Makalesi*

## Okuma Güçlüğü Olan Öğrencilerin Okuma Becerilerini Geliştirmeye Yönelik Çalışmalardaki Eğilimler\*

Zuhal Çeliktürk Sezgin\*\*

Akın Bilgin\*\*\*

### MAKALE BİLGİSİ

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### ÖZET

Okuma güçlüğü, bireyin zeka düzeyi ve fiziksel özellikleri ile orantılı biçimde okuma başarısı gösterememesi olarak tanımlanabilir. Bu durum okuma güçlüğü olarak bilinmektedir. Alanyazında okuma yetersizliği olan öğrencilerin okuma güçlüklerini gidermeye yönelik pek çok çalışma bulunmaktadır. Okuma güçlüğü olan öğrencilerin okuma becerilerini geliştirmeye yönelik Türkiye’de yapılan çalışmaların eğilimlerini belirlemeyi amaçlayan bu araştırma nitel araştırma yaklaşımına uygun olarak yürütülmüştür. Araştırmanın verileri nitel araştırma yöntemlerinden doküman incelemesi yoluyla toplanmış ve betimsel analiz tekniği ile çözümlenmiştir. Araştırma kapsamında Dergipark Akademik, EBSCOhost, Google Akademik ve YÖK Ulusal Tez Merkezi veri tabanları taranmış ve belirlenen ölçütleri karşılayan 53 çalışmaya ulaşılmıştır. Belirlenen çalışmalar, alt problemlere dayalı olarak geliştirilen veri işleme şablonuna işlenmiştir. Araştırma sonucunda, çalışmaların 2019 ve 2020 yıllarında fazlalaştığı, çoğunluğunun makalelerden oluştuğu, araştırma modeli olarak daha çok eylem araştırmasının tercih edildiği, çalışmaların ilkökul 3 ve 4. sınıf düzeyinde yoğunlaştığı, uygulamaların büyük çoğunluğunun tek katılımcı ile gerçekleştirildiği, uygulama süresinin sıklıkla 26-50 ders saati aralığında olduğu, okuma becerilerini geliştirmek için tekrarlı okuma ve eko okuma yöntemlerinin daha çok tercih edildiği, okuma becerilerinin değerlendirilmesinde ise “Yanlıı Analiz Envanteri”nin sıklıkla kullanıldığı görülmüştür.

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## Giriş

Yeterli zekâ ve uygun öğrenme ortamına rağmen bazı öğrenciler ileriki sınıflarda bile konuşma, okuma, yazma, matematik gibi temel beceri alanlarında zorluklar yaşayabilmektedir. Yaşanılan bu zorluklar “özel öğrenme güçlüğü” olarak bilinmektedir. Millî Eğitim Bakanlığı (MEB, 2008: 3) özel öğrenme güçlüğü olan bireyi; örgün eğitim programında yeterli zekâ düzeyine rağmen dili yazılı ya da sözlü olarak anlama ve kullanabilmede, dikkati yoğunlaştırmada, matematikte, akıl yürütmede, motor ve organizasyon becerilerinde olumsuzluklar yaşayan ve bu nedenlerden dolayı yaşlıtlarına göre düşük akademik başarı gösteren birey olarak tanımlamıştır. Öğrenme güçlüğü olan birey için tipik bir kavramdan bahsetmek mümkün değildir. Bu öğrencilerin her biri akademik, sosyal ya da davranışsal özellikler açısından da birbirinden farklı özelliklere sahiptir. Öğrencilerin bazıları sadece bir alanda güçlük yaşarken, bazıları birden çok alanda güçlük yaşayabilirler (Gargiulo, 2003, Pierangelo ve Giuliani, 2006; akt. Melekoğlu, 2010, s.92). Son yıllarda öğrenme güçlüğü olan çocukların sayısı önemli ölçüde artmıştır. Bunun nedenlerinden birisi olarak, insanların bu sorunlar hakkında daha fazla farkındalık sahibi olması düşünülmektedir (Pollock vd., 2004: 1).

## Alanyazın taraması

Okuma sürecine ilişkin beceriler; kelimenin kodunu çözme, kelime okuma/tanıma, akıcı okuma, okuduğunu anlama boyutlarında ele alınmaktadır (Bender, 2012: 183). Bu beceriler içerisinde oluşabilecek herhangi bir sorun öğrenme güçlükleri içerisinde “okuma güçlüğü” olarak bilinmektedir. Kuruyer (2014: 12-13) bazı öğrencilerin, herhangi bir zeka eksikliği, görme-ışitme yetersizliği, dikkat eksiliği ve hiperaktivite bozukluğu (DEHB) olmamasına rağmen, yaşlıtlarına göre okuma becerisi konusunda aynı performansı sergileyemediklerini, bu yaşadıkları zorlukların da okuma güçlüğü olarak adlandırılabilceğini belirtmiştir. Bir çocuğun okuma ile ilgili yaşadıkları zorluklar belirli öğretimsel ihtiyaçların olduğunun kabul edildiği ilk noktadır (Pollock vd., 2004: 52). Çünkü okuma güçlükleri dile yansır, bu durumda dil sistemi içerisindeki bir eksikliğe işaret eder (Shaywitz & Shaywitz, 2004). Bu bağlamda, okuma ile ilgili yaşanan zorlukların dil sorunları ile birlikte pekçok alandaki akademik zorluklara yansıtacağı söylenebilir.

Basit Okuma Modeli'ne (The Simple View of Reading) göre, iyi bir okuma için kod çözme ve anlama gereklidir (Hoover & Gough, 1990). Çocuklar okumaya başladıklarında, kelime okuma konusuna yenedirler ve kod çözme becerisini hızla kazanma konusunda farklılık göstermektedirler. Başlangıçta, çocukların kelimelerin kodunu çözme konusundaki yetkinlikleri, okuduğunu anlama ile neredeyse aynıdır. Zaman içerisinde çocuklar kelimelerin kodunu çözme konusunda yetkin hale geldikçe anlama daha önemli hale gelecektir (Oakhill, Cain & Elbro, 2019: 84). Belirli anlama sorunu olan çocuklar kelime okumada iyi olsalar bile, genellikle zayıf anlayıcılar olarak bilinir. Bu tür sorunları olan çocuklar genellikle ilkokulun 3. ve 4. sınıfından önce fark edilirler. İyi okuyucular ise, kelime okuma ve anlamada çok zorlanmayan okuyuculardır (Oakhill, Cain & Elbro, 2019: 84-85). Bazı çocuklar kültürel açıdan dezavantajlı bir ortamda oldukları için okumadan yoksun kalabilmektedir ya da ıııtme, görme gibi duyuusal sorunlar okuma sorunlarına neden olabilmektedir. Okuma sorunlarının temelinde sadece zihinsel işlevler yer almayabilir. Bu

gibi çocuklar, okuryazar bir ortama maruz kaldıktan bir süre sonra okuma güçlüklerinin üstesinden gelebilirler (Pas, 2009: 9).

Okuma güçlüğü denince alanyazında karşımıza çıkan bir diğer kavram disleksidir. Disleksi, genellikle zayıf okuma yeteneği için kullanılan bir terimdir. Çok özel bir okuma güçlüğünü tanımlamak için kullanılmaktadır (Pas, 2009: 3). Disleksi, beyin ve merkezi sinir sisteminde algısal sorunlara bağlı olarak harflerin ve kelimelerin algılanmasında yaşanan sorunları ifade etmek için kullanılır ve bu sorunların okuma güçlüklerine yol açtığı varsayılmaktadır (Bender, 2012: 183). Türkçe alanyazındaki konu ile ilgili araştırmalara bakıldığında, “okuma güçlüğü” ve “disleksi” kavramlarının birlikte ya da birbirilerinin yerine kullanıldığı görülmüştür. Bu yüzden okuma güçlükleri kapsamında disleksiye ve özelliklerini de açıklamakta yarar vardır.

Disleksinin ne olduğu ve neden kaynaklandığına ilişkin çok farklı görüş bulunmaktadır. Disleksiye ilişkin en yaygın kabul edilen görüş; okuma ve heceleme ile ilgili zorluklarla ilgilidir. Aslında bu zorluklar dışarıdan kolaylıkla gözlenebilen özelliklerdir ve ancak okumaya başlama ile birlikte sergilenmektedir. Yine, her okuma ve heceleme zorluğu disleksi olarak kabul edilemez. Disleksi olarak kabul edilebilmesi için; okuma, konuşma, yazma, zihin, koordinasyon, organizasyonel güçlükler, bilgi işleme, fonolojik zorluklar, görsel zorluklar, tutarsızlıklar gibi ana özelliklerin olması gerekmektedir (Peer ve Reid, 2003: 9-13). Ancak bu noktada dislektik bir çocuğun, fizyolojik (kulak, gözler, IQ) bir sorununun olmadığından emin olmak her zaman önemlidir (Pollock vd., 2004: 52). Stanovich’in ortaya attığı “Fonolojik-Temel Değişken Farklılık Model”de (Phonological-Core Variable Difference Model)” (1988) normal ve zayıf okuyucular arasındaki en önemli farkın bilişsel fonksiyonlardaki ses bilimsel alandan kaynaklandığını iddia etmiştir (Tracey ve Morrow, 2006: 155).

Disleksinin tanınması, anlaşılması ve uygun öğrenme yaklaşımlarının belirlenmesi birçok hükümet raporunda çokça gündeme gelmiş bir konudur. Ancak disleksi hakkında çok bilgi ve kaynak olmasına rağmen, bu bilgi ve kaynaklardaki artış, öğretmenleri ve ebeveynleri her zaman hem fikir olunabilecek bir noktadan uzaklaştırmakta ve bazı kafa karışıklıklarına neden olmaktadır (Reid, 2011: 4). Okuma güçlüğü/disleksi kavramları son yıllarda eskiye oranla daha sık gündeme gelmektedir. Ancak okuma güçlüğü olan öğrencilere teşhisin ve tanının nasıl konulacağı ve bireyselleştirilmiş öğretim programının nasıl uygulanacağına ilişkin yeterli bilgi bulunmamaktadır (Çeliktürk Sezgin ve Akyol, 2015: 7). Okuma problemlerinde erken müdahalenin önemi açıkça tespit edilmiştir (Christo vd., 2009: 3). Bu bağlamda, yapılan alanyazın taraması sonunda konuya ilişkin pek çok araştırmaya ulaşılmıştır. Alandaki konuya özgü bu tür çalışmaları toplamanın ve bu çalışmaların birleşiminin yapılması ve yorumlanması, gelecekte gerçekleştirilecek çalışmalara araştırma, uygulama ve politikalar bakımında yön verme ve öneriler sunma bakımından katkılar sağlayacaktır (Davies, 2000; akt. Yıldız vd., 2019: 1052).

Türkiye’de yapılmış okuma güçlüğüne ilişkin araştırmalar; okuma güçlüğünün teşhis/nedenleri, tanınmasına/değerlendirilmesine ilişkin araştırmalar (Balcı, 2017; Bingöl, 2003), okuma güçlüğünün giderilmesine ve okuma becerilerinin geliştirilmesine yönelik araştırmalar (Akyol ve Ketenoğlu Kayabaşı, 2018; Çeliktürk Sezgin ve Akyol, 2015; Deniz ve Aslan, 2020; Dinç, 2017; Duran ve Sezgin, 2012; İşler ve Şahin, 2016; Kodan,

2015; Sağlam, 2019; Sidekli, 2010; Yamaç, 2014) ve okuma güçlüğüne ilişkin öğretmen araştırmaları (Balcı, 2019; Doğan, 2013; Kodan, 2020; Sirem ve Baş, 2021; Yurdakal ve Susar Kırmızı, 2019) temaları altında gruplanabilir.

Bu araştırmada, okuma güçlüğü olan öğrencilerin okuma becerilerini geliştirmek amacıyla yapılan çalışmalar ele alınmıştır. Alanyazında Türkiye’de okuma güçlüğüne gidilmesine yönelik pekçok müdahaleli araştırmanın olduğu ve bu araştırmalarda farklı yöntem ve uygulamaların kullanıldığı, bu çalışmalarda katılımcı sayısının ve uygulama sürelerinin farklılaştığı görülmektedir. Bu çalışmanın amacı; okuma güçlüğü olan öğrencilerin okuma becerilerini geliştirmeye yönelik Türkiye’de yapılan çalışmaların eğilimlerini incelemektir. Böylelikle okuma güçlüğü olan öğrencilerin, okuma problemlerini gidermede, Türkiye’deki çalışmaların genel görünümünün ortaya çıkartılması hedeflenmiştir. Buna ek olarak, alanın uygulayıcısı olan sınıf ve Türkçe öğretmenlerine, okuma güçlüğü olan öğrencilerine yönelik olarak, sınıf ortamında uygulayabilecekleri eğitim-öğretim uygulamaları, materyaller, ölçme araçları gibi konularda fikir vereceği düşünülmektedir. Bu bağlamda, araştırmada aşağıdaki sorulara cevap aranmıştır. Okuma güçlüğü olan öğrencilerin okuma becerilerini geliştirmek amacıyla yapılan;

1. Çalışmaların yıllara göre dağılımı nedir?
2. Çalışmaların yayın türleri nedir?
3. Çalışmaların modelleri nedir?
4. Çalışmaların katılımcılarının sınıf düzeyi nedir?
5. Çalışmaların katılımcı sayısı nedir?
6. Çalışmaların uygulama süresi nedir?
7. Çalışmaların okuma yöntem ve teknikleri nedir?
8. Çalışmaların ölçme araçları nedir?

## **Yöntem**

### **Araştırmanın modeli ve yayın etiği**

Okuma güçlüğü olan öğrencilerin okuma becerilerini geliştirmeye yönelik Türkiye’de yapılan çalışmaların eğilimlerini belirlemeye amaçlayan bu çalışma nitel araştırma yaklaşımına dayalı olarak yürütülmüştür. Veriler nitel araştırma yaklaşımlarından doküman incelemesi yöntemine dayalı olarak elde edilmiştir. Doküman incelemesi, araştırılması hedeflenen konu ya da olayların yer aldığı yazılı materyallerin incelenmesine dayalı bir veri toplama yöntemidir (Yıldırım ve Şimsek, 2013: 217). “Okuma Güçlüğü Olan Öğrencilerin Okuma Becerilerini Geliştirmeye Yönelik Çalışmaların Eğilimleri” başlıklı bu çalışma literatür taramaya dayalı bir araştırma makalesidir. Bu tür bir çalışma için etik kurul raporu gerekli değildir.

### **Veri kaynağı**

Araştırmanın verileri; “Dergipark Akademik”, “EBSCOhost”, “Google Akademik” ve “YÖK Ulusal Tez Merkezi” veri tabanlarındaki okuma güçlüğü olan öğrencilerin okuma

becerilerini geliştirmeye dönük yapılan araştırmalardır (tez, makale). Araştırma kapsamında belirlenen “okuma güçlüğü”, “disleksi” ve “dislektik” anahtar sözcükleri dikkate alınarak veri tabanlarından taramalar yapılmıştır.

### **Verilerin toplanması**

Araştırma kapsamında belirlenen veri tabanlarından alanyazın taraması yapılmıştır. Belirlenmiş veri tabanlarından yapılacak taramalar için son tarih 02 Ocak 2021 olarak kararlaştırılmıştır. Yapılan taraması sonucu bir veri havuzu elde edilmiştir. Elde edilen veri havuzundan incelemek üzere seçilecek çalışmaların belirlenmesinde bazı ilksel ölçütler getirilmiştir. Bunlar;

- Okuma güçlüğü olan öğrencilerin okuma becerilerini geliştirmeye yönelik bir çalışma olma
- Aynı çalışmanın farklı yerlerde türetilmemiş-yayımlanmamış olması. Eğer aynı çalışma hem araştırma makalesi hem de tez olarak yayımlanmışsa, birincil kaynağın yani tez halini araştırmaya dahil etme.

Dahil etme için diğer ölçütler şunlardır:

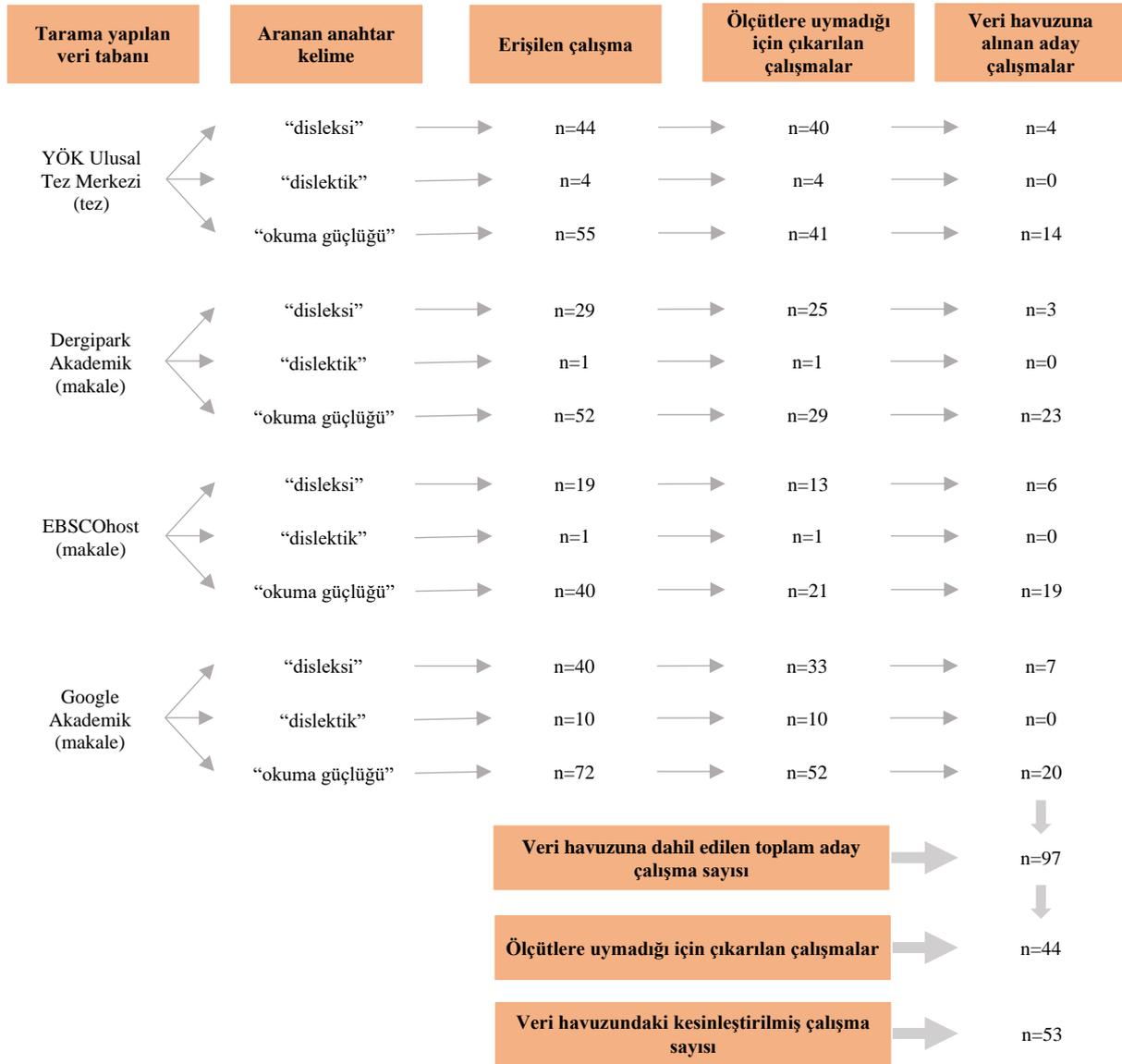
- Türkiye’de yapılan çalışmalar.
- Okuma güçlüğü olan öğrencilere yönelik çalışmalar
- Okuma güçlüklerini gidermeye yönelik müdahaleli araştırmalar.
- İlköğretim düzeyinde olan çalışmalar (1.-8. sınıflar)
- Anadili Türkçe olan öğrencilerin okuma güçlüklerine gidermeye yönelik çalışmalar.

Hariç tutma ölçütleri:

- Yurt dışında yapılan çalışmalar.
- Okul temelli olmayan çalışmalar.
- Okuma güçlüğüne teşhis ve tanılamaya yönelik çalışmalar.
- Okuma güçlüğü ve disleksiye ilişkin kuramsal çalışmalar.

Veri havuzunun oluşturulması ve getirilen ölçütlere göre araştırma kapsamında incelenecek çalışmaların belirlenmesi için yürütülen veri toplama süreci Şekil 1’de özetlenmiştir.

Şekil 1. Çalışma Seçim Sürecine Yönelik İzlenen Yol



Şekil 1 incelendiğinde, araştırmanın başında toplam 367 çalışmaya erişilmiştir. Veri havuzuna dahil edilen toplam aday çalışma sayısı ise 97’dir. Daha sonra ölçütlere uymadığı için 44 çalışma çıkartılmıştır. Tüm bu işlemlerin sonunda veri havuzundaki kesinleştirilmiş çalışma sayısı 53 olarak (18 tez, 35 makale) belirlenmiştir.

### Verilerin çözümlenmesi

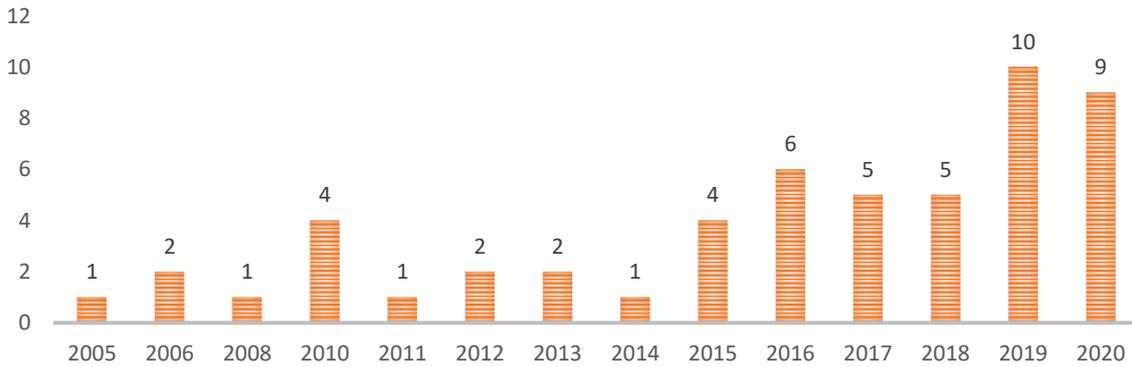
Bu araştırmanın verileri betimsel analiz tekniği kullanılarak çözümlenmiştir. Betimsel analizde veriler önceden belirlenmiş temalara göre düzenlenmekte ve yorumlanmaktadır (Yıldırım ve Şimşek, 2013: 256). Verilerin çözümlenmesi amacıyla, alt problemlere dayalı olarak kategorilerden oluşan bir veri işleme şablonu oluşturulmuştur. Burada; çalışmaların yılı, yayın türü, araştırma modelleri, katılımcıların sınıf düzeyi, katılımcı sayısı, uygulama süresi, okuma yöntem ve tekniklere ve kullanılan ölçme araçlarına ilişkin bilgiler yer almaktadır.

Verilerin çözümlenmesi aşamasında, iki araştırmacı da birbirinden bağımsız olarak veri işleme şablonuna araştırmada incelenen çalışmaları işlemişlerdir. Daha sonra, araştırmacılar alt başlıklar ve içerikler arasındaki benzerlik ve farklılıkları karşılaştırmışlar. Yapılan karşılaştırmaların sonunda ise, fikir ayrılığı olan veriler yeniden gözden geçirilmiş ve fikir birliği sağlanmaya çalışılmıştır. Böylece araştırmanın güvenilirliği artırılmaya çalışılmıştır.

### Bulgular

Bu araştırmanın bulguları, araştırmada ele alınan alt problemlere dayalı olarak incelenmiştir. Araştırmanın birinci alt problemi çalışmaların “Yıllara göre dağılımı nasıldır?” olarak belirlenmiştir. Bu kapsamda incelenen çalışmaların dağılımı Şekil 2’de gösterilmiştir.

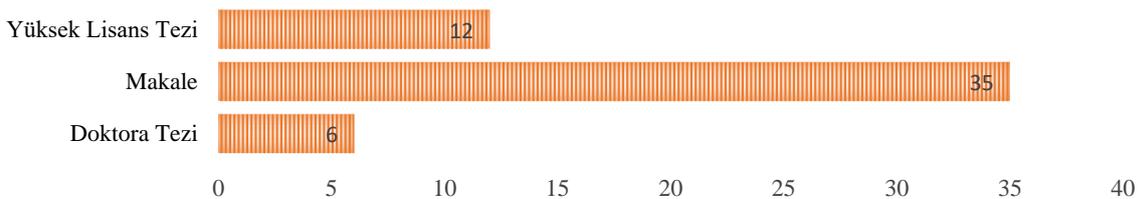
**Şekil 2.** İncelenen Çalışmaların Uygulama Yapılan Yıllara Göre Dağılımı



Şekil 2’deki grafik incelendiğinde, 2005 yılında bir (%1,88), 2006 yılında iki (%3,77), 2008 yılında bir (%1,88), 2010 yılında dört (%7,54), 2011 yılında bir (%1,88), 2012 yılında iki (%3,77), 2013 yılında iki (%3,77), 2014 yılında iki (%3,77), 2015 yılında dört (%7,54), 2016 yılında altı (%11,32), 2017 yılında beş (%9,43), 2018 yılında beş (%9,43), 2019 yılında 10 (%18,86) ve 2020 yılında dokuz (%16,98) çalışmanın olduğu anlaşılmaktadır. Konuyla ilgili yapılan çalışmaların sayısının son yıllarda arttığı görülmüştür.

Araştırmanın ikinci alt problemi araştırmaların “Çalışma türleri nelerdir?” olarak belirlenmiştir. Bu kapsamda incelenen çalışmaların dağılımı Şekil 3’te gösterilmiştir.

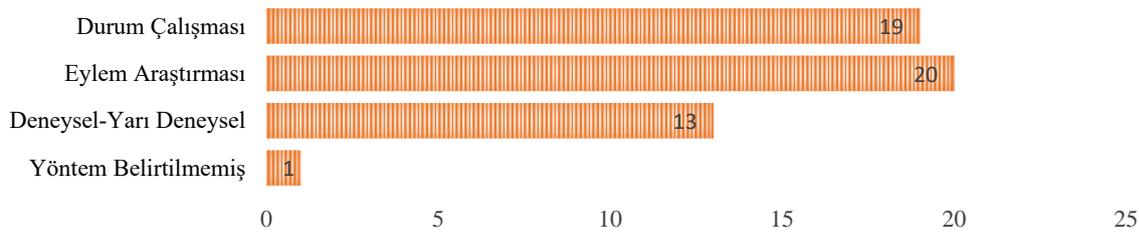
**Şekil 3.** İncelenen Çalışmaların Yayın Türüne Göre Dağılımı



Şekil 3 görüldüğü üzere, çalışmaların 12’si yüksek lisans (%22,64), 6’sı doktora tezi (%11,32), 35’i ise makalelerden (%66,04) oluşmaktadır. Çalışmaların büyük çoğunluğunun makale türünde olduğu belirlenmiştir.

Araştırmanın üçüncü alt problemi çalışmaların “*Araştırma modelleri nelerdir?*” olarak belirlenmiştir. Bu kapsamda incelenen çalışmaların dağılımı Şekil 4’te gösterilmiştir.

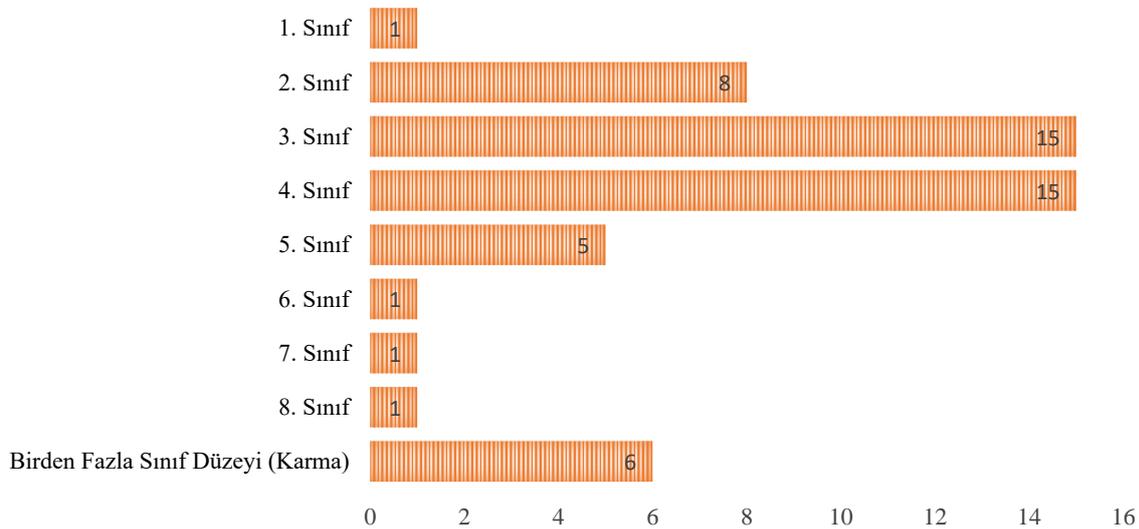
**Şekil 4.** İncelenen Çalışmaların Araştırma Modellerine Göre Dağılımı



Şekil 4 incelendiğinde, araştırma modeli bakımından çalışmaların 19’unda durum çalışması (%35,84), 20’sinde eylem araştırması (%37,73) ve 13’ünde ise deneysel yönteminin (%24,52) kullanıldığı görülmektedir. Bir yayında ise yöntem belirtilmemiştir. Çalışmalarda daha çok eylem araştırmasının kullanıldığı görülmektedir.

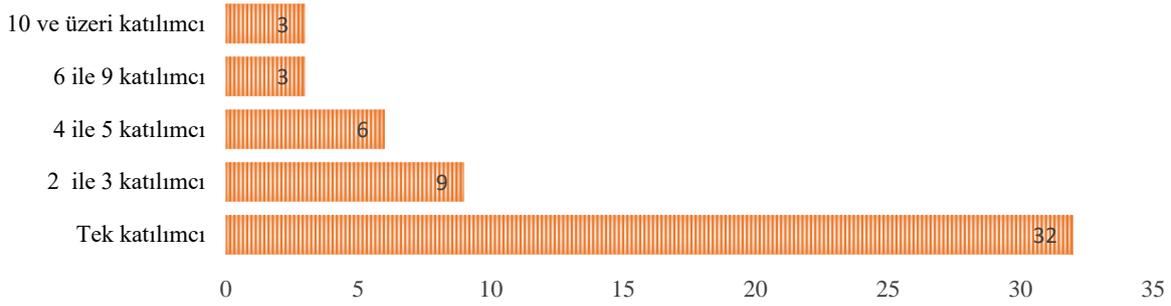
Araştırmanın dördüncü alt problemi çalışmaların “*Katılımcılarının sınıf düzeyi nedir?*” olarak belirlenmiştir. Bu kapsamda incelenen çalışmaların dağılımı Şekil 5’te gösterilmiştir.

**Şekil 5.** İncelenen Çalışmalardaki Katılımcıların Sınıf Düzeyine Göre Dağılımı



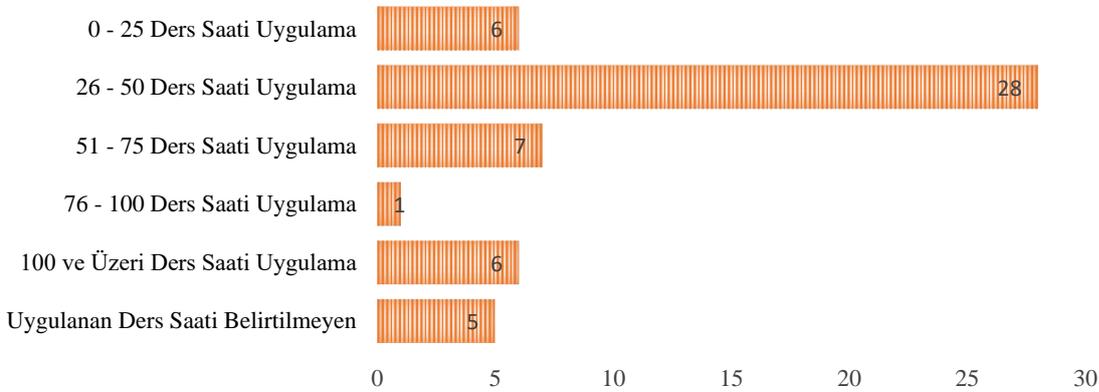
Şekil 5’te görüldüğü üzere, okuma güçlüğü olan öğrencilerin okuma becerilerini geliştirmeye yönelik çalışmaların birinci sınıf düzeyinde 1 (%1,88), ikinci sınıf düzeyinde 8 (%15,09), üçüncü sınıf düzeyinde 15 (%28,3), dördüncü sınıf düzeyinde 15 (%28,3) ve beşinci sınıf düzeyinde 5 (%9,43), altıncı, yedinci ve sekizinci sınıf düzeylerinde 1’er (%1,88) yapıldığı anlaşılmaktadır. Yayınların 6 tanesi ise birden fazla sınıf düzeyinde gerçekleştirilmiştir (%11,32). Çalışmaların, daha çok 3 ve 4. Sınıf düzeyinde yapıldığı anlaşılmaktadır.

Araştırmanın beşinci alt problemi çalışmaların “*Katılımcı sayısı nedir?*” olarak belirlenmiştir. Bu kapsamda incelenen çalışmaların dağılımı Şekil 6’da gösterilmiştir.

**Şekil 6.** İncelenen Çalışmaların Katılımcı Sayısına Göre Dağılımı

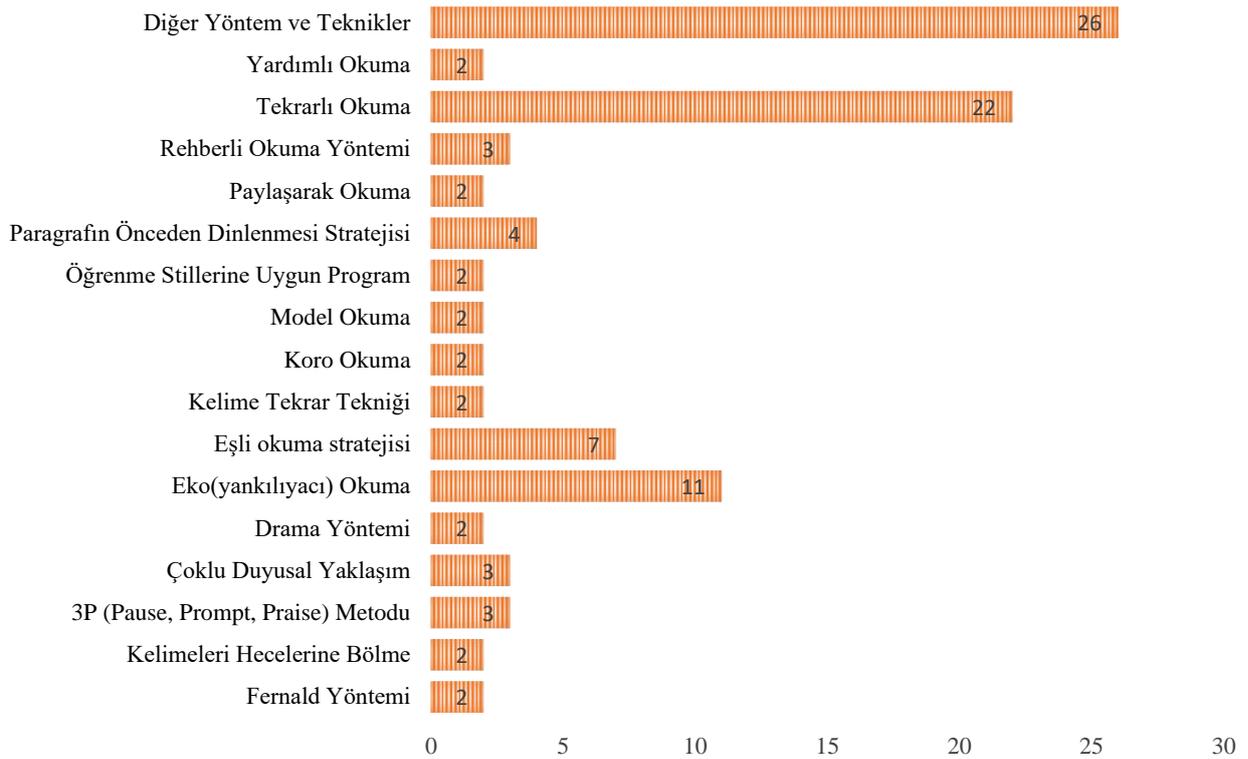
Şekil 6 incelendiğinde, tek katılımcı ile 32 (%60,37), iki ile üç katılımcı ile 9 (%16,98), dört ile beş katılımcı ile 6 (%11,32), altı ile dokuz arası katılımcı ile 3 (%5,66), on ve üzeri katılımcı ile 3 (%5,66) çalışmanın yapıldığı anlaşılmaktadır. Çalışmaların büyük bir kısmının tek katılımcı ile yapıldığı belirlenmiştir.

Araştırmanın altıncı alt problemi çalışmaların “*Uygulama süresi ne kadardır?*” olarak belirlenmiştir. Bu kapsamda incelenen çalışmaların dağılımı Şekil 7’de gösterilmiştir.

**Şekil 7.** İncelenen Çalışmaların Uygulama Süresine Göre Dağılımı

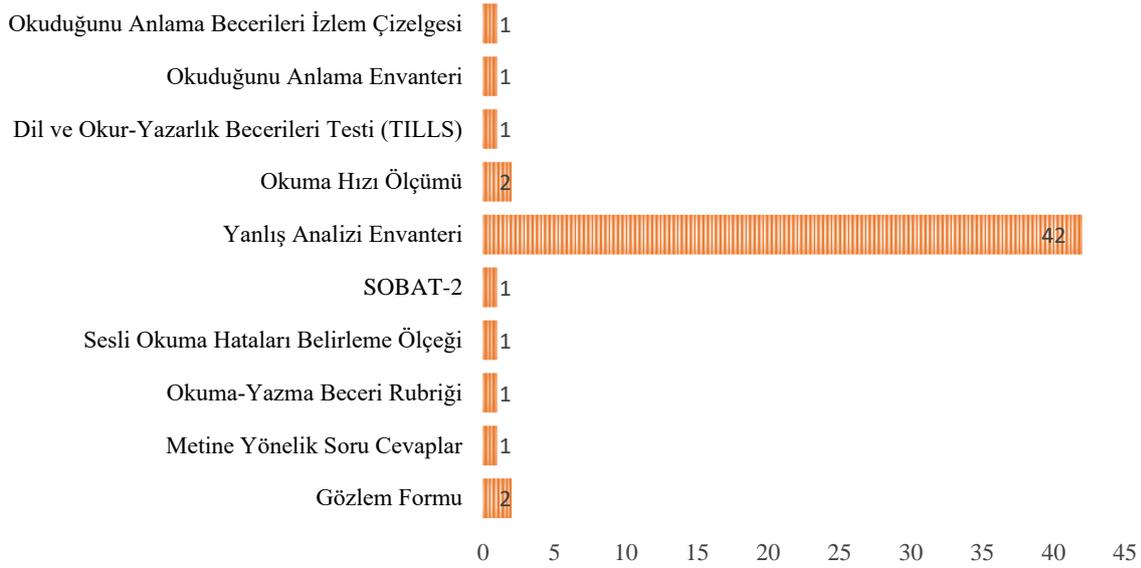
Şekil 7’ de görüldüğü üzere, 0-25 ders saati aralığında 6 (%11,32), 26-50 ders saati aralığında 28 (%52,83), 51-75 ders saati aralığında 7 (%13,2), 76-100 ders saati aralığında 1 (%1,88), 100 ve üzeri ders saati aralığında 6 (%11,32) uygulamanın gerçekleştiği görülmektedir. Ayrıca çalışmaların 5’inde (%9,43) yapılan uygulamalar ders saati olarak belirtilmemiştir. Ders saati belirtilmeyen araştırmalarda 12 hafta (2 yayında), 17 hafta, 5 hafta, 7 hafta şeklinde bilgiler mevcuttur. Çalışmaların büyük bir kısmının uygulama süresinin 26-50 ders saati arasında olduğu anlaşılmıştır.

Araştırmanın yedinci alt problemi çalışmaların “*Kullanılan okuma yöntem ve teknikleri nelerdir?*” olarak belirlenmiştir. Bu kapsamda incelenen çalışmaların dağılımı Şekil 8’de gösterilmiştir.

**Şekil 8.** İncelenen Çalışmalarda Kullanılan Okuma Yöntem ve Tekniklerine Göre Dağılımı

Şekil 8 incelendiğinde, Fernald yönteminin 2 (%2,06), kelimeleri hecelerine bölmenin 2 (%2,06), 3P metodunun 3 (%3,09), çoklu duyusal yaklaşımın 3 (%3,09), drama yönteminin 2 (%2,06), eko (yankılıyıcı) okumanın 11 (%11,34), eşli okuma stratejisinin 7 (%7,21), kelime tekrar tekniğinin 2 (%2,06), koro okumanın 2 (%2,06), model okumanın 2 (%2,06), öğrenme stillerine uygun programın 2 (%2,06), paragrafın önceden dinlenmesi stratejisinin 4 (%4,12), paylaşarak okumanın 2 (%2,06), rehberli okumanın 3 (%3,09), tekrarlı okumanın 22 (%22,68), yardımcı okumanın 2 (%2,06) çalışmada kullanıldığı görülmüştür. Ayrıca; belirtilenler dışında, 26 farklı yöntem ve tekniğin (%26,8) incelenen araştırmalarda kullanıldığı görülmüştür. Bu 26 yöntem ve teknik içerisinde maksimum frekans sayısı birdir ve şekil üzerinde tek tek yazılmasının çok uzun olması nedeniyle de hepsi bir arada verilmiştir. Çalışmalarda, tekrarlı okuma ve eko okuma yöntemlerinin daha çok kullanıldığı görülmüştür.

Araştırmanın sekizinci alt problemi çalışmaların “Ölçme araçları nelerdir?” olarak belirlenmiştir. Bu kapsamda incelenen çalışmaların dağılımı Şekil 9’da gösterilmiştir.

**Şekil 9.** İncelenen Çalışmaların Ölçme Araçlarına Göre Dağılımı

Şekil 9’da görüldüğü üzere, okuma becerilerindeki gelişimin ölçülmesi için gözlem formu 2 (%3,77), Metne Yönelik Soru Cevaplar 1 (%1,88), Okuma-Yazma Beceri Rubriği 1 (%1,88), Sesli Okuma Hatalarını Belirleme Ölçeği 1 (%1,88), Sesli Okuma Becerisi ve Okuduğunu Anlama Testi (SOBAT-2) 1 (%1,88), Yanlış Analiz Envanteri 42 (%79,24), Okuma Hızı Ölçümü 2 (%3,77), Dil ve Okur-Yazarlık Becerileri Testi (TILLS) 1 (%1,88), Okuduğunu Anlama Envanteri 1 (%1,88) ve Okuduğunu Anlama Becerileri İzlem Çizelgesi 1 (%1,88) çalışmada kullanılmıştır. Çalışmalarda sıklıkla “Yanlış Analiz Envanteri”nin tercih edildiği belirlenmiştir.

### Tartışma

Bu çalışmanın amacı; okuma güçlüğü olan öğrencilerin okuma becerilerini geliştirmeye yönelik Türkiye’de yapılan çalışmaların eğilimlerini incelemektir. Böylelikle konuya ilişkin genel görünümün ve öne çıkan yayın türleri/araştırma modelleri/katılımcılar/uygulama süreleri/okuma yöntemleri/ölçme araçlarının bütüncül bir bakış açısı ele alınacağı düşünülmektedir. Yapılan incelemenin sonucunda 53 çalışma (18 tez, 35 makale) araştırmaya dahil edilmiştir.

Çalışma sonunda, araştırmaların yıllara göre dağılımına bakıldığında; özellikle 2019 ve 2020 yıllarında araştırmaların sayısında artış olduğu görülmüştür. Bu bulguya ek olarak, konuya ilişkin yapılan ilk çalışmanın 2005 yılında olduğu belirlenmiştir. Türkiye’de, 2004-2005 eğitim-öğretim yılından sonra yapılandırmacı eğitim yaklaşımına geçilmiş ve bununla birlikte; birinci sınıflarda ilkokuma yazma öğretiminde ses temelli cümle yöntemi kullanılmaya başlamıştır. Ses temelli cümle yöntemine göre; ilkokuma ve yazma öğretimine seslerle başlanmakta, birkaç ses verildikten sonra, seslerden hecelere, hecelerden kelimelere, kelimelerden cümlelere ulaşılacak şekilde bir öğretim yapılmaktadır (Akyol, 2006: 86). Okumayı öğrenmede ayırt edici zorluklar yaşayan öğrenciler için, öğretmenler ses birimi temelli öğretimi esas almalıdır. Ses birimi becerilerinin aşamalarına, öğretim için az sayıda beceri belirlenmesine, becerilerin ayrı ayrı ele alınmasına ve fonem sesleri kullanılması gibi

ses birimin genel ilkelerine dikkat etmelidir (Bender, 2012: 186). Bu anlamda, Türkiye’de uygulanan ilkokuma yazma öğretim yaklaşımı okuma güçlüklerinin de giderilmesinde uygun bir yaklaşım olduğunu söylenebilir.

İncelenen çalışmaların yayın türlerine göre dağılımı incelendiğinde, 6 doktora tezi, 12 yüksek lisans tezi ve 35 makale türünde yayın belirlenmiştir. Bu verilerden hareketle en çok çalışmanın makale türünde olduğu anlaşılmaktadır. Bu durum, Türkiye’de okuma güçlüğüne yönelik çalışmalarda; lisansüstü çalışmalara göre, makalelere daha çok yönelim olduğu şeklinde yorumlanabilir.

Araştırma sonunda, çalışmalarda en çok eylem araştırması yönteminin kullanıldığı anlaşılmıştır. Bu bulgu, okuma güçlüğüne gidermeye yönelik çalışmalarda nitel araştırma yöntemlerinin tercih edildiğini ortaya koymaktadır. Eylem araştırması özellikle eğitim alanında uygulamayı geliştirmek amacıyla, son yıllarda yeniden popülerleşen bir yöntemdir (Glesne, 2012: 32). Eylem araştırması, kuram ile uygulama arasındaki boşluğu doldurmanın yanında, öğretmenlerin yetkinliğini kolaylaştırma ve öğretmenlere gelişme ve deneyim oluşturma noktasında fırsatlar yaratmaktadır (Johnson, 2015: 23). Bu bağlamda, okuma güçlüklerinin giderilebilmesi için yapılacak araştırmalarda eylem araştırmasının uygun bir yöntem olduğu söylenebilir.

Araştırmada, incelenen çalışmalardaki örneklem alınan sınıf düzeyinin daha çok 3. ve 4. sınıflarda olduğu görülmüştür. İlkokul birinci sınıf ilkokuma ve yazmanın öğrenildiği dönemdir ve birinci sınıfın sonunda okuma ve yazma öğretimi sonlanır. İkinci sınıfta ise öğrencilerin bu becerilerini geliştirici çalışmalara yer verilir (MEB, 2019: 14). İlkokuma ve yazma aşamasının tamamlanmasından sonra öğrencilerin okuma düzeylerinin “serbest düzey” bir başka isimle “bağımsız düzey”e geçmesi beklenir. Akyol (2020: 98) serbest düzeyi, çocuğun düzeyine uygun bir materyali bir başkasının yardımı olmadan okuması ve anlamlandırması olarak açıklamıştır. 3. ve 4. sınıfta okumada yetersizliklerin olması, okuma güçlüğüne akla getirmektedir. Bu yüzden araştırmalarda bu örneklem grubuna yönelim olmuş olabilir. Araştırmadan elde edilen bir başka sonuç ise, ortaokul öğrencilerine yönelik (5.,6.,7. ve 8. sınıf) 8 araştırmaya ulaşılmış olmasıdır. Bu sonuçtan hareketle, Türkiye’de ortaokul düzeyinde okuma güçlüğü olan öğrencilerin var olduğu söylenebilir. Oysaki, okuma problemlerinin erken tespit edilmesi ve gerekli müdahalelerin yapılması hayati önem taşımaktadır. Balcı’ya (2015: 230) göre de ülkemizde disleksinin erken tanılanmasından bahsetmek güç olmakla birlikte, 3. ve 4. sınıfta hatta ortaokul düzeyinde bile okuyamayan ya da okumada güçlük yaşayan öğrenciler bulunmaktadır.

Çalışmalardaki katılımcı sayısına bakıldığında ise, çalışmaların büyük bir kısmının tek katılımcı ile yapıldığı belirlenmiştir. 10 ve üzerinde katılımcı ile gerçekleştirilen çalışma sayısının oldukça az olduğu göze çarpmaktadır. Bu gibi araştırmaların daha büyük örneklem gruplarında yapılabilmesi araştırmacı sayısı, zaman ve araç-gereç gibi konularda maliyet gerektirmektedir. Bu yüzden araştırmaların daha çok tek katılımcı ile gerçekleştirildiği düşünülmektedir. Bir diğer yandan, öğrencilerin okuma güçlüklerine yönelik yapılacak uygulamalarda bireysel ya da küçük grup öğretimi olmasına dikkat edilmelidir (EACEA, 2011; akt. Çeliktürk Sezgin ve Akyol, 2015: 7). Bu bilgi, çalışmalardaki tek ya da az sayıdaki katılımcı ile çalışılmasını destekler niteliktedir.

Araştırma kapsamında incelenen çalışmaların büyük bir kısmının uygulama süresinin 26-50 ders saati arasında olduğu anlaşılmıştır. Bu sonuç bize okuma güçlüğü gidermede hazırlanacak bir bireyselleştirilmiş program için bu sürenin uygun olabilecek bir süre aralığı olduğunu işaret etmektedir. Bundan sonra yapılacak araştırmalarda bu sürenin referans olarak alınması önerilmektedir.

Araştırma kapsamında incelenen çalışmaların kullanılan okuma yöntem ve tekniklerine göre dağılımına bakıldığında; tekrarlı okuma ve eko okuma yöntemlerinin daha çok kullanıldığı görülmüştür. Bu sonuç araştırmalarda belli başlı okuma yöntem ve tekniklerine yığılma olduğunu göstermektedir. Tekrarlı okuma yöntemi; okuyucunun kısa ve anlamlı bir metni, belli bir akıcılık düzeyine ulaşmaya kadar birkaç kez okumasına dayanmaktadır (Samuels, 1979: 377). Çocukların, hikâyeleri birkaç kez yeniden okumaları anlamalarını artırmaktadır (Yaden, 1988). Eko okuma ise, öğretmenin bir hikâyenin satırını okuması ve ardından öğrencilerin aynı satırı öğretmenin tonlamasını ve cümlelerini taklit ederek okumasına dayalı bir stratejidir (Vacca vd., 2015: 227). Bu tekniklerde amaç belli bir akıcılık düzeyine gelmektir. Okuma güçlüğü olan öğrencilerin, akıcı okuma sorunlarının yanında anlama sorunları da yaşamaktadırlar. Kuruyer (2014: 25) okuma güçlüğü yaşayan öğrencilerin kelime tanıma ve ayırt etmeye çok fazla zaman harcadıkları için anlamı kaçırdıklarını, bunun nedeninin de kısa süreli belleğin kelime tanıma ve ayırt etmeye kapasitesinin üstünde bir performans harcamasından kaynaklandığını ifade etmiştir. İncelenen çalışmalarda, okuma güçlüğü yaşayan öğrencilerin anlama becerilerini geliştirici yöntemler üzerinde çok durulmadığı görülmüştür. Gelecekte yapılacak araştırmalarda, anlama becerisini geliştirici stratejilere de yer verilmesi önerilmektedir.

İncelenen çalışmalarda sıklıkla “YanlıŞ Analiz Envanteri”nin tercih edildiği belirlenmiştir. Bu envanter, Akyol (2020) tarafından; Harris ve Sipay (1990), Ekwall ve Shanker (1988) ve May (1986)’den yararlanılarak Türkçeye uyarlanmıştır. Araştırmalarda bir ölçme aracına yönelimin sıklığı, bu alanda ölçme ve değerlendirme noktasında ölçme araçlarının yetersiz olduğuna işaret etmektedir. Öğrencinin okuma performansını değerlendirmede, kelime tanıma, akıcılık ve anlama önemli kritik alanlardır (Akyol vd., 2014: 3). Bu bağlamda, okuma güçlüğü olan öğrencilerin okuma becerilerinin değerlendirilmesinde, bu kritik beceri alanları dikkate alınması gerekmektedir.

### Sonuç

Türkiye’de yapılmış “okuma güçlüğü olan öğrencilerin okuma becerilerini geliştirmeye yönelik çalışmalar” incelendiğinde, özellikle son yıllarda araştırmaların sayısında artış olduğu görülmüştür. Ancak okuma güçlüğü, çocuğun akademik becerilerin yanı sıra tüm yaşamını etkileyen önemli bir öğrenme güçlüğü olduğu için bu konuda daha fazla çalışmaya gerek duyulmaktadır. Araştırmada konuya ilişkin çalışmaların yayın türüne göre dağılımına bakıldığında, lisansüstü çalışmaların makalelere göre sayıca az olduğu görülmüştür. Bu kapsamda, lisansüstü öğrencilerin, okuma güçlüğü konusunu ele alan çalışmalara yönlendirilmesi önemli görülmektedir.

Yapılan çalışmalarda okuma güçlüğü gidermeye yönelik müdahaleli uygulamaların genelde süresinin 25-50 ders saatinde olduğu görülmüştür. Okuma güçlüğü olan öğrencilerin okuma becerilerinin daha geniş zaman aralığında değerlendirilebilmesi

için konuyla ilgili boylamsal araştırmalara ihtiyaç olduğu düşünülmektedir. Çalışmalarda sıklıkla tekrarlı okuma ve eko okuma yöntemlerinin kullanıldığı görülmüştür. Gelecekte yapılacak araştırmalarda, farklı okuma yöntem ve tekniklerinin kullanılması önerilmektedir. Araştırmada okuma güçlüğü'nün belirlenebilmesine yönelik sınırlı sayıda ölçme aracının kullanıldığı görülmüştür. Bu kapsamda, öğrencilerin okuma sorunlarının tespiti ve değerlendirilmesine yönelik geçerlik-güvenirlilik çalışması yapılmış yeni ölçme araçlarının geliştirmesi gerektiği düşünülmektedir. Araştırmada okuma güçlüğü'ne yönelik çalışmalar Türkiye örneğinde incelenmiştir. Bundan sonra yapılacak araştırmalara yurt dışı çalışmalarda dahil edilebilir.

### Kaynakça

#### \*Araştırma Kapsamında İncelenen Çalışmalar

- \*Aktepe, V. & Akyol, H. (2015). Okuma güçlüğü ve giderilmesi: Tek örneklemlili bir durum çalışması. *International Journal of Eurasia Sciences*, 6(19), 111-126.
- Akyol, H. (2006). *Türkçe ilkökuma yazma öğretimi*. (5. Baskı). Ankara: Pegem Akademi Yayınları.
- Akyol, H. (2020). *Programa uygun Türkçe öğretim yöntemleri*. (10. Baskı). Ankara: Pegem Akademi Yayınları.
- Akyol, H. & Ketenoğlu Kayabaşı, Z. E. (2018). Okuma güçlüğü yaşayan bir öğrencinin okuma becerilerinin geliştirilmesi: Bir eylem araştırması. *Eğitim ve Bilim*, 43(193), 143-158. Doi: 10.15390/EB.2018.7240
- \*Akyol, H. & Ketenoğlu Kayabaşı, Z. E. (2018). Okuma güçlüğü yaşayan bir öğrencinin okuma becerilerinin geliştirilmesi: Bir eylem araştırması. *Eğitim ve Bilim*, 43(193), 143-158. Doi: 10.15390/EB.2018.7240
- \*Akyol, H. & Kodan, H. (2016). Okuma güçlüğü'nün giderilmesine yönelik bir uygulama: Akıcı okuma stratejilerinin kullanımı. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 35(2), 7-21. doi: 10.7822/omuefd.35.2.1
- \*Akyol, H. & Sever, E. (2019). Okuma yazma güçlüğü ve bir eylem araştırması: İkinci sınıf örneği. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 34(3), 685-707. Doi: 10.16986/HUJE.2018040667
- \*Akyol, H. & Çoban Sural, Ü. (2020). Okuma, okuduğunu anlama ve okuma motivasyonunun geliştirilmesi: Bir eylem araştırması. *Eğitim ve Bilim*, Çevrimiçi Ön Yayın. doi:10.15390/EB.2020.8977
- Akyol, H., Yıldırım, K., Ateş, S., Çetinkaya, Ç. & Rasinski, T. V. (2014). *Okumayı değerlendirme öğretmenler için kolay ve pratik bir yol*. Ankara: Pegem Akademi Yayınları.
- Balcı, E. (2015). *Amerika Birleşik Devletleri'nde disleksili bireylere uygulanan eğitim ve öğretim programlarının Türkiye'de yapılan çalışmalara katkısı açısından değerlendirilmesi*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Balcı, E. (2017). Dyslexia: definition, classification and symptoms. *SDU International Journal of Educational Studies*, 4(2), 166-180.
- Balcı, E. (2019). Disleksi hakkında öğretmen görüşleri ve karşılaştıkları sorunlar. *Ege Eğitim Dergisi*, 20(1), 162-179. DOI: 10.12984/eegefd.453922
- \*Balcı, E. & Çayır, A. (2017). Çoklu duyuşal öğrenme'nin disleksi riski olan bir ilkökul 4. sınıf öğrencisinin fonolojik farkındalık becerisine etkisi. *Ana Dili Eğitimi Dergisi*, 5(2), 201-216.

- \*Baştuğ, M. & Öncü, B. (2020). İkinci sınıf öğrencilerinin akıcı okuma becerilerini geliştirmede pratik stratejilerle erken okuryazarlığa yardım programı'nın (HELPS) kullanılması üzerine bir durum çalışması. *Eğitimde Nitel Araştırmalar Dergisi - ENAD*, 8(4), 1147-1164. doi: 10.14689/issn.2148-2624.8c.4s.4m
- Bender, W. N. (2012). *Öğrenme güçlüğü olan bireyler ve eğitimleri*. (Çev. Ed. H. Sarı). Ankara: Nobel Akademik Yayıncılık.
- Bingöl, A. (2003). Ankara'daki ilkokul 2. ve 4. sınıf öğrencilerinde gelişimsel disleksi oranı. *Ankara Üniversitesi Tıp Fakültesi Mecmuası*, 56(2), 67-82.
- Christo, C., Davis, J. M. & Brock, S. E. (2009). *Identifying, assessing, and treating dyslexia at school*. New York: Springer Science & Business Media.
- \*Çaycı, B. & Demir, M. K. (2006). okuma ve anlama sorunu olan öğrenciler üzerine karşılaştırmalı bir çalışma. *Türk Eğitim Bilimleri Dergisi*, 4(4), 437-458.
- \*Çayır, A. & Balcı, E. (2017). Bireyselleştirilmiş okuma programının disleksi riski olan bir ilkokul öğrencisinin okuma becerileri üzerindeki etkisi. *Uluslararası Türkçe Edebiyat Kültür Eğitim (TEKE) Dergisi*, 6(1), 455 - 470.
- Çeliktürk Sezgin, Z. & Akyol, H. (2015). Okuma güçlüğü olan dördüncü sınıf öğrencisinin okuma becerilerinin geliştirilmesi. *Turkish Journal of Education*, 2(4), 4-16.
- \*Çeliktürk Sezgin, Z. & Akyol, H. (2015). Okuma güçlüğü olan dördüncü sınıf öğrencisinin okuma becerilerinin geliştirilmesi. *Turkish Journal of Education*, 4(2), 4-16.
- \*Çolak, Y. (2019). *Disleksi teşhisi konmuş öğrencilere drama ile okuma yazma öğretimi*. Yayımlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Dağ, N. (2010). Okuma güçlüğü'nün giderilmesinde 3P metodu ile boşluk tamamlama (cloze) tekniğinin kullanımı üzerine bir çalışma. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 11(01), 63-77.
- Deniz, S. & Aslan, Y. (2020). Özel öğrenme güçlüğü olan bir öğrencide hikâye haritası tekniğinin okuduğunu anlamaya etkisinin değerlendirilmesi. *Milli Eğitim Dergisi*, 49(228), 241-261. <https://doi.org/10.37669/milliegitim.824841>
- \*Deniz, S. & Aslan, Y. (2020). Özel öğrenme güçlüğü olan bir öğrencide hikâye haritası tekniğinin okuduğunu anlamaya etkisinin değerlendirilmesi. *Milli Eğitim Dergisi*, 49(228), 241-261. <https://doi.org/10.37669/milliegitim.824841>
- Dinç, R. (2017). Okuma güçlüğü yaşayan öğrencide okuma becerisini geliştirmeye yönelik bir eylem araştırması. *Kuramsal Eğitim Bilim Dergisi*, 10(2), 320-334. <http://dx.doi.org/10.5578/keg.27774>
- \*Dinç, R. (2017). Okuma güçlüğü yaşayan öğrencide okuma becerisini geliştirmeye yönelik bir eylem araştırması. *Kuramsal Eğitim Bilim Dergisi*, 10(2), 320-334. <http://dx.doi.org/10.5578/keg.27774>
- Doğan, B. (2013). Türkçe ve sınıf öğretmenlerinin okuma güçlüğüne ilişkin bilgileri ve okuma güçlüğü olan öğrencileri belirleyebilme düzeyleri. *Okuma Yazma Eğitimi Araştırmaları*, 1(1), 20-33.
- \*Doğuyurt, M. F. & Doğuyurt, S. B. (2016). Okuma güçlüğü çeken öğrencilerin okuma becerisinin geliştirilmesine yönelik bir çalışma: Bir eylem araştırması. *21. Yüzyılda Eğitim ve Toplum Eğitim Bilimleri ve Sosyal Araştırmalar Dergisi*, 5(14), 275-286.
- Duran, E. & Sezgin, B. (2012). Rehberli okuma yönteminin akıcı okumaya etkisi. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi*, 32(3), 633-655.

- \*Duran, E. & Sezgin, B. (2012). Rehberli okuma yönteminin akıcı okumaya etkisi. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi*, 32(3), 633-655.
- Duran, E. & Sezgin, B. (2012). Yankılayıcı okuma yönteminin akıcı okumaya etkisi. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 31(2), 145-164.
- \*Duran, E. & Sezgin, B. (2012). Yankılayıcı okuma yönteminin akıcı okumaya etkisi. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 31(2), 145-164.
- \*Ege, B. (2019). *Okuma güçlüğünün giderilmesinde akıcı okuma stratejilerinin etkisi*. Yayımlanmamış Yüksek Lisans Tezi, Bayburt Üniversitesi, Lisansüstü Eğitim Enstitüsü, Bayburt.
- \*Ekiz, D., Erdoğan, T. & Uzuner, F. G. (2011). Okuma güçlüğü olan bir öğrencinin okuma becerisinin geliştirilmesine yönelik bir aksiyon araştırması. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 11(2), 111-131.
- Glesne, C. (2012). *Nitel araştırmaya giriş*. (Çev.Eds. A Ersoy & P. Yalçınoğlu). Ankara: Anı Yayıncılık.
- \*Gökbulut, Ö. D., Akçamete, G. & Güneyle, A. (2020). Birlikte öğretim uygulamalarının özel gereksinimli ilkokul öğrencilerinin okuduğunu anlama becerilerine etkisi. *Elektronik Sosyal Bilimler Dergisi*, 19(74), 879-894. doi:10.17755/esosder.592673
- \*Gül, M. (2019). *Okuma güçlüğü yaşayan ilkokul 4.sınıf öğrencisinin öğrenme stiline uygun zenginleştirilmiş öğretim yöntemleriyle okuma güçlüğünün giderilmesi*. Yayımlanmamış Yüksek Lisans Tezi, Zonguldak Bülent Ecevit Üniversitesi, Sosyal Bilimler Enstitüsü, Zonguldak.
- \*Gürbüz, A. (2015). *Altı dakika yönteminin akıcı okumaya etkisi*. Yayımlanmamış Yüksek Lisans Tezi, Uşak Üniversitesi, Sosyal Bilimler Enstitüsü, Uşak.
- Hoover, W. A. & Gough, P. B. (1990). The simple view of reading. *Reading and Writing: An Interdisciplinary Journal*, 2(2), 127-160. <https://doi.org/10.1007/BF00401799>
- İşler, N. K. & Şahin, A. E. (2016). Bir ilkokul 4. sınıf öğrencisinin okuma bozukluğu ve anlama güçlüğü: Bir durum çalışması. *Ana Dili Eğitimi Dergisi*, 4(2), 174-186.
- \*İşler, N. K. & Şahin, A. E. (2016). Bir ilkokul 4. sınıf öğrencisinin okuma bozukluğu ve anlama güçlüğü: Bir durum çalışması. *Ana Dili Eğitimi Dergisi*, 4(2), 174-186.
- Johnson, A. P. (2015). *Eylem araştırması el kitabı*. (Çev. Eds. Y. Uzuner & M. Özten Anay). (2. Baskı). Ankara: Anı Yayıncılık.
- \*Kanık Uysal, P. & Akyol, H. (2019). Okuma güçlüğü ve giderilmesi: Bir eylem araştırması. *Eğitim ve Bilim*, 44(198), 17-35. <http://dx.doi.org/10.15390/EB.2019.8032>
- \*Karakaya, B. & Altuntaş, O. (2017). Disleksisi olan çocuklarda görsel algı becerilerinin, okuma becerileri üzerine etkisinin incelenmesi. *Ergoterapi ve Rehabilitasyon Dergisi*, 5(3), 161-168.
- \*Karacakaloğlu, N. & Saraçlı Çelik, S. (2018). Rehberle okuma yönteminin ilkokul öğrencilerinin dinlediğini anlama düzeyleriyle akıcı okuma becerilerine etkisi. *Turkish Studies-Educational Sciences*, 13(19), 1083-1100. <http://dx.doi.org/10.7827/TurkishStudies.14096>
- \*Kaşdemir, B. (2020). *Özel öğrenme güçlüğü olan bir öğrencinin okuduğunu anlama becerisinin tahmin-inceleme-özetleme örgütlenme- değerlendirme (TİÖD) okuduğunu anlama stratejisi ile geliştirilmesi*. Yayımlanmamış Yüksek Lisans Tezi, Zonguldak Bülent Ecevit Üniversitesi, Sosyal Bilimler Enstitüsü, Zonguldak.
- Kodan, H. (2015). *Koro, tekrarlı ve yardımcı okuma yöntemlerinin zayıf okuyucuların okuma ve anlama becerileri üzerine etkisi*. Yayımlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.

- \*Kodan, H. (2015). *Koro, tekrarlı ve yardımcı okuma yöntemlerinin zayıf okuyucuların okuma ve anlama becerileri üzerine etkisi*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Kodan, H. (2020). Okuma güçlüğüne ilişkin öğretmen görüşleri. *Bayburt Eğitim Fakültesi Dergisi*, 15(29), 204-222. DOI: 10.35675/befdergi.644534
- Kuruyer, H. G. (2014). *Zenginleştirilmiş okuma programının okuma güçlüğü olan öğrencilerin bilişsel süreç ve nöral yapılarına etkisi*, Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Küçükköy, M. E. (2020). *Effects of syllable segmentation on reading on children with reading difficulty: A helpful technique for poor readers*. Yüksek Lisans Tezi, Orta Doğu Teknik Üniversitesi, Enformatik Enstitüsü, Ankara.
- Melekoğlu, M. A. (2010). Öğrenme güçlüğü, dikkat eksikliği/hiperaktivite bozukluğu, duygu/davranış bozukluğu. İ. H. Diken. (Ed.). *İlköğretimde kaynaştırma* (p.89-118). Ankara: Pegem Akademi Yayınları.
- Millî Eğitim Bakanlığı (MEB). (2008). *Özel eğitim ve rehabilitasyon merkezi özel öğrenme güçlüğü destek eğitim programı*. Erişim Adresi: [https://orgm.meb.gov.tr/meb\\_ays\\_dosyalar/2013\\_09/04010347\\_zelrenmeogldestekeitimprogram.pdf](https://orgm.meb.gov.tr/meb_ays_dosyalar/2013_09/04010347_zelrenmeogldestekeitimprogram.pdf)
- Millî Eğitim Bakanlığı (MEB). (2019). *Türkçe dersi öğretim programı* (İlkokul ve Ortaokul 1,2,3,4,5,6,7 ve 8. Sınıflar). Erişim Adresi: <https://mufredat.meb.gov.tr/Programlar.aspx>
- Oakhill, J., Cain, K. & Elroy, C. (2019). Reading comprehension and reading comprehension difficulties. D. A. Kilpatrick, R. M. Joshi & R. K. Wagner (Eds). *Reading Development and Difficulties* (p. 83-115). Springer, Cham.
- \*Okur, A. & Öztürk, D. (2018). Okuma becerisinin geliştirilmesinde grafiksel sembollerin kullanımına yönelik örnek olay çalışması. *AKRA Kültür Sanat ve Edebiyat Dergisi*, 235-251. <https://doi.org/10.31126/akrajournal.356872>
- \*Örs, E. (2019). Bir ilkokul dördüncü sınıf öğrencisinin okuma-yazma öğrenimi üzerine durum çalışması. *HAYEF: Journal of Education*, 16(1), 68-88. DOI: 10.26650/hayef.2019.18008
- \*Özdemir, O. (2013). *İlköğretim öğrencilerinin öğrenme stillerine göre okuma güçlüklerinin giderilmesi*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Özkara, Y. (2010). Okuma güçlüğü olan öğrencilerin okuma düzeylerinin geliştirilmesine yönelik bir uygulama. *Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 5, 109-119.
- Pas, J. P. (2009). *Reading difficulties and dyslexia*. Sage Publicationas.
- Peer, L. & Reid, G. (2003). *Introduction to dyslexia*. London: David Fulton Publishers.
- \*Peksoy, M. (2018). *Okuma güçlüğü çeken öğrencilerin okuma becerilerini geliştirmede tekrarlı okuma tekniğinin kullanımı üzerine bir durum çalışması*. Yayınlanmamış Yüksek Lisans Tezi, Gaziantep Üniversitesi, Eğitim Bilimleri Enstitüsü, Gaziantep.
- Pollock, J., Waller, E. & Politt, R. (2004). *Day-to-day dyslexia in the classroom*. (2th Edition). RoutledgeFalmer.
- Reid, G. (2011). *Dyslexia*. (3th Edition). London: Continuum Publishing.
- Sağlam, Ö. (2019). *Tekrarlı ve yankılayıcı okuma yöntemlerinin 3. Sınıf öğrencilerinin okuma becerilerine etkisi*. Yayınlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.

- \*Sağlam, Ö. (2019). *Tekrarlı ve yankılayıcı okuma yöntemlerinin 3. Sınıf öğrencilerinin okuma becerilerine etkisi*. Yayımlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Samuels, S. J. (1979). The method of repeated readings. *The Reading Teacher*, 50(5), 376-381.
- \*Sert, C. (2019). *Okuma güçlüğü olan öğrencilerin okuma akıcılığının artırılmasında model okuma, tekrarlı okuma, hata düzeltme ve kendini izleme stratejisi sağaltım paketinin etkisi*. Yayımlanmamış Yüksek Lisans Tezi. Ankara: Gazi Üniversitesi.
- Sidekli, S. (2010). *İlköğretim 5. sınıf öğrencilerinin okuma ve anlama becerilerini geliştirme (Eylem araştırması)*. Yayımlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Sidekli, S. (2010). *İlköğretim 5. sınıf öğrencilerinin okuma ve anlama becerilerini geliştirme (Eylem araştırması)*. Yayımlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Sidekli, S. & Yangın, S. (2005). Okuma güçlüğü olan öğrencilerin okuma becerilerinin geliştirilmesine yönelik bir uygulama. *Atatürk Üniversitesi Kazım Karabekir Eğitim Fakültesi Dergisi*, 0(11), 393 - 413.
- \*Sirem, Ö., Bağbaşı, G. N. & Baş, Ö. (2020). Okuma güçlüğüne yönelik bir uygulama: Fernald yönteminin kullanımı. *Tarih Okulu Dergisi (TOD)*, 13(XLV), 1209-1227. doi:10.29228/Joh42107
- Sirem, Ö. & Baş, Ö. (2021). Okuma güçlüğü yaşayan öğrencilerin sınıftaki davranışlarının incelenmesi üzerine nitel bir araştırma. *Milli Eğitim Dergisi*, 50, (230), 645-662. DOI: 10.37669/milliegitim.699644
- \*Sözen, N. (2017). *Okuma güçlüğü olan öğrencilerin anlama becerilerinin geliştirilmesinde rehberli okuma yöntemi'nin etkisi*. Yayımlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü., Ankara.
- \*Şahin, F. & Çakır, R. (2018). Çoklu ortam materyallerinin okuma-yazma güçlüğü çeken öğrencilerin okuma-yazma becerileri üzerinde etkisi. *Öğretim Teknolojileri ve Öğretmen Eğitimi Dergisi*, 7(2), 75 - 90.
- \*Şahin, M. & Baştuğ, M. (2020). Okuma güçlüğüne gidermede nörolojik etki yönteminin rolü. *Academy Journal of Educational Sciences*, 4(2), 93-101. <http://dx.doi.org/10.31805/acjes.814139>.
- \*Şen, N. (2016). *Okuma güçlüğü çeken ortaokul öğrencilerinin okuma becerilerinin incelenmesi*. Yayımlanmamış Yüksek Lisans Tezi, Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü., İzmir.
- Shaywitz, S. E. & Shaywitz, B. A. (2004). Reading disability and the brain. *Educational Leadership*, 61(6), 6-11.
- \*Topalca, S. (2019). *Drama yönteminin dislekside sesbilgisel farkındalık becerisine etkisi*. Yayımlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Tracey, D. H. & Morrow, L. M. (2006). *Lenses on reading: An introduction to theories and models*. New York: The Guilford Press.
- \*Türkmenoğlu, M. (2016). *İlkokulda akran öğretimi aracılığıyla okuma güçlüğüne giderilmesi*. Yayımlanmamış Yüksek Lisans Tezi, Niğde Üniversitesi, Eğitim Bilimleri Enstitüsü, Niğde.
- \*Ulu, H. & Akyol, H. (2016). Okuma becerisinin gelişiminde tekrarlayıcı okuma ve GSOÖ stratejisinin etkisi. *Eurasian Journal of Educational Research*, 63, 225-242. <http://dx.doi.org/10.14689/ejer.2016.63.13>

- \*Urfalıoğlu Eroğlu, G. (2020). *Improving reading abilities in dyslexia with neurofeedback and multi-sensory learning*. Yayınlanmamış Doktora Tezi, Sabancı Üniversitesi, Mühendislik ve Fen Bilimleri Enstitüsü, İstanbul.
- \*Uzunkol, E. (2013). Akıcı okuma sürecinde karşılaşılan sorunların tespiti ve giderilmesine yönelik bir durum çalışması. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 9(1), 70-83.
- Vacca, J. L., Vacca, R. T. Gove, M. K., Burkey, L. C., Lenhart, L. A. & Mckee, C. A. (2015). *Reading & learning to read*. (9th Edition). Pearson Publication.
- Yaden, D. (1988). Understanding stories through repeated read-alouds: How many does it take?. *The Reading Teacher*, 41(6), 556-560.
- Yamaç, A. (2014). İlkokul dördüncü sınıf düzeyinde bir öğrencinin sesli okuma akıcılığını artırmaya yönelik bir uygulama. *Kastamonu Eğitim Dergisi*, 23(2), 631-644.
- \*Yamaç, A. (2014). İlkokul dördüncü sınıf düzeyinde bir öğrencinin sesli okuma akıcılığını artırmaya yönelik bir uygulama. *Kastamonu Eğitim Dergisi*, 23(2), 631-644.
- Yıldırım, A. & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri*. (Genişletilmiş 9. Baskı). Ankara: Seçkin Yayıncılık.
- Yıldız, M., Çoban Sural, Ü. & Boz, İ. (2019). Türkiye’de okuduğunu anlamayı geliştirmeye dönük ilköğretim düzeyindeki çalışmaların sistematik incelenmesi. *Gazi Eğitim Fakültesi Dergisi*, 39(2), 1049-1086. <https://doi.org/10.17152/gefad.548457>
- \*Yılmaz, M. (2006). *İlköğretim 3. sınıf öğrencilerinin sesli okuma hatalarını düzeltmede ve okuduğunu anlama becerilerini geliştirmede tekrarlı okuma yönteminin etkisi*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- \*Yılmaz, M. (2008). Kelime tekrar tekniğinin akıcı okuma becerilerini geliştirmeye etkisi. *Türk Eğitim Bilimleri Dergisi*, 6(2), 323-350.
- \*Yılmaz, M. & Kadan, Ö. F. (2019). Okuma güçlüklerini gidermede eşli okuma yönteminin etkisine yönelik bir eylem araştırması. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 8(1), 231-244. DOI: 10.14686/buefad.432501
- Yurdakal, İ. H. & Susar Kırmızı, F. (2019). İlkokullarda okuma güçlüğüne sağaltmaya yönelik kullanılan öğretimsel düzenlemelere ilişkin öğretmen görüşleri. *Kastamonu Eğitim Dergisi*, 27 (2), 853-867. DOI: 10.24106/kefdergi.2893
- \*Yüksel, A. (2010). Okuma güçlüğü çeken öğrencilerin okuma becerisinin geliştirilmesine yönelik bir çalışma: Bir eylem araştırması. *Kuramsal Eğitimbilim Dergisi*, 3(1), 124-134.



## Contextualized Teaching of Different Senses of “al-” in Turkish as a Foreign Language<sup>1\*</sup>

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### ABSTRACT

Different types of word knowledge require different approaches to teaching. It is argued that learning different senses of words takes place through constantly encountering words in different contexts. Experimental studies also show that comprehension of unknown word senses (Iravani and Ghasemi, 2013) and ambiguity resolution of polysemous words (Watanabe, 2014) are facilitated when the context is available. Verbal polysemy is especially closely related to context. Verbs can show distributional differences in their different senses and verbs have different valences in some of their senses. Based on these relations between polysemy and context, this study aims to create sentence contexts for “al-”, a high-frequency verb in Turkish, for contextualized teaching of its different senses in Turkish as a foreign language. The sentence contexts for different senses of the verb are created based on the information about its different senses’ valences.

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## Introduction

Teaching meaning-form relationships is an important step of vocabulary teaching, but the number of known words alone is not enough to achieve proficiency in a foreign language; the depth of knowledge about known words is just as important. Therefore different types of knowledge about words must be learned, including their different senses.

Polysemy is a widely encountered phenomenon in natural languages and the majority of the words in a language have more than one sense. Because it is a widely encountered phenomenon and the number of senses is particularly high in high-frequency words, polysemy causes problems to foreign language learners at all levels. The studies (Schmitt, 1998, Karlsson, 2013; Öztürk, 2018) show that even advanced learner's knowledge of different senses is inadequate. This inadequacy leads to problems in foreign language teaching both in terms of language production and comprehension (Watanabe, 2014; Saito, Webb & Trofimovich, 2016; Öztürk, 2017).

Different types of word knowledge require different approaches to teaching. Even though new words and their meaning-form relationship is taught more effectively with decontextualized activities, such as word lists, in order to deepen the knowledge of already known words and to teach different word knowledge types, such as collocations, constraints on usage, different senses, the contextualized approach should be adopted (Nagy, 1995; Horst, Cobb & Meara, 1998; Waring & Takaki, 2003; Webb, 2007; Schmitt, 2008; Nation & Meara, 2010).

This study aims to create sentence contexts for “al-”, the fourth most frequent verb in Turkish, for contextualized teaching of its different senses in Turkish as a foreign language. The sentence contexts for different senses of the verb are created based on its different senses' valences. This study is intended to be a model for contextualized teaching of different senses of verbs based on their differences in valence in general. Verbs show variety in their contextual distribution and their distributional richness is related to their semantic flexibility. Verbs change their meaning depending on the arguments that they are used with (Fellbaum, 1990, 1998; Lemmens, 1998). Therefore, polysemy is closely related to valence in verbs. Verbs differ in terms of their valences in some of their senses and the differences in valence can be seen in the number, semantic roles, grammatical functions and semantic properties of obligatory and optional arguments.

## Literature Review

### Contextualized Teaching of Different Senses of Words

Experimental studies (Prince, 1996; Laufer & Schumeli, 1997; Webb, 2007; Mehrpour, 2008; Herusatoto, 2011; Ünalı, Bardakçı, Akpınar & Dolaş, 2013; Sadeghi & Nobakht, 2014) that compare the contextualized and decontextualized approach show that the decontextualized approach is more effective in terms of the number of words that can be taught in a certain period of time. However, a closer look at these studies reveals that these studies focus only on teaching new words and teaching the meaning-form relationship of words.

The decontextualized approach is much more effective in terms of teaching a large number of words in a short period of time and also at the first stage when the meaning-form relationship of new words is learned. However, contextualized activities are more effective in the development of different word knowledge types and in the enrichment of the knowledge about words whose meaning-form relationship is already known (Nagy, 1995; Horst et al., 1998; Waring & Takaki, 2003; Webb, 2007; Schmitt, 2008; Nation & Meara, 2010). Webb (2007) states that studies that only measure the development of meaning-form relationships conclude that the contextualized activities do not have a significant effect on vocabulary teaching. But according to Webb (2007), different types of word knowledge should be examined if the effect of the context on vocabulary learning is to be determined.

Studies on the effect of contextualized activities on different word knowledge types (Pigada & Schmitt, 2006, Webb, 2007, Baleghizadeh & Nik, 2011) show that there is a positive relation between contextualized activities and different word knowledge types. Pigada & Schmitt (2006) investigate the effect of intensive reading on the knowledge about spelling, grammatical features and meanings of words and conclude that the knowledge about the spelling of words is greatly improved as a result of intensive reading. Baleghizadeh & Nik (2011) compare the effects of word lists and different context types (single sentence and paragraph) on teaching adjective+preposition and preposition+noun colligations and conclude that contextualized activities are more effective than word lists in teaching these colligations.

The knowledge of different senses is also another word knowledge type that is closely related to context and therefore is expected to benefit from the contextualized approach. Learning polysemous words starts with the core sense and as the duration of language learning increases, other senses of the words are learned. Studies (Schmitt, 1998; Crossley, Salsbury & McNamara, 2010) show that learning different senses of polysemous words is a gradual process. In their study, Crossley et al. (2010) demonstrate that foreign language learners begin to learn and produce different senses of words after learning the core sense. Even though language learners use polysemous words in the early stages of learning, the use of other senses starts in the later stages.

Webb (2007) emphasizes the importance of context in learning different senses. Webb (2007) argues that the meaning of polysemous words is mostly only clear in context, therefore it is not very possible to learn such information with decontextualized activities, this information can only be learned from context. Learning different senses of words takes place over time through encountering different senses of words in different contexts (Schmitt, 2000, Bogaards, 2001). Bogaards (2001) states that words are used in different meanings in different contexts and that students encounter these contexts piece by piece. For this reason, learning words takes place over time through encountering different meanings in different contexts piece by piece. Similarly, Schmitt (2000) argues that the semantic limitations of words can be learned by constantly encountering words in different contexts. According to Schmitt (2000), each different context that the word is encountered increases the understanding of collocations, different meanings and other high-level knowledge of that word. In regard to teaching different senses of words, Hoshino, Sakata, Morimoto, Matsukubo & Tsubaki (2018) emphasize the importance of well-structured materials. Hoshino et al. (2018) recommend that beginner-level texts should focus on core senses and after the core sense is learned, they should start focusing

on different senses. For this purpose, it should be ensured that students encounter various expressions with different meanings of words in texts.

Experimental studies (Iravani & Ghasemi 2013; Watanabe 2014) that focus on the relationship between context and polysemy support these views. Iravani & Ghasemi (2013) examine the effects of 3 different types of clues (elaborated context, semantic frameworks and meaning chains) on the comprehension of unfamiliar meanings of polysemous words in EFL and conclude that the elaborated context is a more effective type of clue in regard to the comprehension of the meanings that are not familiar to students. Watanabe (2014) measures the effects of meaning relatedness and context constraint on lexical ambiguity resolution in EFL and shows that both meaning relatedness and context facilitate the process.

### Relation Between Verbal Polysemy and Valence

Verbs are more flexible in meaning compared to the other part-of-speech categories and the reason for this is that they have more tendency to change their meaning depending on the arguments they are used with or co-occur with (Fellbaum, 1990, 1998; Lemmens, 1998). Verbs can show different distributional properties and have different valences in their different senses. Verbal polysemy is explained by polyvalence; having multiple valences (Leech, 1992; Rappaport Hovav & Levin, 1998; Zaefferer, 2002; Levin & Rappaport Hovav, 2005). The differences in valence can be seen in the number, semantic roles, grammatical functions and semantic properties of obligatory and optional arguments (Uzun, 1997; Vater, 2003; Uçar, 2009; Asher, 2011; Şen & Turan, 2012; Spalek, 2015).

The differences in the number, semantic roles and semantic properties of obligatory and optional arguments are seen in the examples (1)-(2) from Vater (2003). The verb “gehen” (‘to go’) in German has two different meanings as in (1) and (2). In (1), the Goal argument “zum Bahnhof” (‘to the station’) is optional. On the contrary in (2), the Goal argument “nach London” (‘to London’) is obligatory and its omission leads to an ungrammatical sentence. In both (1) and (2), the Goal argument denotes a location. The comparison of the subjects of both these examples reveals that in these two constructions, semantic role and semantic properties of the subject differ. In (1), the subject has the semantic role Agent and it must be animate. On the contrary in (2), the subject has the semantic role Theme and must be inanimate.

- (1) a. Paul geht zum Bahnhof.  
       ‘Paul is going to the station.’  
       b. Paul geht.  
       "Paul is going/walking."  
 (2) a. Der Brief geht nach London.  
       ‘The letter is going to London.’  
       b. \*Der Brief geht.

(Vater, 2003: 104)

Uzun (1997) gives examples from the verb “geç-” (‘to pass’) in Turkish and shows that in different senses this verb has a different number of arguments and grammatical functions of these arguments can also differ. In (3a-3g), different senses of “geç-” and example sentences are given.

- (3) a. Güneş ön camdan arka cama geçti. (“bir yerden başka bir yere geçmek”)  
 ‘The sun moved from the windscreen to the rear window.’ (‘to move from one place to another.’)
- b. Bu hastalık hayvanlardan insanlara geçer. (“bulaşmak”)  
 ‘This disease is transmitted by animals to humans.’ (‘to be transmitted by (disease)’)
- c. Otobüs bu duraktan geçmez. (“uğramak”)  
 ‘The bus does not pass by this stop.’ (‘to pass by’)
- d. Söyledikleri yazıya geçsin. (“yazmak, kaydetmek”)  
 ‘Let what he/she said be written.’ (‘to write, to record’)
- e. Bu para artık geçmiyor. (“tedavülde olmak”)  
 ‘This money is not valid anymore.’ (‘to be in circulation (money)’)
- f. Ali sınıfını geçti. (“bitirmek, başarmak”)  
 ‘Ali passed his class.’ (‘to finish, to achieve’)
- g. Bu haberi bütün gazetelere geçin. (“aktarmak, iletmek”)  
 ‘Pass this news to all newspapers.’ (‘to pass on, to convey’)

(Uzun, 1997: 6)

In (3a) and (3b), the verb “geç-” has similar valence properties. In both these senses, the verb can take two objects; dative-marked (-(y)A) and ablative-marked (-DAn). In (3c), the verb only takes an ablative-marked object (-DAn) and in (3d), it takes a dative-marked object (-(y)A). In (3e), the verb is intransitive. In (3f), the verb only takes an accusative-marked object (-(y)I) and in (3g), it takes two objects; accusative-marked (-(y)I) and dative-marked (-(y)A).

Asher (2011) gives examples for the relation between the meaning of verbs and the semantic properties of their arguments. The verb “sweep” has two meanings depending on its direct object’s semantic properties; whether it is a location or a portion of matter. Because the verb has different meanings with different types of objects, copredication and ellipsis with two different types of objects result in ungrammatical sentences in (4c) and (4d).

- (4) a. John swept the kitchen and Mary the entryway.  
 b. John swept the dust and Mary the leaves.  
 c. #John swept the kitchen and Mary the leaves.  
 d. # John swept the kitchen and the dust.

(Asher, 2011: 33)

Another example that is given by Asher (2011) is the communication verbs. The meaning of the communication verbs, such as “shout”, “whisper”, “whistle”, etc. changes according to whether or not they take an object and the type of objects they take as in (5).

- (5) a. John shouted (whispered, whistled, whined . . . ). (activity)

- b. John shouted (whispered, whistled, whined . . . ) a warning. (accomplishment)
- c. John shouted (whispered, whistled, whined . . . ) at the animal. (accomplishment or activity)
- d. The bullets whistled past John. (accomplishment)

(Asher, 2011: 33)

Similarly, Spalek (2015) conducts a corpus-based study on the verbs “romper” (‘to break’) and “cortar” (‘to cut’) in Spanish and concludes that different object types that these verbs can take result in different interpretations of these verbs.

There are several studies that focus on the relation between verbal polysemy and valence in Turkish (Uzun, 1997; Uçar, 2009; Şen & Turan, 2012). These studies show that verbs have different valences in some of their senses in Turkish. Uzun (1997) classifies polysemy that is caused by the changes in valence as structural polysemy and determines four ways that these changes occur: obligatory arguments are added or removed, optional arguments are removed or optional arguments become obligatory arguments. In this study, Uzun (1997) focuses on only the semantic roles of the obligatory and optional arguments.

Uçar (2009) investigates the changes in valence of 90 verbs in Turkish that have five or more senses in dictionaries based on the classification of Uzun (1997). Uçar (2009) determines the changes in the number and semantic roles of the obligatory and optional arguments of these 90 verbs in their different senses. Şen and Turan (2012) analyze the number and the grammatical function of the obligatory arguments of 414 verbs in Turkish that are found in the dictionary under the letter “A”. Uçar (2009) and Şen & Turan (2012) focus on the different aspects of valence and they do not account for all aspects of valence; i.e. the number, semantic roles, grammatical function, semantic properties of obligatory and optional arguments. Also, both of these studies determine different senses of verbs based on Turkish dictionaries.

## Methodology

### Selecting the Verb

This study aims to create example sentence contexts for contextualized teaching of a high-frequency verb in Turkish; “al-” (‘to take, to get’). This verb is selected for this study because of the strong relation between frequency and polysemy and the importance of teaching high-frequency words in foreign language vocabulary teaching<sup>4</sup>. The verb “al-” is the fourth most frequent verb in Turkish National Corpus (with 50,997,016 running words) (Aksan, Aksan, Mersinli & Demirhan, 2017) with the raw frequency 312199 and a dispersion value of 0.97. First three verbs in the TNC corpus are the verbs “yap-” (‘to do, to make’), “ol-” (‘to be, to become’) and “et-” (‘to do, to make’) which are mostly used as light verbs (Özbek, 2008;

<sup>4</sup> See Yavaş (2020) for the application of this model to 8 other high-frequency verbs in Turkish; gel-, çık-, çalış-, geç-, kal-, aç-, dur-, bırak-.

Uçar, 2009; Akşehirli, 2013). These verbs are eliminated because, as light verbs, they have limited contributions to the meaning and the valence of the complex predicate.

### **Determining the Different Senses of “al-”**

Senses of “al-” that are included in this study are based on the findings of the Meaning Production Survey and Semantic Relatedness Survey conducted in Uçar (2009). In Uçar (2009), different meanings produced by the native speakers for a verb are accepted as different senses of that verb and the most frequently produced meaning is accepted as the core sense of that verb (Meaning Production Survey). Afterwards, different senses’ semantic relatedness to the core sense is assessed through native speaker judgments and senses are classified as polysemy or homonymy based on their semantic relatedness (Semantic Relatedness Survey). The senses classified as homonymy in Uçar (2009) are not included in this study.

Based on these findings, the verb “al-” has four different senses;

- 1) Beğendiği arabayı sonunda aldı.  
‘He/She finally bought the car he/she liked.’
- 2) Postacıdan mektubu aldı.  
‘He/She received the letter from the postman.’
- 3) Masanın üstündeki kalemi aldı.  
He/She took the pen, which was on the table.’
- 4) Milli atlet altın madalyayı aldı.  
‘The national athlete received the gold medal.’

(Uçar, 2009: 519)

In sense 1, “al-” has the meaning ‘to buy something’; in sense 2, it has the meaning ‘to receive or get something’; in sense 3, it has the meaning ‘to take, pick up or grab something’ and in sense 4, it has the meaning ‘to receive or win a reward, prize, medal, etc.’.

### **Valence Analysis**

For valence analysis of “al-”, valences of different senses of “al-” are analyzed. First, the number, grammatical functions and semantic roles of the obligatory arguments are determined. Afterwards, the semantic roles that the verb can take as optional arguments are determined. Finally, different senses are compared in order to determine the differences in the semantic properties of the arguments. This comparison is made between the senses that show similarity in their valence.

Semantic roles that can be an optional argument in every sense, such as Cause, Time, Manner, and Comitative are not included in the analysis. Some verbs accept the roles of Force and Instrument in the subject position, however, Force and Instrument roles in the subject position are not included in the analysis.

## Creating Example Sentence Contexts

At this stage, example sentence contexts are created based on the valences determined for each verb sense in the previous stage. Three example sentence contexts are created for each situation of valence possibilities: obligatory arguments, obligatory arguments+one optional argument, obligatory arguments+another optional argument, and so on.

In this study, the proficiency level is not taken into account, and therefore, it is aimed that the example contexts are suitable for all levels. For this reason, simple structures and simple and frequent words are used in the creation of the example contexts. Furthermore, in some examples, additional sentences are included in order to reinforce the meaning of the verb.

It is also intended to support and reinforce the verb meaning with the chosen words and structures. Words, phrases and structures that are frequently used with the verb are used and these are determined through searches in the TSCorpus<sup>5</sup> (Sezer and Sezer, 2013; Sezer, 2016, 2017) and online search engines.

## Results

### Valence Analysis of “al-”

The verb “al-” has four different senses;

- 1) to buy something
- 2) to receive or get something
- 3) to take, pick up or grab something
- 4) to receive or win a reward, prize, medal, etc.

In sense 1, the verb “al-” requires two obligatory arguments; Agent role as subject and Theme role as direct object<sup>6</sup> as in (6). As for optional arguments; “al-” can take the roles of Source role as an ablative-marked NP (*mağaza-dan* ‘from the store’, *fırın-dan* ‘from the bakery’, etc.) as in (7), Beneficiary role as an indirect object (*Ayşe’ye* ‘for Ayşe’, *kardeşim-e* ‘for my little sister/brother’, *sevgilim-e* ‘for my boyfriend/girlfriend’, etc.) as in (8), Instrument role as a comitative/instrumental-marked NP (*kredi kartı-yla* ‘with a credit card’, *nakit para-yla* ‘with cash’, *hediye çeki-yle* ‘with gift card’, etc.) as in (9) and Price role as a dative-marked NP (*5 lira-ya* ‘for 5 lira’, etc.) as in (10).

(6) Esin                      kalem                      aldı.

Esin-NOM                  pencil-ACC

Agent                      Theme

‘Esin bought a pencil.’

(7) Esin                      fırın-dan                      ekmek                      aldı.

Esin-NOM                  bakery-ABL                  bread-ACC

<sup>5</sup> <http://tscorpus.com>

<sup>6</sup> Direct object of a sentence is marked with the accusative case in Turkish, although accusative case marker sometimes is not realized depending on the definiteness of the NP.

- Agent            Source            Theme  
‘Esin bought bread from the bakery.’
- (8) Esin            Ayşe’ye            çiçek            aldı.  
Esin-NOM        Ayşe-DAT        flower-ACC  
Agent            Beneficiary        Theme  
‘Esin bought flowers for her mother’
- (9) Esin            kredi kartı-yla        kitap            aldı.  
Esin-NOM        credit card-INST    book-ACC  
Agent            Instrument            Theme  
‘Esin bought a book with a credit card.’
- (10) Esin            5 lira-ya            kitap            aldı.  
Esin-NOM        5 lira-DAT        book-ACC  
Agent            Price            Theme  
‘Esin bought a book for 5 lira.’

In sense 2, the verb “al-” requires two obligatory arguments; Receiver role as subject and Theme role as direct object as in (11). As for optional arguments; “al-” can only take the role of Giver role as an ablative-marked NP (*okul-dan* ‘from the school’, *postacı-dan* ‘from the postman’, *Ali’den* ‘from Ali’, etc.) as in (12).

- (11) Esin            mektup            aldı.  
Esin-NOM        letter-ACC  
Receiver            Theme  
‘Esin received a letter.’
- (12) Esin            okul-dan            belge-yi        aldı.  
Esin-NOM        school-ABL        document-ACC  
Receiver        Giver            Theme  
‘Esin received the documents from the school.’

In sense 3, the verb “al-” requires two obligatory arguments; Agent role as subject and Theme role as direct object as in (13). As for optional arguments; the verb “al-” can take the roles of Source role as an ablative-marked NP (*çanta-dan* ‘from the bag’, *masa-dan* ‘from the table’, *çekmece-den* ‘from the drawer’, etc.) as in (14) and Instrument role as a comitative/instrumental-marked NP (*maşa-yla* ‘with tongs’, *kaşık-la* ‘with the spoon’, *elim-le* ‘with my hand’, etc.) as in (15).

- (13) Esin            kalem-i            aldı.  
Esin-NOM        pencil-ACC  
Agent            Theme  
‘Esin took the pencil.’
- (14) Esin            çanta-dan        cüzdan-ı        aldı.

Esin-NOM      bag-ABL      wallet-ACC  
Agent            Source        Theme

‘Esin took her wallet from her bag.’

(15)      Esin            et-i            maşa-yla      aldı.

Esin-NOM      meat-ACC      tongs-INST  
Agent            Theme        Instrument

‘Esin picked up the meat with tongs.’

In sense 4, the verb “al-” requires two obligatory arguments; Receiver role as subject and Theme role as direct object as in (16). As for optional arguments; “al-” can take the roles of Giver role as an ablative-marked NP (devlet-ten ‘from the government’, UNESCO’dan ‘from UNESCO’, etc.) as in (17), Location role as a locative-marked NP (olimpiyatlar-da ‘in the Olympics’, Cannes Film Festivalinde ‘at the Cannes Film Festival’, Almanya’da ‘in Germany’, vb.) as in (18) and Attribute role as a locative-marked NP (yüzme-de ‘in swimming’, edebiyat kategorisi-nde ‘in the literature category’, etc.) as in (19).

(16)      Esin            madalya      aldı.

Esin-NOM      medal-ACC  
Receiver        Theme

‘Esin received a medal.’

(17)      Proje            UNESCO’dan      ödül            aldı.

project-NOM    UNESCO-ABL      award-ACC  
Receiver        Giver              Theme

‘The project received an award from UNESCO’

(18)      Proje            Almanya’-da      ödül            aldı.

project-NOM    Germany-LOC      award-ACC  
Receiver        Location            Theme

‘The project received an award in Germany.’

(19)      Esin            yüzme-de        madalya      aldı.

Esin-NOM      swimming-LOC      medal-ACC  
Receiver        Attribute            Theme

‘Esin received a medal in swimming.’

**Table 1.** Different Senses of “al-” and Their Valences

Meaning	Obligatory Arguments	Optional Arguments
1. to buy something	Agent, Theme	Source, Instrument, Beneficiary, Price
2. to receive or get something	Receiver, Theme	Giver

3. to take, pick up or grab something	Agent, Theme	Source, Instrument
4. to receive or win a reward, prize, medal, etc.	Receiver, Theme	Giver, Location, Attribute

Table 1 contains information about valences of different senses of “al-”. In terms of their obligatory arguments’ number, semantic roles and grammatical functions, sense 1 and sense 3 (Agent-subject/Theme-direct object) and sense 2 and sense 4 (Receiver-subject/Theme-direct object) are similar. However, even though sense 1 and sense 3 show similarity in their obligatory arguments, these two senses take different optional arguments. This is also the case with sense 2 and sense 4.

Sense 1 can take the roles Source, Beneficiary, Instrument and Price as optional arguments. On the other hand, sense 3 can only take the roles Source and Instrument as optional arguments. Even though these senses can both take the Source and Instrument roles, semantic properties of these two arguments differ in both senses. In sense 1, the Source argument must be a place where the act of buying can happen<sup>7</sup> as in (20a), on the other hand, this argument can be any physical place in sense 3 as in (20b). In sense 1, the Instrument argument must be an instrument for buying, such as money, and credit card as in (21a), and in sense 3, it must be an instrument for holding or grasping objects, such as gloves, and tongs as in (21b).

- (20) a. Esin fırın-dan ekmek aldı. (sense 1)  
 Esin-NOM bakery-ABL bread-ACC  
 Agent Source Theme  
 ‘Esin bought bread from the bakery.’
- b. Esin çanta-dan cüzdanı aldı. (sense 3)  
 Esin-NOM bag-ABL wallet-ACC  
 Agent Source Theme  
 ‘Esin took her wallet from her bag.’
- (21) a. Esin kredi kartı-yla kitap aldı. (sense 1)  
 Esin-NOM credit card-INST book-ACC  
 Agent Instrument Theme  
 ‘Esin bought a book with a credit card.’
- b. Esin et-i maşayla aldı. (sense 3)  
 Esin-NOM meat-ACC tongs-INST  
 Agent Theme Instrument  
 ‘Esin picked up the meat with tongs.’

As for sense 2 and sense 4, both of these senses can take the Giver semantic role as an optional argument but in sense 2, this argument must be a person from which the receiving of an object can happen as in (22a). In sense 4, this argument must be an organization, such as an

<sup>7</sup> This argument even does not have to be a physical location, as in the example “internetten” ‘from the internet’.

institution, a corporation that can give rewards, prizes, etc. as in (22b) The Receiver and the Theme argument also has different semantic properties in these two senses. In sense 4, the Receiver argument can be inanimate as well, as opposed to sense 2 as in (22a) and (22b). In sense 2, this argument must be human. In sense 4, the Theme argument must be an object that can be won, such as a prize and a reward as in (23b). But in sense 2, the Theme argument can be any object that can be received as in (23a).

- (22) a. Esin Ali'den belgeyi aldı. (sense 2)  
 Esin-NOM Ali-ABL document-ACC  
 Receiver Giver Theme  
 'Esin received the documents from Ali.'
- b. Proje UNESCO'dan ödül aldı. (sense 4)  
 project-NOM UNESCO-ABL award-ACC  
 Receiver Giver Theme  
 'The project received an award from UNESCO'
- (23) a. Esin mektup aldı. (sense 2)  
 Esin-NOM letter-ACC  
 Receiver Theme  
 'Esin received a letter.'
- b. Esin madalya aldı. (sense 4)  
 Esin-NOM medal-ACC  
 Receiver Theme  
 'Esin received a medal.'

### Example Sentence Contexts for Different Senses of “al-”

In this section, the example sentence contexts for each sense of “al-” are listed. They are created based on the properties of their valence determined in the previous section. The phrases that are used in the example contexts, and the obligatory and optional arguments that these phrases correspond to can be found in the tables (2-5).

### Example Sentence Contexts for Sense 1

**Table 2.** Phrases Used in the Creation of Sentence Contexts for Sense 1

Semantic Roles	Phrases
Agent*	ben, sen, o, arkadaşım, o (Beste), o (Cem), İrem, siz (I, you (sing.), he/she, my friend, she (Beste), he (Cem), İrem, you (pl.))

Theme*	hangi çantayı/ hangisini, hiçbir şey, yeni bir elbise, ekmek, eski kitaplar, bu kitabı, bu kazağı, oyuncak, çiçek, bu eşyaları, su, kahveyi, kazağını, kalem, defter, arabanızı (which bag/which one, nothing, a new dress, bread, old books, this book, this sweater, toy, flowers, these things, water, coffee, her sweater, pencil, notebook, your car(pl.))
Source	bakkaldan, sahaftan, internetten (from the grocery store, from the second-hand bookstore, from the internet)
Beneficiary	bana, ona (kardeşime), sevgilisine (me, him/her (brother/sister), for his/her boyfriend/girlfriend)
Instrument	hediye çekiyle, bozuk paralarım, kredi kartıyla (with the gift card, with my coins, with credit card)
Price	10 liraya, 2 liraya, 6 liraya, ne kadara/kaç (for 10 lira, for 2 lira, for 6 lira, for how much money)

\*: obligatory arguments

Sentence contexts created with Agent and Theme arguments:

- 1) İki çantayı da çok beğendim. Sence hangi çantayı/hangisini almalıyım?  
*'I really liked both bags. Which bag/which one do you think I should buy?'*
- 2) Hiçbir şey alamadım çünkü mağazadaki her şey çok pahalıydı.  
*'I couldn't buy anything because everything in the store was too expensive.'*
- 3) Yeni bir elbise aldım.  
*'I bought a new dress.'*

Sentence contexts created with Agent, Theme and Source arguments:

- 4) Bakkaldan ekmek alır mısınız?  
*'Can you buy bread from the grocery store?'*
- 5) Sahaftan eski kitaplar aldı.  
*'He/She bought old books from the second-hand bookstore.'*
- 6) Bu kitabı internetten aldım, internette daha ucuzdu.  
*'I bought this book online, it was cheaper on the internet.'*

Sentence contexts created with Agent, Theme and Beneficiary arguments:

- 7) Arkadaşım bana bu kazağı aldı ama kazağın rengini beğenmedim/üstüme olmadı/küçük geldi.  
*'My friend bought me this sweater, but I didn't like its colour/it doesn't fit me/it is small for me.'*
- 8) Gelecek Perşembe kardeşimin doğum günü. Ona oyuncak alacağım.

*'Next Thursday is my brother's/sister's birthday. I'll buy him/her a toy.'*

9) Yılbaşında sevgilisine çiçek almış.

*'He/She bought flowers for his/her boyfriend/girlfriend for New Year's Eve.'*

Sentence contexts created with Agent, Theme and Instrument arguments:

10) Beste geçen ay bir çekilişte hediye çeki kazanmıştı. O yüzden bu eşyaları hediye çekiyle aldı.

*'Beste won a gift card in a draw last month. That's why she bought these things with the gift card.'*

11) Bozuk paralarımın su aldım.

*'I bought water with my coins.'*

12) Cem'in nakit parası yoktu, o yüzden kahveyi kredi kartıyla aldı.

*'Cem didn't have cash, so he bought the coffee with credit card.'*

Sentence contexts created with Agent, Theme and Price arguments:

13) Irem kazağını 10 liraya aldı.

*'Irem bought her sweater for 10 lira.'*

14) 2 liraya kalem, 6 liraya da defter aldı.

*'He/She bought a pencil for 2 lira and a notebook for 6 lira.'*

15) Arabanızı ne kadara/kaçaya aldınız?

*'For how much did you buy your car?'*

## Example Sentence Contexts for Sense 2

**Table 3.** Phrases Used in the Creation of Sentence Contexts for Sense 2

Semantic Roles	Phrases
Receiver*	Beste, sen, ben, başkan (Beste, you, I, the president)
Theme*	mektubu, öğretmenin e-mailini, bir mektup, belgeleri, parayı, fişi (the letter, the teacher's email, a letter, the documents, the money, the receipt)
Giver	sekreterden, ondan (Cem'den), kasiyerden (from the secretary, from him (from Cem), from the cashier)

\*: obligatory arguments

Sentence contexts created with Receiver and Theme arguments:

- 1) Cem bir ay önce Beste’ye mektup yollamıştı. Beste mektubu bugün almış.  
*‘Cem sent a letter to Beste a month ago. Beste has received the letter today.’*
- 2) Öğretmenin e-mailini aldın mı?  
*‘Have you received the teacher’s email?’*
- 3) Dün bir mektup aldım ama kim gönderdi bilmiyorum.  
*‘I received a letter yesterday but I don’t know who sent it.’*

Sentence contexts created with Receiver, Theme and Giver arguments:

- 4) Başkan sekreterden belgeleri aldı.  
*‘The president received the documents from the secretary.’*
- 5) Parayı Cem’e vermiştim, ondan parayı aldın mı?  
*‘I gave the money to Cem, did you get the money from him?’*
- 6) Kasiyerden fişi almadım.  
*‘I didn’t get the receipt from the cashier.’*

### Example Sentence Contexts for Sense 3

**Table 4.** Phrases Used in the Creation of Sentence Contexts for Sense 3

Semantic Roles	Phrases
Agent*	o, ben, İrem Cem’in babası, annesi (he/she, I, İrem, Cem’s father, his/her mother)
Theme*	gitarını, kağıt, kalem, telefonumu, çantasını, bir kitap, cüzdanımı, tencereyi, topu, camları (his/her guitar, a paper, a pen, my phone, his/her bag, a book, my wallet, the pot, the ball, the glass)
Source	odadan, kitaplıktan, çantamdan (from the room, from the bookcase, from my bag)
Instrument	eldivenle, sopayla, süpürgeyle (with gloves, with a stick, with a broom)

\*: obligatory arguments

Sentence contexts created with Agent and Theme arguments:

- 1) Gitarını aldı ve şarkı çalmaya başladı.  
*‘He/She took his/her guitar and started playing a song.’*

- 2) Kağıt, kalem aldım ve adresi kağıda yazdım.  
*'I took a paper and a pen and wrote the address on the paper.'*
- 3) Arkadaşımı arayacaktım. Telefonumu aldım ama şarjı yoktu ve kapanmıştı.  
*'I was going to call my friend. I picked up my phone but its battery had died and it was turned off.'*

Sentence contexts created with Agent, Theme and Source arguments:

- 4) İrem odadan çantasını aldı.  
*'İrem took her bag from the room.'*
- 5) Kitaplıktan bir kitap aldı.  
*'He/She took a book from the bookcase.'*
- 6) Çantamdan cüzdanımı aldım.  
*'I took my wallet from my purse.'*

Sentence contexts created with Agent, Theme and Instrument arguments:

- 7) Tencere çok sıcaktı, o yüzden tencereyi eldivenle aldı.  
*'The pot was very hot, so he/she took the pot with gloves.'*
- 8) Çocuklar top oynuyorlardı ve top ağaca takıldı. Cem'in babası topu sopayla aldı.  
*'The children were playing ball and the ball got caught in the tree. Cem's father took the ball with a stick.'*
- 9) Bardak kırıldı ve her yer cam oldu. Annesi camları süpürgeyle aldı.  
*'The glass was broken and it was everywhere. His/her mother swept the glass.'*

#### Example Sentence Contexts for Sense 4

**Table 5.** Phrases Used in the Creation of Sentence Contexts for Sense 4

Semantic Roles	Phrases
Receiver*	o (İrem), takımımız, bu öykü, dedem, iş adamı, bölüm başkanımız, okulumuzun projesi, milli sporcular, film, okulumuzun öğrencileri, Michael Phelps, Türkiye (İrem, our team, this story, my grandfather, the businessman, our head of department, our school project, national athletes, the film, students in our school, Michael Phelps, Turkey)
Theme*	başarı belgesi, kupa, ödül, birçok madalya, plaket, altın madalya, birçok ödül, madalya

	(a certificate of achievement, a trophy, an award, many medals, a plaquet, a gold medal, many awards, a medal)
Giver	vakıftan, devletten, üniversiteden (from the foundation, from the government, from the university)
Location	Almanya’da, olimpiyatta, festivallerde, yarışmada (in Germany, in the Olympics, at festivals, in the competition)
Attribute	genç kategorisinde, güreşte, yüzmede (in the junior category, in wrestling, in swimming)

\*: obligatory arguments

Sentence contexts created with Receiver and Theme arguments:

- 1) İrem çok çalışkan bir öğrenci. O yüzden yıl sonunda başarı belgesi aldı.  
*‘İrem is a very hard-working student. That’s why she received a certificate of achievement at the end of the year.’*
- 2) Takımımız turnuvada birinci oldu ve kupa aldı.  
*‘Our team won the tournament and won a cup.’*
- 3) Bu öykü, öykü yarışmasında en iyi öykü seçildi ve ödül aldı.  
*‘This story was selected as the best short story in the short story competition and received an award.’*

Sentence contexts created with Receiver, Theme and Giver arguments:

- 4) Dedem savaş zamanında askerdi ve bu yüzden devletten birçok madalya aldı.  
*‘My grandfather was a soldier in wartime and therefore he received many medals from the government.’*
- 5) İş adamı yıl boyunca vakfa birçok bağışta bulundu ve yıl sonunda vakıftan plaket aldı.  
*‘The businessman made many donations to the foundation throughout the year and he received a plaquet from the foundation at the end of the year.’*
- 6) Bölüm başkanımız üniversiteden ödül aldı.  
*‘Our head of department received an award from the university.’*

Sentence contexts created with Receiver, Theme and Location arguments:

- 7) Okulumuzun projesi Almanya’da ödül aldı.  
*‘Our school’s project was awarded in Germany.’*
- 8) Milli sporcular olimpiyatta altın madalya aldı.  
*‘National athletes won a gold medal in the Olympics.’*
- 9) Sinemaya yeni bir film geldi. Film festivallerde birçok ödül almış.

*'A new movie came to the cinema. The movie has received many awards at festivals.'*

Sentence contexts created with Receiver, Theme and Attribute arguments:

10) Okulumuzun öğrencileri, yarışmada genç kategorisinde madalya aldı.

*'Students in our school won a medal in the junior category in the competition.'*

11) Türkiye güreşte birçok madalya aldı.

*'Turkey won many medals in wrestling.'*

12) Michael Phelps yüzmede toplam 11 altın madalya aldı.

*'Michael Phelps won a total of 11 gold medals in swimming.'*

### Discussion

The valence analysis of the verb “al-” shows that “al-” has different valences in its different senses. The differences in its valence are seen in the number, grammatical functions, semantic roles and semantic properties of the obligatory and optional arguments. These findings are in line with other studies that study the relationship between verbal polysemy and valence in Turkish (Uzun, 1997; Uçar, 2009; Şen & Turan, 2012).

All of the examined senses of “al-” differ in terms of their obligatory and optional arguments and if these arguments are shared among senses, they appear to have different semantic properties. As a result, it was possible to create example sentence contexts that are different from each other for each verb sense, both in terms of grammatical functions and semantic properties of the phrases that are used.

### Conclusion

This study aims to determine the relation between valence and polysemy of the verb “al-” in Turkish and to use this information in contextualized teaching of different senses of “al-” in Turkish as a foreign language. First, valences of different senses of “al-” are analyzed. Afterwards, example sentence contexts are created for each verb sense based on their valence for the purpose of contextualized teaching of the different senses of “al-” in Turkish as a foreign language.

In this study, the senses of the verb are limited to the findings of the Meaning Production Survey and Semantic Relatedness Survey applied to native speakers in Uçar (2009). However, of course, conscious meaning production of native speakers does not fully reflect the diversity of the meanings of verbs. But this study is carried out for educational purposes and it is assumed that the meaning production of native speakers reveals the most frequent senses of that verb. The frequency of senses is as much as important as the frequency of the words in foreign language teaching. High-frequency senses are learned earlier than less frequent senses (Schmitt, 2010: 54). Therefore, the teaching should also start with the more frequent senses and continue with the less frequent ones. Unfortunately, there is no study in Turkish that investigates the sense frequencies of highly polysemous verbs, such as “al-”.

This study is intended to be a model for contextualized teaching of different senses of verbs. In future studies, the model developed in this study can be applied to different verbs in Turkish and to different languages as well. This study does not take into account the proficiency level. In future studies, the level of proficiency can be taken into account in adapting the model. Verbs and their senses can be selected according to the level of proficiency and the grammatical structures and words that are suitable for that level can be used in the creation of the sentence contexts.

### References

- Adolphs, S. & Schmitt, N. (2003). Lexical Coverage of Spoken Discourse. *Applied linguistics*. 24(4): 425-438.
- Adolphs, S. & Schmitt, N. (2004). Vocabulary Coverage According to Spoken. *Vocabulary in a Second Language: Selection, Acquisition, and Testing* (pp. 39-51). Editors P. Bogaards & B. Laufer. Amsterdam: John Benjamins Publishing.
- Aksan, Y., Aksan, M., Mersinli, Ü., & Demirhan, U. U. (2017). *A Frequency Dictionary of Turkish*. Taylor & Francis.
- Akşehirli, S. (2013). Türkçede Et- Katkısız Eyleminin Sözlüksel İşlevleri. *Turkish Studies*. 8(9): 481-494.
- Asher, N. (2011). *Lexical Meaning in Context: A Web of Words*. Cambridge: Cambridge University Press.
- Baleghizadeh, S., & Nik, A. B. (2011). The Effect of Type of Context on EFL Learners' Recognition and Production of Colligations. *Journal of Language and Linguistic Studies*. 7(1): 100-112.
- Bogaards, P. (2001). Lexical Units and the Learning of Foreign Language Vocabulary. *Studies in Second Language Acquisition*. 23(3): 321-343.
- Brugman, C. (2001). Light Verbs and Polysemy. *Language Sciences*. 23(4-5): 551-578.
- Carter, R. (2012). *Vocabulary*. New York: Routledge.
- Crossley, S., Salsbury, T. & McNamara, D. (2010). The Development of Polysemy and Frequency Use in English Second Language Speakers. *Language Learning*. 60(3): 573-605.
- Fellbaum, C. (1990). English Verbs as a Semantic Net. *International Journal of Lexicography*. 3(4), 278-301.
- Fellbaum, C. (1998). A Semantic Network of English: The Mother of All WordNets. *EuroWordNet: A Multilingual Database with Lexical Semantic Networks* (pp. 137-148). Editor P. Vossen.
- Göksel, A., & Kerslake, C. (2005). *Turkish: A Comprehensive Grammar*. Routledge.
- Herusatoto, H. (2012). Longer EFL Vocabulary Retention: Learning in Context or in Isolation?. *LINGUA: Jurnal Ilmu Bahasa dan Sastra*. 6(2): 181-183.

- Horst, M., Cobb, T. & Meara, P. (1998). Beyond a Clockwork Orange: Acquiring Second Language Vocabulary Through Reading. *Reading in a Foreign Language*. 11: 207–23. Dordrecht, Springer.
- Hoshino, Y., Sakata, N., Morimoto, S., Matsukubo, A. & Tsubaki, M. (2018). The Meaning Distributions of a Polysemous Word in Two Kinds of EFL Learning Materials. *Journal of Bunkyo Gakuin University*. 17: 35-56.
- Hu, H. M. & Nation, P. (2000). What Vocabulary Size is Needed to Read Unsimplified Texts. *Reading in a Foreign Language*. 8: 689-696.
- Iravani, H., & Ghasemi, M. D. (2013). A Comparison of Using Three Different Types of Cues, Elaborated Context, Semantic Frames and Meaning Chains, in Disambiguating Polysemous Verbs. *International Journal of English Language Education*. 1(1), 109-129.
- Karlsson, M. (2013). Quantitative and Qualitative Aspects of Advanced Learners' L1 and L2 Mastery of Polysemous Words. *Hermes-Journal of Language and Communication Studies*. 51: 79-112.
- Laufer, B. (1992). How Much Lexis is Necessary for Reading Comprehension?. *Vocabulary and Applied Linguistics* (pp. 126-132). Editors P. J. Arnaud & H. Bejoint. London: Palgrave Macmillan.
- Laufer, B. (1997). The Lexical Plight in Second Language Reading: Words You Don't Know, Words You Think You Know, and Words You Can't Guess. *Second Language Vocabulary Acquisition: A Rationale for Pedagogy* (pp. 20-34). Editors J. Coady & T. Huckin. Cambridge: Cambridge University Press.
- Laufer, B. & Shmueli, K. (1997). Memorizing New Words: Does Teaching Have Anything to Do with it?. *RELC JOURNAL*. 28(1): 89-106.
- Leech, G. (1992). Corpora and theories of linguistic performance. *Directions in corpus linguistics*, 105-122.
- Lemmens, M. (1998). *Lexical perspectives on transitivity and ergativity*. Benjamins.
- Levin, B. & Rappaport Hovav, M. (2005). *Argument Realization*. Cambridge: Cambridge University.
- Mehrpour, S. (2008). A Comparison of the Effects of Two Vocabulary Teaching Techniques. *The Asian EFL Journal*. 10(2): 192-208.
- Miyamoto, T. (2000). *The Light Verb Constructions in Japanese: The Role of the Verbal Noun*. Philadelphia: John Benjamins Publishing Company.
- Morimoto, S., & Loewen, S. (2007). A Comparison of the Effects of Image-Schema Based Instruction and Translation-Based Instruction on the Acquisition of L2 Polysemous Words. *Language Teaching Research*. 11(3): 347-372.
- Nagy, W. E. (1995). *On the Role of Context in First-and Second-Language Vocabulary Learning*. Champaign.: University of Illinois at Urbana-Champaign.
- Nation, I. S. P. (1993). Vocabulary Size, Growth, and Use. *The Bilingual Lexicon* (pp. 115-134). Editors R. Schreuder & B. Weltens. Amsterdam: John Benjamins Publishing.

- Nation, I. S. P. (2006). How Large a Vocabulary is Needed for Reading and Listening?. *Canadian Modern Language Review*. 63(1): 59-82.
- Nation, I. S. P. (2011). Research into Practice: Vocabulary. *Language Teaching*. 44(4): 529-539.
- Nation, P., & Waring, R. (1997). Vocabulary Size, Text Coverage and Word Lists. *Vocabulary: Description, Acquisition and Pedagogy*. 14: 6-19.
- Nation, P. & Meara, P. (2010). Vocabulary. *An Introduction to Applied Linguistics* (pp. 34-53). Editor N. Schmitt. London: Hodder Education.
- Özbek, A. (2008). Support Verb Constructions in Turkish. *Annals of Japan Association for Middle East Studies*. 24(1), 1-16.
- Özbek, A. (2010). On Çek- as a Light Verb-A Contrastive View from Japanese. *Dil ve Dilbilimi Çalışmaları Dergisi* 6(1): 1-13.
- Öztürk, M. (2017) Words with Multiple Meanings in Authentic L2 Texts: An analysis of Harry Potter and the Philosopher’s Stone. *The Reading Matrix: An International Online Journal*. 17(2): 133-141.
- Öztürk, M. (2018). Acquisition of Noun Polysemy in English as a Foreign Language. *Journal of Foreign Language Education and Technology*. 3(1): 83-109.
- Pigada, M. & Schmitt, N. (2006). Vocabulary Acquisition from Extensive Reading: A Case Study. *Reading in a Foreign Language*. 18(1): 1–28.
- Prince, P. (1996). Second Language Vocabulary Learning: The Role of Context versus Translation as a Function of Proficiency. *The Modern Language Journal*. 80: 478- 493
- Qian, D. D. (2002). Investigating the Relationship Between Vocabulary Knowledge and Academic Reading Performance: An Assessment Perspective. *Language Learning*. 52(3): 513-536.
- Rappaport Hovav, M. & Levin, B. (1998). Building Verb Meanings. *The Projection of Arguments: Lexical and Compositional Factors* (pp. 97-134.). Editors M. Butt & W. Geuder. Stanford: CSLI Publications.
- Sadeghi, K. & Nobakht, A. (2014). The Effect of Linguistic Context on EFL Vocabulary Learning. *GEMA Online Journal of Language Studies*. 14(3).
- Saito, K., Webb, S., & Trofimovich, P. (2016) Lexical Profiles of Comprehensible Second Language Speech: The Role of Appropriateness, Fluency, Variation, Sophistication, Abstractness, and Sense Relations. *Studies in Second Language Acquisition*. 38: 677-701.
- Schmitt, N. (1998). Tracking the Incremental Acquisition of Second Language Vocabulary: A Longitudinal Study. *Language Learning*. 48(2): 281-317.
- Schmitt, N. (2000). *Vocabulary in Language Teaching*. Cambridge: Cambridge University Press.
- Schmitt, N. (2008). Instructed Second Language Vocabulary Learning. *Language Teaching Research*. 12(3): 329-363.

- Schmitt, N. (2010) *Researching Vocabulary: A Vocabulary Research Manual*. London: Palgrave Macmillan.
- Schmitt, N., Jiang, X., & Grabe, W. (2011). The Percentage of Words Known in a Text and Reading Comprehension. *The Modern Language Journal*. 95(1): 26-43.
- Sezer, T. (2017). TS Corpus Project: An Online Turkish Dictionary and TS DIY Corpus. *European Journal of Language and Literature*. 9(1), 18-24.
- Sezer, T. (2016). Tweets Corpus: Building a Corpus by Social Media. *Journal of National Education and Social Sciences*. 210: 621-633
- Sezer, T. & Sezer, B. (2013). TS Corpus: Herkes İçin Türkçe Derlem. *Proceedings 27th National Linguistics Conference*, 217-225.
- Spalek, A. A. (2015). Spanish Change of State Verbs in Composition with Atypical Theme Arguments: Clarifying the Meaning Shifts. *Lingua*. 157: 36-53.
- Stevenson, S., Fazly, A., & North, R. (2004). Statistical Measures of the Semi-Productivity of Light Verb Constructions. *Proceedings of the Workshop on Multiword Expressions: Integrating Processing*. 1-8.
- Şen, E. & Turan, S. (2012). Türkçede Eylemlerin Altulam Özellikleri ve Bu Özelliklerin Eğitim-Öğretim Ortamlarına Aktarılması. *Dil Dergisi*. 158: 7-36.
- Uçar, A. (2007). Eylemde Çokanlamlılık ve Sözlük Girdisi Olarak Katkısız Eylemler XXI. *Ulusal Dilbilim Kurultayı Bildirileri 10* (pp.137-145) Editors Y. Aksan & M. Aksan. Mersin: Mersin University.
- Uçar, A. (2009). Türkçede Eylemlerde Çokanlamlılık: Uygunluk Kuramı Çerçevesinde Bir Çözümleme [Unpublished doctoral dissertation]. Ankara University Graduate School of Social Sciences.
- Uçar, A. (2010). Light Verbs Constructions in Turkish Dictionaries: Are They Submeanings of Polysemous Verbs?. *Journal of Linguistics and Literature*.7(1): 1-17.
- Uzun, N. E. (1997). Türkçe Eylemlerde Çokanlamlılık ve Rol Kuramı. *A. Ü. Tömer Dil Dergisi*. 51 (1), 5-20.
- Ünalı, I., Bardakçı, M., Akpınar, K. D. & Dolaş, F. (2013). A Comparison of Contextualized, Decontextualized and Corpus-Informed Vocabulary Instruction: A Quasi-Experimental Study. *Dil ve Edebiyat Eğitimi Dergisi*. 2(8): 78-95.
- Vater, Heinz (2003). Valency and Diathesis. *Motivation in Languages: Studies in Honor of Günter Radden* (pp. 99-122) Editors H. Cuyckens, T. Berg, R. Dirven and K. Panther. Amsterdam: John Benjamins.
- Waring, R. & Takaki, M. (2003). At What Rate Do Learners Learn and Retain New Vocabulary from Reading a Graded Reader? *Reading in a Foreign Language*. 15: 130-163
- Watanabe, Y. (2014). Effects of Contextual Constraint on the Processing of Polysemous Words in Japanese EFL Reading. *KATE Journal*. 28: 55-68.
- Webb, S. (2007). Learning Word Pairs and Glossed Sentences: The Effects of a Single Context on Vocabulary Knowledge. *Language Teaching Research*. 11(1): 63-81.

- Yavaş, D. E. (2020). Contextualized Teaching of Polysemous Verbs in Turkish as a Foreign Language [Unpublished master’s thesis]. Dokuz Eylül University Graduate School of Social Sciences.
- Zaefferer, D. (2002). Polysemy, polyvalence, and linking mismatches: the concept of RAIN and its codings in English, German, Italian, and Spanish. *DELTA: Documentação de Estudos em Lingüística Teórica e Aplicada*, 18(SPE), 27-56.



## An Analysis of Theses Written on Teaching English to Young Learners in Turkey

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### ABSTRACT

This review study examines all the master's and doctoral theses completed on teaching English to young learners (TEYL) between the years 2014 and 2020 in Turkey. Eighty theses and dissertations indexed in the Turkish National Theses Database were included in the study. The tendencies in the theses in terms of sub-subjects covered, research designs applied, sampling methods used, research contexts targeted, and overall findings were identified and discussed. This paper provides an account of recent graduate research in TEYL to be a reference for researchers and supervisors in the field by presenting the results of a conceptual and descriptive analysis of the theses. Furthermore, by interpreting the tendencies in research methodology and over/under-studied areas in the field, the study reveals possible gaps and research opportunities in the field of TEYL.

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### Statement of Publication Ethics

Hereby, we consciously assure that this material is the authors' own original work; the paper is not currently being considered for publication elsewhere; the paper reflects the authors' own research and analysis in a truthful and complete manner; and all the authors have been personally and actively involved in substantial work leading to the paper and will take public responsibility for its content.

No ethical committee approval was required for this study. Data collection did not include human subjects.

### Authors' Contribution Rate

All the authors contributed to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

### Conflict of Interest

The authors certify that they have NO affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter or materials discussed in this manuscript.

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## Introduction

There is a worldwide trend of introducing foreign language(s) to young learners in schools (Garton et. al., 2011; Enever, 2011). Due to its current popularity and status globally, English is the first ranking language among the languages included in the curriculums for young learners. Parallel to this increasing interest in an early start to English language learning, the body of research on teaching English to young learners is also growing and it has been debated a lot in the past years.

The term ‘young learners’ comprises “a range of learners who share commonly accepted characteristics such as having short attention spans and learning holistically” (Kırkgöz, 2018, p.172). Yet, in the discussions of who is referred as young learner, it is seen that there are different views and various age ranges of young learners (YL) exist in the literature. While for some scholars, YLs are accepted as those between five and twelve years of age (Cameron, 2001), others categorize it as six to eleven (Phillips, 1993) or five to ten (Harmer, 2001). As all these categorizations target a broad age group, and this may yield danger of overlooking the discrepancy among children’s cognitive, physical, psychological, and linguistic characteristics, a further division was made as “very young learners (VYLs)” referring to those younger than six (Ellis, 2014).

In many Asian and European countries, there is a recent tendency to give central importance to TEYL and introduce it at early ages in primary schools (Murphy, 2014; Pinter, 2006; Spolsky & Moon, 2012). Turkey, being one of these countries, has witnessed a shift in this regard. The latest educational reform in Turkey released in 2012 has been one of the major factors influencing TEYL in Turkey. Twelve years of compulsory education (4+4+4, referring to four years for primary, secondary, and high schools) was initiated, and the start age of English instruction was lowered to the second year of primary education. Students started to take two hours of English a week in the second grade as of the 2013-2014 academic year.

This shift yielded new discussions because age is a leading factor that shapes the overall instruction and approaches in language teaching. There is no doubt that due to the differences in physical, cognitive, social, emotional, and motor skills, teaching language to a six-year-old would differ from teaching language to an eleven-year-old student. This situation has also been highlighted by Kırkgöz (2018) that primary school children are not only “less cognitively aware”, but they are also in the ongoing process of “developing literacy in their first language.”

There are several motivations behind the attempt to integrate language teaching in the curricula at a younger age. In addition to the major factor of globalization (Copland & Garton, 2014), another propelling force to pull down the start age of English instruction is related to age and language learning. There is a widespread belief of “the early the better” which takes us back to the discussions of Critical Period Hypothesis (CPH) rooted in the field of SLA. In a nutshell, it is claimed that there is a cutoff age in puberty and language learning is easier at a younger age because cortical connections can easily be formed until this cutoff age. Thus, learning a language after puberty is basically foreclosed. Discussing the evidence for and against CPH is beyond the scope of this paper but it should be noted that its impact on language teaching was immense.

Motivated by all these recent discussions and mounting attention on TEYL as an area of investigation, this study aims to analyze theses written in the field of teaching English to young learners (TEYL) in the last six years in Turkey. To our knowledge, there is no study evaluating theses concerning TEYL directly. Therefore, this study is based on this gap in the literature and aims at contributing to the field by carrying out a systematic review of theses to reveal recent tendencies and to illuminate future directions of graduate research into TEYL. It is important to carry out systematic reviews in certain periods since “an understanding of trends in dissertation research can show what issues, theories, and methodologies young researchers and their faculty mentors are interested in” (Drysdale, Graham, Spring & Halverson, 2013; p. 91). Such reviews have the potential to uncover the state of research carried out by new researchers. Hence, the study attempts to present a complete picture of graduate research on TEYL in Turkey.

Carrying out a content analysis of theses published in the National Thesis Center, the study answers the research questions below to determine the trends, gaps, and current situation of TEYL by focusing on the subjects (participants), methods, techniques used, and applications in the thesis under investigation.

1. How has the distribution of theses published by Turkish researchers changed through the years?
2. What is the tendency among the theses written in the field of teaching foreign languages to young learners in the last six years in Turkey?
  - a. What are the (sub)topics studied in the theses?
  - b. What are the research designs employed in the theses?
  - c. What are the sampling methods used in the theses?
  - d. What are the research contexts that the studies were conveyed?
  - e. Who are the participants in the studies under investigation?

By finding answers to these research questions, the study can provide an overall picture of TEYL in Turkey and is expected to help researchers, teacher educators, curriculum developers, teachers, and other potential beneficiaries to see the contemporary situation, limitations, problems, future directions, and possible suggestions in this field.

## Methodology

The study was carried out in descriptive research design to evaluate the graduate research in the field of TEYL. Given the aim of the study, the general survey model was used and document analysis of the theses was done. Survey model is employed when the aim is to describe a current situation by identifying specific features related to it (Büyüköztürk, et. al., 2012). By aiming at generating interpretive explanations based on a collection of graduate studies on TEYL, this study was designed to extend the existing knowledge and provide a holistic view on TEYL by examining the target studies. For this purpose, the theses on TEYL were collected based on certain criteria, and categories/patterns were found with the help of a computer software for qualitative analysis. The stages

followed to carry out this study are: (i) Setting the criteria: to reach all the relevant theses, the criteria were set to serve the relevant purpose and to ease the access of target theses. The criteria were finding the Turkish and English theses on YL and language teaching prepared in both master and doctoral programs in Turkish universities and limiting the year of publication between 2014-2020. (ii) Analysis: At this stage, the theses collected were analyzed based on predetermined categorizations. (iii) Interpretation: as the last stage, to reach an in depth understanding of the phenomenon, the findings were discussed, analyzed, and interpreted. All these stages were carried out in a cyclical process as further explained below.

### **Data collection and analysis**

We electronically surveyed all theses and dissertations found on the National Dissertation and Thesis Database of Council of Higher Education (CoHE) that addressed TEYL. We searched some keywords that included “teaching English to young learners, teaching children, and young learners.” The most inclusive one that listed all the theses addressing an aspect of teaching English to young learners was “young learners.” The other two keywords were observed to restrict the search to only some of the theses. The relevant theses and dissertations published in Turkey between the years 2014-2020 were found and stored for research purposes.

Once all relevant theses were obtained, each thesis was subjected to the content analysis. The data of the present study was gathered through a form that was adapted from Paper Classification Form (PCF) by Çiltaş, Güler, and Sözbilir (2012) and the Educational Technologies Publication Classification Form (ETPCF) by Göktaş et al. (2012). It includes descriptive information such as the name of university and the type of departments where the theses were written, year of acceptance, type of the program (master or doctoral), title, research topic(s) covered, sub-subjects, research methods employed, data collection tools utilized, participants (study group), and data analysis methods. Each thesis was coded according to these eleven categories using a software program for qualitative analysis. The researchers worked cooperatively in the process of classification of the theses to reach a consistent coding. It should also be noted here that the statements were taken as they were declared in the theses and no comments were included in the coding process by the researchers. For instance, if there were no clear statements including the sampling method in the theses, no inferences were made about the sampling method used in the procedure and this was coded as ‘no sampling method specified’ in the code list. An independent third rater who is an expert in the field cooperated to discuss the discrepancies. Based on these discussions, discrepancies were resolved.

All research questions were extracted from the theses to determine the topical trends. We adapted a pattern established by Emerson et al. (1995) for coding the theses based on the research questions. The topics, sub-topics were grouped into categories and the categories were further grouped into broader categories. The number of each topic and sub-topics were counted by tallying. This was a cyclical process and was carried out by both researchers firstly on their own and then together.

## Results

Overall, our data included seventy-four Masters' thesis and six dissertations (M.A and PhD) written on teaching English to young learners. They were prepared in 33 different state and private universities in Turkey. The departments that the theses were written are Educational Technologies (n=1), Pre-School Education (n=3), Curriculum and Instruction (n=5), and English Language Teaching (n=71). The tendency among the thesis collected is investigated and it is reported by answering the research questions.

### Distribution of theses

Distribution of theses changed through the years. Table 1 illustrates the years theses were written in and the type of thesis as M.A. and PhD.

**Table 1.** Distribution of theses and the type of the theses according to years

Year	No of the theses	Type of the theses
2014	11	10 M.A., 1 Ph.D.
2015	18	18 M.A.
2016	16	13 M.A., 3 Ph.D.
2017	12	11 M.A., 1 Ph.D.
2018	10	10 M.A.
2019	4	4 M.A.
2020	9	8 M.A., 1 Ph.D.
TOTAL	80	74 M.A., 6 Ph.D.

It is seen that 2015 was the year with the highest number of theses prepared and there is a recent decrease in the number of studies conducted. Additionally, there is a big difference between the number of dissertations and master's theses written in total.

### Distribution of sub-subjects studied in the theses

It is observed that the focus of the theses on YL was varied. 17 sub-subjects were identified. The findings concerning sub-subjects are presented in Table 2.

**Table 2.** Distribution of sub-subjects studied in the theses

Sub-subjects	n
Young learner (YL) Vocabulary	20
The use of a specific teaching method/technique	18
The use of a specific material	17
Program/coursebook/course evaluation and development	10
YL language skills	10
Attitude / Perception	9
Language acquisition	6
YL teacher qualifications	6
The role of Portfolio	5
YL assessment	5
YL motivation	5
YL teacher education	5

YL grammar	2
Language learning strategies	2
YL pronunciation	2
Intercultural competence	1
Teacher beliefs & practices	1

As shown in Table 2, the most common areas covered were vocabulary (n=20), the use of a specific teaching method/technique (n=18), the use of a specific material (n=17), YL program/ coursebook/ course evaluation and development (n=10), YL language skills (n=10), and attitude/perception studies (n=9). Language acquisition, teacher qualifications, portfolio, assessment, motivation, teacher education, grammar, language learning strategies, pronunciation, intercultural competence, and teacher beliefs/practices are under-studied sub-subjects in teaching English to young learners in the last five years.

Further analysis of some sub-subjects yielded sub-categorizations of the themes found. For example, the theses that were written on the use of a specific language teaching method/ technique for young learners were geared towards game-based teaching (n=8), drama (n=4), Total Physical Response (n=2), Content and Language Integrated Learning (n=1), brain-based teaching (n=1), on-line differentiated reading (n=1), and the use of songs (n=1). Studies on language skills included theses on skills such as speaking (n=4), reading (n=2), writing (n=2), listening (n=2). Language acquisition as a sub-subject covered issues such as input-based instruction (n=1), age effects (n=2), social-emotional stability (n=1), focus on form instruction (n=1), and corrective feedback (n=1).

### Research designs employed in the theses

The next research question is on the research design employed in the theses collected. As seen in Table 3, various research designs were employed in the theses under investigation.

**Table 3.** Distribution of research designs employed in the theses

Research design	n
Mixed method	25
Quasi-experimental	14
Qualitative	12
Quantitative	8
Case study	8
Action research	6
Experimental	5
One group pretest posttest design	1
Conversation Analysis	1

The most common design used is mixed method (n=24). It is followed by quasi-experimental methods (n=14). The next most common was qualitative design (n=12). Other research designs employed were quantitative (n=8), case study (n=8), action research (n=6),

experimental (n=5), One group pretest posttest design (n=1) and conversation analysis (n=1).

### Sampling methods used in the theses

The findings related to the question of how researchers chose their samples are shown in Table 4.

**Table 4.** Distribution of sampling methods used in the theses

Sampling method	n
Sampling method not specified	22
Convenience sampling	20
Random sampling	14
Purposive sampling	9
Cluster random sampling	3
No sampling method	4
Stratified sampling	1
Nonprobability sampling	1
Momentary time sampling	1
Total	75

The number of theses in which the sampling method was not specified is twenty-two. The most common sampling method used was convenience sampling (n=20) which was consecutively followed by random sampling (n=14), purposive sampling (n=9), cluster random sampling (n=3), stratified sampling (n=1), nonprobability sampling (n=1), and momentary time sampling (n=1). Some of the theses stated that no sampling method was used in the study because all samples were included (n=4). The restricted theses (n=5) were not included in the analysis regarding the sampling method.

### Participants (Study Groups) in the theses

Table 5 illustrates the participants (study groups) in the theses analyzed.

**Table 5.** Distribution of participants in the theses

Participants	n
Young learners	67
Young learner teachers	22
Parents	3
Pre-service teachers	3
(Young learner) teacher educators	2

When the participants in the target studies are grouped according to their age levels, it is found that there are young learners (n=67), young learner teachers (n=22), parents (n=3), pre-service teachers (n=3) and young learner teacher educators (n=2). The young learners are further grouped into very young learners (n=11), young learners (n=20) and older young learners (n=36). Some of the theses included multiple participant groups. Some of the theses studied with multiple participant groups.

## Research contexts of the studies

When the theses were examined in terms of the research contexts, the following findings that are shown in Table 6 were obtained.

**Table 6.** Distribution of research contexts

Research context	<i>n</i>
Primary school	44
Secondary school	15
Kindergarten	11
Higher Education	4
Not specified	1
Total	75

The studies investigated were conducted in mainly four different settings: primary school (n=44), secondary school (n=15), kindergarten (n=11) and higher education (n=4). It is seen that primary school was dominant as the target context. One of the theses did not specify the research context. The restricted theses (n=5) were not included in the analysis.

## Discussion and Suggestions

This study offers a detailed analysis of eighty theses and dissertations written on teaching English to young learners in Turkish universities between 2014 and 2020. The distribution of theses over the years shows that there is a slow decrease in the number of theses through 2020. Although there seems to be a variation on the topics studied, a considerable number of thesis and dissertations were written on similar topics which are vocabulary teaching, using songs, games, and teaching of a particular skill. Based on the findings of this study, it is suggested that the number of studies in the following sub-subject areas should be increased:

- Assessment of young language learners
- The teaching of grammar to YLs
- Language skills development in YLs
- Intercultural competence in YLs
- The use of Content and Language Integrated Learning (CLIL) in YL EFL classes
- YL teacher beliefs and practices

Gaining insights into the assessment of YLs, which is a critical issue in young learner education due to the age properties and the risk of discouraging children from learning languages is crucial. Therefore, graduate work that focuses on assessment is needed in the field of TEYL. Among the researchers who focused on assessment of young learners in their theses, Özdemir (2017) examined the effect of portfolio on self-assessment; Fişne (2016) examined an integrated language testing program for the 4th grade young learners with an attainment-based perspective. As for teacher perspectives in assessment, Ayas (2014) investigated teachers' conceptions and practices concerning assessment in English for young

learners and Çakır (2020) analyzed teachers' beliefs and practices on the assessment of 4th grade EFL students in Turkey, Italy, and Finland. However, the number of theses that focus on assessment is only a few. What is more, a variety of sub-topics related to assessment needs to be focused on within theses. For instance, graduate students can particularly investigate self-assessment, in-class assessment, and authentic assessment the use of which are convenient for the nature of child learning and recommended both in the CEFR (CEFR, 2001) and English language curriculum (for grades 2-8) in Turkey (MoNE, 2008).

The teaching of grammar to YLs can be another focus of graduate research that will well inform the field. Even though the teaching of grammar for very young learners and young learners in the kindergarten and primary schools is not recommended, older young learners in the lower secondary schools still deal with grammar. There were only two theses by Bayrak (2017) and Göksu (2014) that study grammar teaching with a language acquisition point of view. The former is a master's thesis and investigated the effect of input-based instructions, while the latter is a doctoral dissertation and studied the effect of corrective feedback through the focus on form instruction. However, there is still a need for theses that scrutinize how grammar is dealt within the classes and in the textbooks in older young learner contexts to contribute to the field. More specifically, for the teaching of grammar to (older) young learners, there is a great need to explore the implementation of action-oriented approach. Action-oriented approach serves the very nature of children's language learning since it "views learners as users of a language, primarily as 'social agents', i.e., members of society who have tasks to accomplish in a given set of circumstances, in a specific environment and within a particular field of action" (Council of Europe, 2001; p. 9). Therefore, theses can investigate how to employ action-oriented approach in the teaching of grammar on the side of the teachers, the learners, and in terms of the teaching/learning process in YL contexts.

Development of language skills in young learners was studied in ten theses since 2014; however, the language skills were dealt with individually. For instance, Gülşen (2018) studied the effects of online differentiated reading on reading comprehension skills and learner autonomy; Doğar-Kayadelen (2018) examined peer editing in YL writing classes; Çelik-Korkmaz (2016) investigated the effects of multi-sensory language teaching on learners' listening and reading skills; and Alpaslan (2015) focused on digitalized learning activities to promote speaking skills. Overall, theses studied the effect of an implementation on the development of an individual language skill. Therefore, it will contribute to the field if researchers notice the gap and study the development of language skills in an integrated way in YL contexts.

Although there has been a growing interest in the intercultural competence as a research topic in language teaching in general, the development of intercultural competence is under studied in graduate research in the field of TEYL. The one and only thesis was by Yurchak (2016) who examined the role of culture in a young learner context by investigating perceptions of teachers, parents, students, and administrators towards intercultural competence. Teacher practices in developing intercultural competence in YLs, the place of

intercultural competence in YL materials, and young learners', teacher candidates' and YL teachers' awareness on interculturality and intercultural competence can be explored in graduate research. Additionally, the use of CLIL and YL teacher beliefs are other topics that are under studied in the theses that focus on TEYL.

A detailed analysis has shown that there are important sub-subjects which have not been dealt within any of the theses written. For instance, even though the use of task-based language teaching and storytelling has been strongly recommended for teaching English to YLs (Bayyurt, 2010; Cameron, 2001; Haznedar, 2010 among others) and there are a majority of best practices about them, there are no theses written on these subjects. Additionally, values education through EFL classes has not been studied in the theses written up to 2020 despite it is strongly suggested in the English language curriculum for grades 2-8 (MoNE, 2008)

When the focus and scope of the theses were investigated, it is seen that there is a recent tendency to conduct studies on the issues related with technology use in language teaching for YL. For instance, there are theses written on digital storytelling (Canlı Bekar, 2019); Education Information Network, EBA (Pehlivan, 2020); Web 2.0 tool VOKI (İstifanoğlu, 2020). We assume that such studies integrating technology will attract more attention particularly on distance education. Upon the breakout of the pandemic and closure of schools, distance education has become the new getaway. Schools all around the world have shifted to distance education suddenly. Some of the institutions were experienced and easily adapted to the news system, yet there were also schools which had to go through hard times to get used to this new system. YLs is one of these student groups who faced various problems and troubles in this changing context. Therefore, we believe that urgent studies on YLs' language learning in distance education are needed. Studies focusing on issues such as recent implementations of integrating technology in YL classrooms, challenges faced, interaction in online meetings, classroom management issues, pedagogical suggestions, educational practices, classroom management, applications and methods from actual settings, motivating and engaging YLs in online learning, YLs' needs in distance education, learner involvement, YL language teachers' training on skills for using technology, developing effective materials and resources are anticipated to be published in the coming days. There is also a gap of research found on how instructors perceive and use technology in pedagogical settings (Tatar & Yıldız, 2010). Therefore, YL contexts as a pedagogical setting can be explored in terms of instructors' perceptions and use of technology.

As for the research design employed in the theses; there is a tendency towards the mixed method research design. The reason for this tendency can be owing to the strengths of combining both the qualitative and quantitative research designs. By doing this, the weaknesses of using only one type of research design have been avoided. It is also noted that the number of other research types such as case study, action research or conversation analysis is limited. For instance, a recent thesis by Öztürk (2020) employed conversation analysis (CA) methodology and utilized video-recorded data and provided invaluable results on how interaction is realized in language classrooms "by the interactants to achieve social

actions through taking, sharing, and allocating turns, co-constructing actions in sequences of talk, repairing trouble in talk-in-interactions in any other interactional contexts” (Walsh, 2002).

In terms of data collection procedures, as Güngör and Ekşi (2019) suggested, video/audio recorded classroom interactions, YL classroom observations, and diaries/journals can provide valuable insights on teaching English to YL. Such various data can enable gaining a deeper understanding of what is happening in real classroom settings in terms of classroom interaction, teaching practices, students’ motivation etc.

Another issue noticed is the lack of theses with larger-scale, longitudinal, and interdisciplinary perspective with a broader view of the phenomenon. Carrying out such studies can contribute to the continuity and sustainability of the overall discussions on YL and language teaching. We analyzed a master’s thesis which investigated foreign language teachers’ beliefs about assessment of young language learners and their practices of assessment in language classes in Turkey, Italy, and Finland (Çakır, 2020). Learning about common problems that YL teachers are struggling with in three different countries in the world or realizing the variation in the assessment types used provide insights for both YL teachers, teacher educators, curriculum designers, and material developers.

When the sampling methods of the theses were analyzed, it was found that twenty-two studies did not specify how the sampling process was carried out. In the theses with information on the choice and inclusion of the participants, there is a tendency towards convenience sampling and random sampling. Although we believe in the robustness of studies with smaller participants groups, we think that it would be a valuable contribution if studies on YL in Turkey could also focus on diverse geographical regions with larger data. There is a tendency towards primary and secondary schools as research contexts in the theses written. The number of theses that use kindergartens and universities (ELT departments with future YL teachers) as research contexts should be increased and various stakeholders such as pre-service teachers, YL teacher educators, and very young learners should be included in the theses as participant groups.

### **Conclusion**

This study provides an analysis of eighty master’s theses and dissertations written between the years 2014-2020 at Turkish universities. By showing an overall picture and revealing the tendencies and distributions of categories such as research methods used, topics covered, and participants, this review sheds light into potential new dimensions for research on YL. In the light of available research findings, it seems that YL remains a popular topic for master’s level studies. Graduate research in YLs’ language learning is not high in quantity and it is decreasing yearly. If the number of PhD level studies increase, the field will become more diversified. Additionally, there is still an accumulation on certain topics such as vocabulary learning or employing a language teaching approach. We

recommend increased research in all aspects of language teaching to YL instead of focusing on teaching of one skill or just vocabulary teaching. By showing the tendencies of sub-themes in the theses, we identified possible areas for future research opportunities with YL such as the assessment of young language learners, developing intercultural competence, the use of CLIL, storytelling and tasks in YL classes, and YL teacher beliefs and practices. Carrying out studies using qualitative methods is another suggestion. New data collection tools must be developed. Mixed method studies that help gathering more data from various settings in a longer period can be utilized. We see a need for more research which is carried out in actual classrooms with video-recordings. It should also be noted here that collecting data in young learner contexts needs great care. In developing data collection tools and in designing research projects, researchers should take Pinter's (2011) discussion of ethical and methodological issues with children into account and pay attention to understand how children differ from adults as research participants. Pinter (2011) emphasizes the importance of developing child-friendly instruments and inviting children's active participation and warns against the methodological challenges and the risk of using different de-contextualized tests. Pinter (2011) mentions the following lines as the starting point of exploring methodological issues in research with children:

Underlying all research are the researcher's own beliefs and assumptions about children and childhood. You, as a researcher engaged in projects with children, will have to think about how your own understanding and conception of 'childhood' and 'children' will influence the way you approach children, the way you talk to them and the kinds of roles and responsibilities you may assign to them (p. 202).

This study is significant in that it provides an updated, general picture of the topic YL in the field of language teaching in Turkey. It helps the target audience of educators, teacher candidates, researchers, and theses supervisors to see the existing body of research and better understand the future directions of TEYL. Although this research provides important inspiration and recommendations for future research based on existing research in the field of TEYL, it is limited in the sense that it only focuses on graduate level theses. Therefore, there is also a need for a review of research published in journals to have a complete understanding of research carried out in Turkey in the field of TEYL.

### References

- Alpaslan, R. S. (2015). *Digitalized learning activities to promote speaking skills*. Unpublished M.A. Thesis, İhsan Doğramacı Bilkent University.
- Ayas, N. (2014). *An investigation of teachers' conception and practices concerning assessment in English for young learners classroom*. Unpublished Master's thesis. Çağ University.
- Bayrak, S. (2017). *Comparative effectiveness of input-based instructions on L2 grammar knowledge: Textual enhancement and processing instruction*. Unpublished M.A. Thesis, Sakarya University.

- Bayyurt, Y. (2010). Task based language learning and teaching. In B. Haznedar, & H. Uysal (Eds.), *Handbook for Teaching Foreign Languages to Young Learners in Primary Schools* (pp. 89-118). Anı Publishing.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demiral, F. (2012). *Bilimsel araştırma yöntemleri*. PEGEM.
- Cameron, L. (2001). *Teaching Languages to Young Learners*. Cambridge University Press
- Çakır, N. (2020). *Comparative analysis of teachers' beliefs and practices on the assessment of 4th grade-EFL students in Turkey, Italy and Finland*. Unpublished M.A. Thesis, Bursa Uludağ University.
- Çelik-Korkmaz, Ş. (2016). *Effects of multi-sensory language teaching on learners' achievement in English vocabulary knowledge and listening and reading skills*. Unpublished Ph.D. Thesis. Çanakkale Onsekiz Mart University.
- Çiltaş, A., Güler, G., & Sözbilir, M. (2012). Türkiye'de matematik eğitimi araştırmaları: Bir içerik analizi çalışması. *Kuram ve Uygulamada Eğitim Bilimleri*, 12(1), 565-580. <https://doi.org/10.24315/trkefd.297682>
- Copland, F., & Garton, S. (2014). Key themes and future directions in teaching English to young learners: introduction to the Special Issue. *ELT Journal*, 68(3), 223-230. <https://doi.org/10.1093/elt/ccu030>
- Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment*. Press Syndicate of the University of Cambridge.
- Doğar-Kayadelen, B. (2018). *Peer editing as a writing assessment to young learners in English writing classes*. Unpublished Master's thesis, Erciyes University.
- Drysdale, J. S., C. R. Graham, K. J. Spring & L. R. Halverson. (2013). An analysis of research trends in dissertations and theses studying blended learning. *Internet and Higher Education*. 17, 90-100. <https://doi.org/10.1016/j.iheduc.2012.11.003>
- Ellis, G. (2014). 'Young learners': clarifying our terms. *ELT journal*, 68(1), 75-78. <https://doi.org/10.1093/elt/cct062>
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnographic fieldnotes*. University of Chicago Press.
- Enever, J. (2011). ELLiE. *Early Language Learning in Europe*. British Council.
- Fişne, F. N. (2016). *An integrated language testing program for the 4th grade young EFL learners: An attainment-based perspective*. Unpublished Master's thesis. Gazi University.
- Garton, S., Copland, F., & Burns, A. (2011). Investigating global practices in teaching English to young learners. *ELT Research Papers*, 11(1), 1-24.
- Göktaş, Y., Kucuk, S., Aydemir, M., Telli, E., Arpacık, O., Yildirim, G., & Reisoglu, I. (2012). Educational technology research trends in Turkey: A content analysis of the 2000-2009 decade. *Educational Sciences: Theory and Practice*, 12(1), 191-199. <https://doi.org/10.18009/jcer.839738>

- Göksu, A. (2014). *The effects of corrective feedback on the grammar acquisition of young learners through the focus-on-form instruction in an EFL context*. Unpublished Master's thesis, Gazi University.
- Gülşen, E. (2018). *Effects of online differentiated reading in reading comprehension skills and learner autonomy of young Learners*. Unpublished Master's thesis, Bahçeşehir University.
- Güngör, M. N., & Ekşi, G. (2019). A Review of Research on Teaching English to Young Learners in EFL Contexts (2008-2018). In G. Yangın-Ekşi, L. Guerra, D. Werbinska & Y. Bayyurt (Eds.), *Research trends in English language teacher education and English language teaching*, (pp. 481-504). University of Evora.
- Harmer, J. (2001). *The practice of English language teaching*. Longman.
- Haznedar, B. (2010). A Story-Based Methodology for Young Learners. In B. Haznedar & H. H. Uysal (Eds.), *Handbook for Teaching Foreign Languages to Young Learners in Primary Schools*, (pp. 253-276). Anı Publishing.
- İstifanoğlu, E. G. (2020). *The influence of VOKI on learners' speaking skill in the EFL context: A case study with young learners*. Unpublished Master's thesis, Çağ University.
- Kırkgöz, Y. (2018). Fostering young learners' listening and speaking skills. In S. Garton and F. Copland (Eds.), *The Routledge Handbook of Teaching English to Young Learners* (pp. 171-187). Routledge.
- Lenneberg, E. (1967). *The biological foundations of language*. John Wiley & Sons.
- MoNE. (2018). *English curriculum (primary and middle school 2nd-8th grades)*. Ankara.
- Murphy, V. A. (2014). *Second Language Learning in the Early School Years: Trends and Contexts*. Oxford University Press.
- Pehlivan, D. S. (2020). *The use of EBA (education information network) in teaching vocabulary and grammar to EFL young learners*. Unpublished Master's thesis, Muğla Sıtkı Koçman University.
- Phillips, S. (1993). *Young learners*. Oxford University Press.
- Pinter, A. (2006). *Teaching Young Language Learners*. Oxford University Press.
- Pinter, A. (2011). *Children Learning Second Languages*. Palgrave Macmillan.
- Özdemir, Ö. (2017). *The effect of language portfolio on young learners' self-assessment and language learning autonomy*. Unpublished Master's thesis, Akdeniz University.
- Öztürk, F.F. (2020). A comparative conversation analytic study on pre-service teachers' trouble design in micro teachings and actual troubles in pre-school EFL classrooms. Unpublished Master's Thesis. Hacettepe University.
- Spolsky, B., & Moon, Y. (2012). *Primary school English-language education in Asia: From policy to practice*. Routledge.
- Tatar, S., & Yıldız, S. (2010). Under use of technology: Perspectives from Turkish teachers of English. *The 35th Annual Conference of the Association for Teacher Education in Europe (ATEE)*, Budapest, Hungary.

- Walsh, S. (2002). Construction or obstruction: teacher talk and learner involvement in the EFL classroom. *Language Teaching Research*, 6(1), 3–23. <https://doi.org/10.1191/1362168802lr095oa>
- Yurchak, M. (2016). *The role of culture in a young learner's EFL context*. Unpublished Master's thesis, Bahçeşehir University.
- Zimmer, L. (2006). Qualitative meta-synthesis: a question of dialoguing with texts. *Journal of Advanced Nursing*, 53(3), 311-318. <https://doi.org/10.1111/j.1365-2648.2006.03721.x>



## Users of Children's Sections of Public Libraries: An International Reading Culture Research

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### ABSTRACT

This study was designed for learning the patterns of utilization of the children's sections of public libraries and understanding the functions and social elements that library users find in or bring to these sections. The study was designed as a qualitative case study for examining three public libraries (Erzincan, Essen & Niğde). Data were collected using semi-structured interviews with 72 children and 43 adults in 3 weeks of observation period. Findings for each of three libraries are given under the headings of quality of spaces for children, social climate, and overall picture of activities for children as the "within-case". As to the "across-case" are reached the themes; preschool children, a place like a bookstore, a place like a playground, and reading as a sub-skill for academic success. Considering the functions of libraries in years, it is necessary to involve experts, writers, teachers, and parents in the process as well.

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The authors accept the responsibility of this article and all the terms of the journal.

### Statement of Publication Ethics

This research was conducted with the ethics committee approval of Erzincan Binali Yildirim University dated 10/09/2021 and numbered 105606.

### Authors' Contribution Rate

The authors equally contributed for the article.

### Conflict of Interest

The authors declare that there is no conflict of interest.

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### **Introduction**

It is observed in the literature that studies displaying the efficiency of social elements in developing a reading culture are increased. As matter of fact, reading is described as a social practice embedded in social elements, and how an important role the sociocultural factors play in development of a reading culture is expressed (Lyons, Kotilainen & Ilkka, 2015; Gee, 2000; Simone, 1999). Such social elements are construed by means of any practices in the child's world in relation to reading, families' relation with reading, and social networks configured for reading (Karadağ, 2013; Sever, 2013; Yılmaz, 2008; Kamalova & Koletvinova, 2016). At this point, there is a need of a concept to discuss reading in a larger perspective besides being a cognitive skill.

A concept of reading culture involving cultural and social practices of reading by expressing the social elements thereof is the most comprehensive concept to be utilized. Interaction between various social elements such as public libraries, schools, and families is important in development of a reading culture (Ekici & Yılmaz, 2014; Phillips et al., 2017). Nevertheless, it is noted that systematic approaches are very limited for the function of public libraries in the configuration of reading culture when such studies on reading culture are considered, and that the studies on the same subject particularly in Turkey are generally conducted quantitatively. Therefore, the purpose of this study conducted to fulfill the need of developing an in-depth perspective is to present the qualitative research pattern of the role of children's sections of public libraries in the process of acquiring a reading culture in an international perspective.

### **Literature review**

Public libraries, which increase the social capital with its social interactions and create a third venue in addition to homes and schools, have a powerful impact on creation of a social capital in terms of both corporate and communal context (Varheim, 2017; Karadeniz & Yılmaz, 2015). Having provided various shared venues to different parts of the society, fulfilling varying needs thereof, and increasing social interaction and trust, it is not surprising to define public libraries as a force increasing the social capital (Goulding, 2004: 4). In speaking of the social capital, another concept that should be discussed is networks. Falk (2001) mentions that literacy as a tool of communication plays an important role in creation of networks and sustaining such connection when he speaks of literacy in the scope of reading culture. Public libraries as a network do not only assume various functions by means of spaces, social climate, and events they provide, but also nourish the community of users and the social capital of such communities.

The intended uses of public libraries, their users, books, and other products available therein have changed in time in the light of legislations and social developments experienced. Evolutions in education and increased research in children's literature incited children to use newly founded public libraries and school libraries (Lerner, 2007: 254). Features of public libraries were reconfigured for educational purposes suitable for children and special sections for children were created in libraries. Seefeldt and Syre (2004) remark that public libraries were made available to public in Europe after the French Revolution when recounting this historical development. All these endeavors for

enlightenment of the people resulted in opening new public libraries one after another in early stages just as bookshelves and in later stages, in large scales as of mid-nineteenth century (Seefeldt & Syre, 2004: 19-20). Although there is a rather old history of book lending services in Turkey, public libraries in the modern perception started in 1920s after establishment of the Republic (Keseroğlu, 1989). Public libraries continued to develop and evolve until present times, and the number of public libraries reached to 7.148 in Germany in 2019 (Saechsische Landesfachstelle für Bibliotheken, 2020), and 1.182 in Turkey (KYGM, 2020).

It is known that public libraries serve to various purposes. Public libraries steer and support the process of acquiring a reading habit by library regulars (Lauristin & Vihalemm, 2014: 203), and help development of reading as a reading culture, which is a more complex process (Pirlibeylioğlu, 1993: 59-60). Manguel (2006) mentions that public libraries help developing the reading skills of individuals as well as changing their social status. "Public libraries have an important role in the process of structuring the society by establishing bridges between the resources and communal participation" (Scott, 2011). Children's section of public libraries provides various practices and opportunities such as organizing events for children, collections of books and other publications addressing to varying levels, organizing story reading sessions for children and courses for teachers, allocating reading spaces for both children and families, organizing meetings of children and writers, and establishing book clubs, etc. It may be said at this point that the most important function of public libraries to transform reading skills to a new form of intangible human capital (Kotilainen, 2016: 305). To understand better the role of public libraries in the process of acquiring a reading culture, it is necessary to observe the meaning ascribed to reading by library regulars, libraries' functions, and any social characteristics they carry to public libraries.

Current study was designed to learn the patterns of use of children's sections of public libraries and understand the functions and social characteristics that library regulars find or bring to children's sections. In comparison to previous studies focusing on quantitative data or making analyses on local perspectives, we used a qualitative approach and international context (Turkey and Germany). As Kotilainen (2016) mentioned it is important to study library regulars to understand how the quantitative data of the community, which library regulars are members of, are reflected locally. Such a research makes it possible to grasp the facilities and opportunities that individuals of a given community may have in learning to read and transform it into a reading culture. The motivations and reasons for visiting libraries, as voiced by library regulars, help to describe their perspective of reading culture. During the process of the study, the children's sections of three libraries, which have similarities and differences, were examined, and a framework of these three libraries was drawn. The starting point for the researchers is to answer how the children's sections of public libraries as a social network work within the context of reading culture. From this point on, answers to two research questions below were sought:

1. What are the facilities and social elements for children provided by public library children's sections?

2. What are the general patterns of using public library children's sections and functions thereof attributed by users?

## **Methodology**

### **Research design and publication ethics**

The study has adopted the design of a qualitative case study, as the sections allocated to children in public libraries constitute a rich and unique case. Creswell (2016) indicates that in a multiple case study, a subject or issue is selected, and the researcher may choose various programs to study from various places or from several programs in the same place. In the current study on the people using the children's sections of provincial public libraries, multiple cases were included in the scope of the study to sample the selected subject. In this context, the children's sections of the public libraries in Erzincan (Turkey), Niğde (Turkey) and Essen (Germany), where each researcher lives, were included in the scope of the study. The methodology of the case study contains the detailed study of specific, actual, and observable formations that are not separate from society but are part of it. The researcher may arrive at a solution related to the cases studied by mean of collecting and analyzing data from each formation observed (Moorman, 2002: 27). In this process, the authors complied with Research and Publication Ethics and research was conducted with the ethics committee approval of Erzincan Binali Yıldırım University dated 10/09/2021 and numbered 105606.

### **Contex**

The sections allocated to children in provincial public libraries, the general outlook of the regulars of these sections, and the meaning they attribute to libraries constituted the subject of the study. Selection of libraries was based on the following criteria: library type (public library), having children's section, accessibility by researcher, cooperation of library staff. Three provincial public libraries in three cities (Erzincan and Niğde in Turkey, and Essen in Germany) were included in the scope of the study. These libraries were selected because the researchers lived in these cities.

As to the cities of study libraries, Essen has a population of around 582.000 (City Population, 2020), whereas Erzincan has 231.517, and Niğde has 352.727 according to the data in 2017 (TÜİK, 2020). All three are the central libraries of the cities where they are located. The children's libraries function as a section of such city libraries. In all three, children's sections are located on the ground floor. Also in Essen Public Library, the children's section has three large spaces. In this section, one of the independent paces is allocated to the children, and the other has resources for the kids aged between zero and six. Between these two independent sections, there is a space containing resources for children aged between 6 and 14.

## Participants

In both countries, public libraries are open around the year. Before starting the observation process, the researchers visited the libraries to learn more about the library environments and hold preliminary conversations with librarians. Following the completion of structuring the data collection tools, an implementation plan was drawn up in cooperation with the librarians. The data were collected in three libraries in the period of July to August. The researchers conducted observations and interviews at three libraries for approximately three weeks inside library buildings.

Interviews were carried out with children and adults visiting the libraries during the period when the study was conducted, and observations were performed on how they make use of the space. The library users aged between zero and 18 were considered as child regulars. The ages of the library regulars varied between zero and 68. The children aged below four were not included in the interviews, but in observations. During the period of the study, activities were organized for children at the public libraries in Erzincan and Essen, but not in Niğde.

**Table 1.** Participants

Participants	City	Interview
Child Participants	Erzincan	32
	Essen	27
	Niğde	13
Total		72
Adult Participants	Erzincan	17
	Essen	18
	Niğde	8
Total		43

At three libraries, 72 children and 43 adults were interviewed. The number of interviews per library differed because of the number of users visiting the library during the period of the study.

## Data collection and analysis

The research data were collected through observations, interviews, and research field notes. The data collected from three sources demonstrated not only the case of each library individually, but also made it possible to compare three cases with each other. Creating a robust description providing a sense of how the natural actors in a given setting experience such setting (Schutt, 2006).

### *Research field notes of researchers*

The researchers paid a visit to respective libraries, introduced themselves to the librarians and briefed them about the study. After getting consent from relevant library management, they spent several days at given library to get a better understanding of the children's section before starting their study. The researchers attended workshops, if any, held at the library to take notes of the information on library regulars. In the stage of data analysis, the data collected from any regular, who attended the workshops, were discussed separately in the section "Activities Conducted at the Library".

The researchers took field notes to reveal the library uses of library regulars, who took part or not in the interviews. Eight items were determined regarding to the age groups of the regulars of children's sections and their families to have common points in the field notes. Yet, the notes were not restricted only to such items. At the end of each day, the researchers shared these notes with each other, and the points raised during the meetings were added to the notes. The interviews with library staff took the form of asking questions, and occasionally, conversations for clarification of certain matters and served as the sources of the researchers' field notes.

### *Observation form*

The data related to observations were collected using an Observation Form, developed by the researchers. The Observation Form was structured as having four basic parts: the physical features of library, the quality of library space accessible by children, social climate, and general view of the activities conducted at library. In structuring the Observation Form, a preliminary test was carried out at the library using the form to determine any deficiencies of the form, and necessary corrections were made. In the Observation Form, each part was elaborated by dividing it into sub-items. The total number of items on the form was 17; six items for physical environments, six items for spaces accessible by children, two items for social conditions, and three items for activities. The observations were made at the children's sections of the provincial public libraries.

### *Interviews*

A semi-structured Interview Form was developed by the researchers to be utilized in the interviews with the regulars of provincial public libraries. Two different Interview Forms were drawn up, as individuals to be interviewed were restricted to children and their parents. After each type of Interview Form was structured, expert opinion was sought regarding to them, and necessary corrections were made before piloting interviews. Following the piloting, the Interview Forms were finalized.

All participants of the study were natural library regulars. Which regulars would be taken within the scope of the study was determined at the days when the researchers were at given libraries, and no prior planning was made. The mother tongue of all participants from Turkey is Turkish. As to the regulars in Germany, some spoke German while others were bilingual (Turkish and German). The interviews with such participants were conducted in Turkish and German with the help of another bilingual researcher, who helped the study. The number of the participants interviewed is given in Table 1.

The adult and child participants were first inquired about their gender, age, educational background, and profession. Then, the semi-structured interviews were held when they were asked about frequency of using library, people accompanying them, purpose of visiting a library, manner of making use of a library, how a library setting is perceived, and communications with librarians. The regulars visiting the children's sections were briefed about the study and asked if they would agree to participate therein. The interviews were held with those agreeing to participate in a suitable place within

libraries or at the desks available in children's sections. The interviews were conducted simultaneously with observations. Each interview with an adult or a child took approximately 15-20 minutes while being recorded using a voice recorder.

## Procedure

In the present study designed as a multiple-case study, multiple cases were included in the study framework for sampling selected subjects. First, the themes within each case were analyzed in detail using the method of "within-case analysis". Then, a comparative thematic analysis was performed among the cases using the method of "across-case analysis" to interpret the case. When multiple cases were selected, first, the themes within the cases were analyzed using the method of "within-case" analysis, and then, a comparative thematic analysis is performed among the cases using the method of "across-case analysis" to interpret the case (Creswell, 2016: 101). In line with these steps, in the present study, each case was defined within itself and then, the themes that emerged following the method of "across-case" analysis were presented.

The interviews held with library regulars at three different libraries using a voice recorder were transcribed. The observation and field notes taken by the researchers were also typed. In the present study, firstly, inductive analysis was performed and all the data from observations and interviews were coded. Inductive analysis consists of discovery of patterns, themes, and categories within the data (Patton, 2014: 453). Each researcher coded her own interviews, observations, and field notes. In the second phase, all the coding was combined, and all three researchers collectively reviewed the codes and created the categories. During the creation of categories, the overlapping data were reviewed and the data falling outside the categories were removed, and the patterns were obtained. The "within-case" analysis was performed under the headings of physical features (location, library space, shelving, and collection) of libraries, quality of spaces available to children, social climate, and general view of activities for children.

## Results

The findings consist of two parts. These parts were created based on two research questions formulated within the context of the aim of study. The first part pursued an answer to the question "What are the facilities provided by public libraries for children?" The within-case status of each library was demonstrated. The second part tried to find the answer to the question "What is the general outlook of the regulars making use of such facilities and the meaning they attribute to public libraries?" The themes emerged when the cases were compared were listed.

### Within-case findings

#### *Reading facilities in the children's section of Essen Public Library*

*Quality of spaces for children:* The sitting areas are arranged based on age groups; each area has desks and chairs with proper sizes for targeted age groups. In addition, there are three armchairs in front of windows and four desks with chairs for adults in the sections for the 0-6 age group. There is a wooden sitting area with stairs covered many

colorful cushions thereon, normally used for story reading activities. It was observed that families preferred to use this area for reading books to their children outside the activity hours. Children use this area and an area covered with the Twister game figure for playing games. The noise levels in the sections decline as the age groups increase. There are three computers, one in each department, used for searching the catalog. In addition, there is a round table with a tag “Child and Computer” with three computers thereon and nine stools around it. During the observation period, children used these computers solely for playing games. The books and materials in the children section are classified according to age groups. Additionally, there is a section for the bilingual books, including Turkish-German, Arabic-German, Russian-German, and Chinese-German ones especially for preschool era in separate boxes. The number of Turkish-German books in this section was reported by the library manager as 295.

*Social climate:* In the children’s section, there are lavatories and a baby changing room equipped with all the needs considered. In addition, there is a cafeteria called “Literaturcafe” inside the library servicing to regulars, including breakfast during the working hours (08.00-17.00) with its indoor and outdoor areas. The entire library and the children’s section are designed for accessibility by wheelchairs. The library with high access also has an elevator. The children’s section has audiobooks for the visually impaired people and such areas suitable for listening to such books.

*General view of activities for children:* The activities that adults can monitor are the activities slated for the age group “4 years and above” and “7 and above”. The librarians cite the individualities of children and lack of sufficient space for the participation of adults.

The facilities provided by the children’s section of Essen Public Library, as a whole turn, the library into a social living space for its regulars. The library provides children and adults with various opportunities for social interaction as children can read books, play games, or attend workshops, etc. with their parents or peers. The approach adopted by the children’s section of Essen Public Library expresses that the library authorities no longer regard reading restricted only to printed books or borrowing books but turn it into a process through which children can improve their life skills. Thanks to such facilities, the library could be embedded culturally in the daily lives of children and parents. This is believed to promote library regulars in terms of reading culture.

#### *Reading culture facilities in the children’s department of Erzincan Public Library*

*Quality of spaces for children:* The children section is located on the library’s ground floor. The section is clearly marked with a label reading “Children’s Section”. The floor thereof is covered entirely with tiles. The room is sufficiently heated, but not equipped with an air conditioning system. The room appears poorly illuminated, especially at the corner away from windows. The corner in question has some tables and shelves. The tables and chairs in the children’s section are colorfully designed suitable for sitting by children up to 5-years old; nevertheless, there are no sitting areas designed for younger or older children. In addition, there are no areas for different activities; rather, the children’s section is designed as a reading hall, which can also be used by children up to 18 years old.

The books are not lent to non-subscribers, although they can make use of study halls and read books in the children's section. There are approximately 14,000 books at the children section and there are not any materials other than books.

*Social climate:* There is a special hall at the library designed solely for visually impaired individuals; therein, there are four computers available for them. The computers are always on and in working condition, but the staff noted that there is not visually impaired regular of the library. The library does not offer transportation services for people with disabilities; however, the entrance of the library is designed to allow easy access by such people. The book lending services are located on the ground floor, but there are apparent difficulties for people with physical disabilities to access to the upper floors to make use of the study halls. This is because of lacking an elevator facility in the building. Furthermore, there are no social facilities such as cafeteria, change room, etc. in the building.

*General view of activities for children:* During the observation period, a 3-week event for the summer period was organized at the library. The activities to be included in the event were determined by the library staff in cooperation with the field experts. There was an activity every day except Sundays. The activities, such as Story Time, Healthy Lifestyle Seminar, Music Recital, Drama, Self-Protection Seminar, and Art Workshop were open to all participants. Thanks to personal efforts of the library director, participation by the groups of summer school and rehabilitation center students upon prior arrangement was high, but voluntary participations were limited.

The children's section of Erzincan Public Library has only bookshelves and tables. Various workshops of arts are also organized for children in this area. However, any children and adults, who were reported as voluntary participants to any activity, represent the individuals, who became aware of and decided to attend such activities for a while after coming to the library to borrow books. None of any voluntary participants came to the library just for attending the events. The fact that the children's section has been designed only for facilitating the act of reading printed materials is proof of the traditional perspective regarding the reading culture. This approach isolates the act of reading from its social setting and restricts the library's function for mediating the development of reading.

#### *Reading culture facilities in the children's section of Niğde Public Library*

*Quality of spaces for children:* In the children's section, there are two tables with three chairs and no playground around. Although the tables and chairs are designed specifically for children, they are not comfortable for using by children in terms of height, etc. There is no area allocated to preschoolers. There is no quiet room only for children. Children try to be as quiet as possible in the book lending section.

*Social climate:* There are lavatories and a canteen on the lower floor within the same building. There is an elevator for disabled people to access to the library, but no special room for disabled regulars in the children's section.

*General view of activities for children:* No activity was organized for children during the study period. The library staff noted that a story reading activity was organized for preschool children only once to promote the library to children.

The children's section of Niğde Public Library consists of several bookshelves and tables in a small room. The book lending service and the reading section are in the same space, effectively restricting the area of movement of readers therein. In addition, there are only few seats in the children's section making it impossible to organize any event therein. Allocation of such a limited space to the library restricts its function solely to book lending and makes it hard for readers to utilize any other function of reading at the library. These restrictions related to the library spaces allocated for utilization by readers create problems in a way the library can promote the reading culture process of readers.

### **Across-case themes**

#### *Social characteristics of readers*

In Niğde, regulars of the library are generally the primary and secondary school children aged 6 to 14. Primary school students come to the library generally with their mothers, whereas secondary school students alone or with friends. Likewise, the library regulars in Erzincan are mainly the children over six years old. Some secondary school students come to the library alone while most primary school students are accompanied by their parents whereas some are accompanied by their siblings attending secondary or high schools. It was observed that in Essen, the children aged below 12 in average come to the library with their parents, although some users aged 12 to 19 years old visit the library alone, or with their friends and sit as a group. The library regulars in Niğde and Erzincan did not demand any social interaction in library environments. On the other hand, in Essen, individuals are incorporated into the library setting with a broader social circle, and their experiences in terms of the reading culture are more diversified as a result.

Through the gender profile, virtually all the adults, who visited the children's sections of the libraries in Niğde and Erzincan, were mothers, whereas some fathers visited the library's children's sections very occasionally. The mothers came alone or with their children to borrow books only for their children, not for themselves. The ages of the mothers using the library varied from 30 to 45. Upon an inquiry whether she came to the children's section only, a mother answered "Yes, for the time being. I currently focused on my children; therefore, we visit the dedicated sections. I cannot spare much time for myself; therefore, we use the children's sections only" (ER6/F/33).<sup>1</sup> Thus, the mothers in this location stated in general that they borrowed books only for their children because they did not have time for themselves. In Essen, parents and grandparents accompanied their children or grandchildren. There was no significant difference in terms of gender or any age group. There were even grandparents coming alone to use the children's section: "I come to this department to select books for my baby grandchild. I borrow books and take them to him/her. Sometimes, I bring my grandchild as well. My workplace is around neighborhood. I will borrow a book and go back. There is a good selection of children's books here" (ES8/M/48). In Niğde and Erzincan, task of promoting reading to children is assumed solely by mothers and utilize libraries in the process. Although this task is performed solely by mothers in families, it undermines the process by which children

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<sup>1</sup> City, number of participants, gender, and age were specified in the codes, respectively.

could establish bonds with libraries and weakens their reading-related practices which they could internalize by transferring from library to their daily lives. In Essen, social environment, which is a natural part of daily life, is transferred to the library environment. This, in turn, paves the ways for children to transfer reading practices to their family and other social settings.

### *Ghost visitors, preschool children*

In the public libraries of Niğde and Erzincan, it was observed that parents generally did not borrow books for their preschool children. When they borrowed, they did it only during the extra time left over after selecting books for their schoolchildren when they accompanied their primary/secondary schoolchildren. One of the mothers interviewed made the following comment: "My daughter selects her books on her own. She is nine years old. The younger one does not know how to read. She is only five years old" (Nİ4/F/34). In Niğde, there was no library regular coming to the library with his/her preschool child solely to borrow books for the child. In Erzincan, it was observed that only some mothers came to the library with their preschool children after the teachers of the children attending to a preschool facility promoted the use of the library.

Children can become subscribers of the children's sections of the public libraries in Niğde and Erzincan only after they start to attend a primary school. Preschool children can borrow books only through their parents or their adult relatives as a workaround. Yet, this practice gives the impression to parents that a preschool child is not expected to read books. However, small children, who are accompanied by their parents and elder siblings, select, and try to read books or make sense of them by just looking at the pictures in them. "Only one of my children can use the library. The other one cannot use it because s/he cannot read and write but looks around and observes us when we visit the library. This applies to the youngest one as well" (Nİ1/F/38).

Even though the very foundations of reading skills of children are laid during the preschool era, it was observed that preschool children were unable to make sufficient use of the libraries in Niğde and Erzincan. Although some books designed for preschool children were available in the libraries, such approach of families and the library led to the reduction of reading practice to the act of reading through printed letters.

### *A place looking like a bookstore*

In Essen Public Library, most of the participants described themselves as library regulars. They noted that they visit the library at least once a week. When inquired about the frequency with which she used the library, a girl said, "In general, I come to the library in order to do my homework; therefore, I come here either every day or at least every other day" (ES3/F/11).

In Niğde and Erzincan, on the other hand, the readers indicated that they visit the library once in every 15 days or once a month: "We borrow three books and come back in 10-15 days. We leave the library as soon as we borrow the books. We stay for 5-10 minutes in the library" (Nİ/F/34); similar responses were common. Likewise, a mother using the library in Erzincan described her visiting frequency as follows: "Once in 15 days

and it changes every time. If the book is read already, we come back once a week. It is because we live in a far distant location..." (ER/F/35). The reason for citing the frequency of visits to the library as once in every 15 days is apparently the maximum duration of 15 days for borrowing a book. When a mother was inquired about her last visit to the library, she was puzzled with the question: "15 days ago, as usual. This is because we have 15 days for returning the books borrowed" (ER11/F/40). Some participants rarely took their children along to the library so that they might be introduced to the books. Yet, the time spent at the library did not exceed half an hour. "We come to the library so that my daughter, who graduated to the second grade, can acquire the habit of reading and observe the library climate, and feel and touch various books. When we come here, we read a few books and borrow our quota of three books for returning them in two weeks. We spend at least half an hour at the library during each visit" (Nİ3/F/33).

It is evident that the users of the public libraries in Niğde and Erzincan tend to see the library as a place where they can exchange books. The duration for borrowing a book is 15 days; readers may come for borrowing books again when the time is due and visit even before then. Yet, the reason for an earlier visit is the finishing of reading a borrowed book. Upon finishing the reading of any current book, the reader visits the library for another one. The relationship of readers with the library fail to evolve into a social habit as this relationship remains restricted to borrowing books only.

#### *A place like a playground*

Public libraries are no longer just a building from where books are borrowed but became such venues influencing the relation of child with books in different ways (events, reading hours, meeting of literates, parents' seminars, etc.). However, functions of libraries change in line with sociocultural changes. While families in Turkey go to libraries mostly for borrowing books, families in Germany consider libraries as a social environment and spend time in libraries.

The regulars of Essen Public Library had diverse objectives in using the library. Some children indicated that they went to the library to play games, saying, "We generally come to the library to play card games" (ES16/M/7). A user considering the library as an entertaining venue explained her reason for coming to the library as follows: "I come from another city. This library has many games. The library in the city where I live has a rich collection just like this one, but there are more games here. So, when I visit my relatives in this city, I come to this library with my cousins to play games" (ES20/F/9).

Some library users visited Essen Public Library for renting movies, ensuring the participation of their children in the activities, borrowing books and doing homeworks: "We come to the library to play games and chat with my friends. Therefore, we come to the children's section in order not to disturb the others studying. This time, we are just two of us, but most of the time, we come as a large group. So, we become noisy to some extent" (ES/F/14). "The kids would be with me in two visits out of three; they make better use of the library than me. We primarily come for borrowing books and CDs, and sometimes, renting games and movies. When I come here alone, I generally borrow resources for improving my German" (ES6/M/38).

It is observed that readers in Niğde and Erzincan have no expectations from libraries as a social network. In the period of observations in Niğde Public Library, there was no event organized for ensuring such social network. However, although there are free events in Erzincan Public Library such as movies for public access, children's theatres, conferences, etc., library users do not prefer to attend to such events. When asked of their expectations from the library, users mostly expressed their recommendations and requests for physical elements of the library "It could have been a bit larger, working areas could be more spacious and environment could be more lighted. The environment could have more picture that can attract children's attention" (ER1/F/33).

This outlook in Essen diversifies not only the habits of regulars utilizing public libraries, but also relationships thereof with the act of reading. As readers go beyond the simple act of borrowing and reading printed books and participate in various activities in an environment characterized with books, public libraries become part of their social living spheres. It is obvious that having libraries becoming a social network is not related just to organize some events in libraries. Having no expectation by the users in Niğde and Erzincan for libraries being such a social network may be associated with that fact that they have no such necessity in their lives. The meaning of libraries attributed by library-goers is important in constructing such social networks they bring in and received from libraries.

#### *Reading as a sub-skill for academic success*

It was observed that teachers played an important role in the social circle of children in relation to public libraries. Almost all secondary schoolchildren visiting Erzincan Public Library alone stated that their teachers promoted the use of library. Some of them indicated that they were library regulars since their primary school years. The children were similarly motivated for visiting the library in Niğde as well. In Essen, the children were guided by their parents and teachers for using the library; however, the former acquired the habit of using the library at early ages.

Many users of two public libraries in Turkey stated that they borrowed mainly novels and stories. In the search of the underlying reason thereof, we came across to the significance that parents and schools attached to academic achievement. A user commented as follows: "We buy the books needed our courses whereas borrow books from library for reading" (Nİ/F/37). In this context, it was observed that parents considered reading books as a sub-skill promoting academic achievement and perceived libraries as the places facilitating this. A father, who brought his child to the library in Erzincan, said about the libraries: "I must note that I have been using the libraries since my childhood, my secondary school years. I have passed all my exams since I became a library regular. I have become successful in all exams I took. I owe it to reading books; I still read books as you see. But my kid is not good at reading books" (ER9/M/46). It is evident that the father prioritizes academic success by taking his child along to the library so that s/he can be successful at exams.

Although the influence of teachers regarding how children are introduced to libraries was visible in all three cities, the tendency to construe reading in connection with

academic achievement in Niğde and Erzincan affects the bond that children establish with books. These observations imply that the act of reading is priced based on its contribution to academic achievement.

### **Discussion**

In this study, the qualitative case study method was utilized for comparative examination of the children's sections of three public libraries in two countries with separate reading and library data. The different lenses on the reading culture they accommodate as well as the differences and similarities in the reader profiles and facilities of these three libraries were presented through various salient motifs. It was found that two countries differed in terms of both library users and facilities provided by the libraries, whereas the public libraries in Niğde and Erzincan, had similar motifs.

It is known that in communities with high levels of reading culture, the numbers and functions of libraries are broader (Ekici & Yılmaz, 2014; Lauristin & Vihalemm, 2014). It was found that the readers in three cities spent their time in children's sections of the public libraries through different activities. In consideration of how these functions affect the library regulars, it was observed that the users of the children's section of Essen Public Library had more diverse objectives in using the library. The reasons for visiting a public library can be very diverse; desire to search for a particular kind of literature, browse the latest magazines, check on the new arrivals at the library, etc. (Lepik, 2013). On the other hand, it can be maintained that parents and children identified the public libraries in Niğde and Erzincan primarily as a facility for borrowing and returning books. At this point, it is very likely that the physical facilities of two libraries in Niğde and Erzincan played a role in this process. It is very hard for public libraries to attract visitors when they are designed as a social environment. Even if parents focus on the academic achievement aspect of reading, Sin (2009) argues that the academic use of school libraries is stronger while use of public libraries may include a more social component. Referring to libraries as treasures, Pihl, van der Kooij and Carlsten (2017) assert that well equipped libraries should offer various facilities such as books, music, newspapers, Internet access, and games, and only such sophisticated and diverse resources may attract children with different skills to the library. Libraries essentially fulfill the deficiency of bond and connection between readers and knowledge. Accordingly, varying needs of communities also transforms and diversifies the functions of libraries. "Libraries, nowadays becoming such centers to support both formal and informal communications between individuals, contribute to socialization of individual, and hence, to the social capital" (Karadeniz & Yılmaz, 2015).

Preschoolers emerged as an invisible social group in the libraries both in field and in practice in Niğde and Erzincan. The literacy experiences in the preschool period have a direct impact on the development of reading culture in later periods (Scarborough, Dobrich & Hager, 1991). It is crucial to increase the number of activities geared toward preschool children in libraries to ensure the development of reading culture in society. At the same time, in this period, children need support of an adult mostly for development of literacy abilities. It is possible to say that involving libraries and book in the relation of parents and

children may strengthen such relations. Such activities may be those requiring parents and children visiting libraries together. "Artistic workshops, such as language, career, technology courses, painting, and music, positively affect the levels of social confidence of participants as result of acculturation. Consequently, such a small network of relations of individuals created in libraries have an impact on the social capital at communal scale" (Karadeniz & Yılmaz, 2015: 193).

The motivations of families in Turkey for utilization of children's sections of libraries seem to be related to their knowledge and experiences regarding libraries as well as designing library spaces and any activities organized therein. Since libraries are an unfamiliar public venue for families, families may not feel safe therein for being together with their children (Lingwood, Billington & Rowland, 2020).

### **Suggestions**

When the children's sections of public libraries are reorganized to address the emerging needs, the readers' perceptions of libraries as "book borrowing places", particularly for Turkey, may be eliminated. Preschool children should be allowed becoming official subscribers of libraries to enhance the allure of libraries for preschool children. An environment may be created in which experts of children's literature, experts of information and document management, teachers, pre-service teachers, librarians, children, and parents may work together.

Further research could focus on gender, social class, and explore relations between cultural resources and libraries in other context (e.g., different countries or different type of libraries). Moreover, qualitative studies on library users and function of libraries could further elaborate the association between social and cultural capital and reading culture.

### **Conclusion**

Libraries are crucial in gaining various skills for reading in the process of acquiring the reading culture with the social practice they provide. Public libraries are no longer just a building from where books are borrowed but became such venues influencing the relation of child with books in different ways (events, reading hours, meeting of literates, seminars for parents, etc.). It was found that there were many different variables involved in the process by which libraries mediate the reading culture; such variables can be explained both as the socio-cultural elements of libraries and as social practices introduced by readers to library settings. The way in which a library space is structured, the social climate of libraries, or the nature of events organized shape the facilities of the reading culture within a library setting. As result, the facilities provided by libraries as well as the profiles of their regulars help to understand how a reading culture in a library setting is reflected on the society at a micro level.

While families in Niğde and Erzincan go to libraries mostly for borrowing books, families in Essen consider libraries as a social environment and spend time in libraries. Such differences in utilization of libraries seem to be related to users' sociocultural characteristics. The fact of families in Niğde and Erzincan borrowing books from libraries mostly for their school-going children, not preschool children, indicates that families

associate reading books with literacy. Facilities provided in the children's sections of libraries and the looks of users of these sections demonstrate how the reading culture is reverberated to the society at micro levels.

For involving the children's sections of public libraries in the daily lives of individuals, it is essential to arrange those venues in such a way to fulfill interests, pleasures, and needs of children. It is advisable to consult and make certain arrangements together with librarians, professionals, families, and educators regarding such social practices to activate the social network function of libraries by means of both national and international regulations at practical levels.

### References

- City Population (2020). *City population-Essen*.  
[https://www.citypopulation.de/en/germany/nordrheinwestfalen/nordrhein\\_westfalen/05113000\\_essen/](https://www.citypopulation.de/en/germany/nordrheinwestfalen/nordrhein_westfalen/05113000_essen/)
- Creswell, J. W. (2016). *Nitel araştırma yöntemleri: Beş yaklaşıma göre nitel araştırma ve araştırma deseni* [Qualitative inquiry & research design: Choosing among five approaches]. Ankara: Siyasal Kitabevi.
- Ekici, S. & Yılmaz, B. (2014). Ankara'daki anaokullarının okuma alışkanlığına hazırlık yeterlilikleri açısından değerlendirilmesi [Evaluation of the Reading Habit Readiness Adequacy of Kindergartens in Ankara]. *Türk Kütüphaneciliği*, 28(4), 547-582.
- Erzincan İl Halk Kütüphanesi (2020). *Tarihçe* [History]. <http://erzincan.kutuphane.gov.tr/TR-61949/tarihce.html>
- Falk, I. (2001). Literacy by Design, not by default: social capital's role in literacy learning, *Journal of Research in Reading*, 24(3), 313-323.  
<https://doi.org/10.1111/1467-9817.00152>
- Gee, J. P. (2000). Discourse and sociocultural studies in reading. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. III, pp. 195–207). Mahwah, NJ: Erlbaum.
- Goulding, A. (2004). Library and Social Capital- Editorial. *Journal of Librarianship and Information Science*, 36(1), 3–6.  
<https://doi.org/10.1177/0961000604042965>
- Kamalova, L. A. & Koletvinova, N. D. (2016). The problem of reading and reading culture improvement of students-bachelors of elementary education in Modern High Institution. *International Journal of Environmental and Science Education*, 11(4), 473-484.  
<https://doi.org/10.12973/ijese.2016.318a>
- Karadağ, Ö. (2013). Okuma kültürüne katkıları bakımından Türkçe ders kitaplarının resimlemeleri (illüstrasyonları) [Illustration in Turkish coursebooks with regard to its contribution to reading culture]. *Eğitimde Kuram ve Uygulama*, 9(2), 84-93.
- Karadeniz, Ş. & Yılmaz, B. (2015). Sosyal sermaye bağlamında kütüphane kurumu [The Library in the context of social capital], *Bilgi Dünyası*, 16(2), 180-203.  
<https://doi.org/10.15612/BD.2015.487>
- Keseroğlu, H. S. (1989). *Halk kütüphanesi politikası ve Türkiye Cumhuriyeti'nde durum* [Policy of public library and situation in Turkish Republic]. İstanbul: Edebiyat Fakültesi Basımevi.

- Kotilainen, S. (2016). *Literacy skills as local intangible capital, the history of a rural lending library c. 1860–1920*. Helsinki: Finnish Literature Society SKS.
- KYGM (2020). *2015-2019 yılları halk kütüphaneleri genel istatistikleri* [2015-2019 General statistics of public libraries]. <https://kygm.ktb.gov.tr/TR-204967/2015-2019-yillari-halk-kutuphaneleri-genel-istatistikle-.html>
- Lauristin, M. & Vihalemm, P. (2014). *Reading in changing society*. Tartu: University of Tartu Press.
- Lepik, K. (2013). *Governmentality and cultural participation in Estonian public knowledge institutions*. Doctoral Dissertation. Tartu: University of Tartu Press.
- Lerner, F. (2007). *Kütüphanelerin hikayesi* [The history of libraries]. (Trans. D. Çençiler). İstanbul: Bileşim Yayıncılık.
- Lingwood, J., Billington, J. & Rowland, C. (2020). Evaluating the effectiveness of a 'realworld' shared reading intervention for preschool children and their families: A randomised controlled trial. *Journal of Research in Reading*, 43(3), 249-271.  
<https://doi.org/10.1111/1467-9817.12301>
- Lyons, M., Kotilainen, S. & Ilkka, M. (2015). The functions and purpose of vernacular literacy: An introduction. *Journal of Social History (Special Issue: The Functions and Purpose of Vernacular Literacy)*, 49(2), 283–286.  
<https://doi.org/10.1093/jsh/shv034>
- Manguel, A. (2006). *The library at night*. New Haven & London: Yale University Press.
- Moorman J. A. (2002). *Combined school/public libraries in the United States: Three comparative case studies*. Doctoral Dissertation. University of Illinois at Urbana-Champaign the Graduate College.
- Niğde İl Halk Kütüphanesi (2020). *Tarihçemiz* [History]. <http://nigde.kutuphane.gov.tr/TR-103048/tarihcemiz.html>
- Olaschinde, M. O., Akanmode, O. A., Alaiyemola, A. T. & Babatunde, O. T. (2015). Promoting the reading culture towards human capital and global development. *English Language Teaching*, 8(6), 194-200.  
<http://dx.doi.org/10.5539/elt.v8n6p194>
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. California: Sage Publications.
- Phillips, A., Crocker, R., Leege, R., Turner, J. & Ebo, E. (2017). Building a reading culture through partnerships. *IFLA*. 1–10.  
<http://library.ifla.org/id/eprint/1747>
- Pihl, J., Van Der Kooij, K. S. & Carlsten, T. C. (Eds.). (2017). *Teacher and librarian partnerships in literacy education in the 21st century*. Rotterdam: Sense Publishers.
- Pirlibeylioğlu, M. (1993). Okuma alışkanlığının geliştirilmesinde kütüphanelerin rolü ve önemi [The role and importance of the libraries in development of reading habit]. In *1. Halk Kütüphaneciliği Sempozyumu Bildiriler (Symposium on Public Libraries)*. Ankara: Kütüphaneler Genel Müdürlüğü. 59-61.
- Saechsische Landesfachstelle für Bibliotheken (2020). DBS-Gesamtauswertungen für 2019 veröffentlicht (Overall evaluations for 2019 published).  
[https://www.lids.sachsen.de/bibliothek/?ID=16632&art\\_param=957#](https://www.lids.sachsen.de/bibliothek/?ID=16632&art_param=957#)
- Scarborough, H. S., Dobrich, W. & Hager, M. (1991). Preschool literacy experience and later reading achievement, *Journal of Learning Disabilities*, 24(8), 508-511.

- <https://doi.org/10.1177/002221949102400811>
- Schutt, R. K. (2006). *Investigating the social world: the process and practice of research*. North America: SAGE Publications.
- Scott, R. (2011). The Role of Public Libraries in Community Building, *Public Library Quarterly*, 30(3), 191-227.
- <https://doi.org/10.1080/01616846.2011.599283>
- Seefeldt, J. & Syre, L. (2004). *Geçmişe ve geleceğe açılan kapı Almanya'da kütüphaneler* [The door opens past and future libraries in Germany]. (Trans. M. Arun). Hildesheim: Georg Olms Verlag.
- Sever, S. (2013). *Çocuk edebiyatı ve okuma kültürü* [Children's literature and reading culture]. İzmir: Tudem Yayıncılık.
- Simone, K. (1999). *Public libraries as partners in youth development*. New York: DeWitt Wallace-Reader's Digest Fund.
- Sin, S.-C. J. (2009). *Structural and individual influences on information behaviour. A national study of adolescents' use of public libraries*. Doctoral Dissertation. University of Wisconsin- Madison.
- Stadtbibliothek Essen (2020). *Informationszentrum stadtbibliothek* (Information about the library). [https://www.stadtbibliothek-essen.de/ueber\\_uns/ueber\\_uns.de.html](https://www.stadtbibliothek-essen.de/ueber_uns/ueber_uns.de.html)
- TÜİK (2020). *İl ve cinsiyete göre il/ilçe merkezi, belde/köy nüfusu ve nüfus yoğunluğu* (Population of province/ district center, town/ village by city and gender), 2017, <https://data.tuik.gov.tr/tr/display-bulletin/?bulletin=adrese-dayali-nufus-kayit-sistemi-sonuclari-2017-27587#>
- Varheim, A. (2017). Public libraries, community resilience, and social capital, *Proceedings of the Ninth International Conference on Conceptions of Library and Information Science*, Uppsala, Sweden, June 27-29.
- Yılmaz, B. (2001). Avrupa Birliği (AB) ülkeleri ve Türkiye'de halk kütüphaneleri: Niceliksel bir karşılaştırma [Public libraries in the European Union (EU) countries and Turkey: a qualitative comparison], *Türk Kütüphaneciliği*, 15(4), 378-398.
- Yılmaz, B. (2008). Çocuklarda okuma kültürünü geliştirmede ebeveyn ve öğretmenin rolü [Role of parents and teachers in developing reading culture of children]. In *Çocuk ve Okuma Kültürü Sempozyumu (Symposium on Child and Reading Culture)*. Eğitim-Sen Yayınları, 133-140.



## The Evaluation of the Secondary-School English Curricula According to Bloom's Revised Taxonomy

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### ABSTRACT

This study aims to evaluate the extent of the objectives in the Secondary-School English curriculum concerning cognitive levels in Bloom's taxonomy. This aim underlies the first question of the study. The second and third questions inquire about the comparison among the grades and the homogeneity. Along with the adoption of the qualitative method, document and content analysis were implemented to categorize the objectives. The number of the curriculum objectives was 245 from 5th to 8th graders. Three notable outcomes were reached. First, each grade substantially suggests lower-order thinking skills. Besides, understanding is the surpassing level regardless of the grades. Lastly, receptive skills were dominantly consulted in lower-order thinking levels, while higher-order thinking skills were mainly applied in productive skills. Consequently, the research concludes that the objectives in the curriculum are not sufficient enough in developing higher-order thinking skills of secondary-school students.

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### Statement of Publication Ethics

This study has been conducted by following the publication ethics. However, ethics committee approval is not needed for the given research article due to its' qualitative nature.

### Authors' Contribution Rate

Both authors contributed to the article equally.

### Conflict of Interest

The authors affirm that there is no conflict of interest.

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## Introduction

Rapid changes in modern life due to globalization influence education to a great degree because the goals of education are to meet the demands of the ever-changing world and to help people acquire citizenship. As an outcome of the developments in the world, one of the most significant shifts has been the movement from 3 Rs (reading, writing, and arithmetic) to 4Cs (critical thinking, communication, collaboration, and creativity) in reference to National Education Association-NEA (2015).

Today, 4 Cs are known as the combination of certain skills needed both in personal and professional lives in the 21<sup>st</sup> century (Pardede, 2020). These requirements of the future education systems are marked out at an international level due to their emphasis on the world's fate. According to OECD (2018), education prepare students not only for work-life but also provides necessary knowledge and skills for the new generation “to become active, responsible and engaged citizens” (p. 4). Among these needed qualifications, students are expected to use the raw data to generate new knowledge and to think beyond the given information, so knowing is just a beginning step to set sail for the original ideas. Highly connected with this idea, critical and creative thinking skills are targeted to be mastered. Therefore, developing critical thinking skills in education contributes to no less a degree. NEA (2015) clarifies the significance of critical thinking skills in the modern world. With regards to it, this skill is demanded for every student in the 21<sup>st</sup> century even though it was designated for gifted students in earlier times.

Critical thinking also has a strong connection with education as “one cannot learn well without thinking well” (NEA, p. 8). Thus, working on this skill has numerous advantages both in the social lives of people and in their academic achievements. Van Roekel (2008) remarks on the significance of training critical thinking by integrating it into different subject matters in the classrooms. However, practicing this skill is not simple, so students need to pass through systematic stages by bringing novelty at every turn. Therefore, it is required to be engaged in the schools where pre-planned programs are implemented. In this way, critical thinking could be developed more successfully.

As well as practicing within different lessons, there are significant benefits for implementing critical thinking skills in foreign language classes (Gandimathi & Zarei, 2018). First of all, students need training for this skill as a part of their curriculum in each lesson and grade. It also has numerous advantages in the context of the foreign language teaching department because diverse thought-provoking questions are expected to be asked in promoting critical thinking. These open-ended and subjective questioning lead students to speak and explain their ideas thoroughly, which in turn, gives them more options in using the target language (Pardede, 2020). However, being a critical thinker requires particular necessities, from simple to complex. These necessities were resulted in various definitions of critical thinking by scholars.

For Ennis (1993), critical thinking refers to the “reasonable reflective thinking that is focused on deciding what to believe or do.” Halpern (2003) defines this term as a branch of thinking for problem-solving and making judgments. Carroll (2000) associates critical thinking with open-mindedness, modesty, and skepticism since these characteristics are

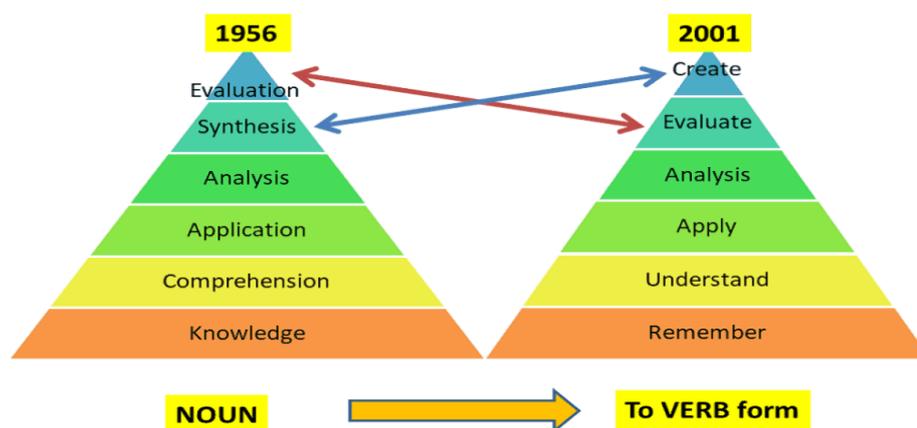
not related to dogmatic thoughts. To sum up these ideas, critical thinking requires processing information and thoughts at higher levels.

Consequently, critical thinking is a comprehensive higher-level thinking. Being able to benefit from it hinges upon dwelling on this skill properly. Since significant stages of human lives take place at the schools, promoting and integrating critical thinking into the school environment is highly crucial for growing critical thinkers. When it is supported in the schools until forming a habit, a great step towards being a more conscious and efficient society is going to be taken.

There are several methods provided by scholars to promote critical thinking in schools. Among them, Bloom's taxonomy takes the lead by being extensive and valid in the world of education. Numerous studies (Gökler, Alpay & Arı, 2012; Assaly & Smadi, 2015; Rahpeyma & Khoshnood, 2015; Kozikoğlu, 2018; Evcim & Özenici, 2019; Demirci & Gökdeniz, 2020) use Bloom's taxonomy to assess the critical thinking level of the target matter such as curriculum, exams or the coursebooks because it is one of the leading sources for evaluating critical thinking in education (Krathwohl, 2002; Amer, 2006; Bümen, 2006)

Bloom's revised taxonomy is an updated version of the original taxonomy. Bloom's scholars, Anderson and Krathwohl (2001), adapted the original taxonomy due to the developments in the world and named it after Bloom's revised taxonomy, which was displayed and clarified below with subcategories and explanations.

**Figure 1.** The Comparison between Bloom's Original and Revised Taxonomy



Even though containing knowledge and cognitive dimension in the revised taxonomy was different than the original one, only the cognitive process dimension is considered in the current study. This is the one that is similar to the original taxonomy with small changes such as using verb versions instead of nouns. Besides, the last two steps in the higher-order thinking levels are relocated by renaming the last step as 'create'. In this way, producing new ideas is considered the last step of achieving critical thinking.

As mentioned above, the cognitive process dimension is a directly adapted version due to the need for proper expressions for the objectives (Krathwohl, 2002). Thus, the

categories mostly resemble each other. In the well-known book ‘A Taxonomy for Learning, Teaching, and Assessing’, which was written by Bloom’s scholars, Anderson and Krathwohl (2001) clarify the detailed content and requirements of each cognitive level. According to them, remembering as the first step of cognitive processing deals with recalling one’s background knowledge in the subject matter. The first step in achieving critical thinking also has two sub-headings called recognizing and recalling. Both of them facilitate retrieving information in one’s long-term memory. The understanding level is about making sense of the information that was learned. By interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining, learners may construct their meaning on the subject. In that way, they comprehend the target topic. The applying is related to using the information in new ways apart from the way of the first time experiencing it. It includes executing and implementing under this category. Analyzing is the starter of higher-order thinking. Following this step, learners build on their higher levels in the way of achieving critical thinking. It is concerned about breaking the whole into its’ relevant parts and making sense of between them. Differentiating, organizing, and attributing are components of the analyzing level. The evaluating was the last step of Bloom’s original taxonomy. However, it was replaced as the fifth step. Making judgments and justifying decisions according to given criteria are significant requirements of this level. In order to achieve this, learners may practice checking and critiquing activities. The highest level in the cognitive process is the creating level. At this point, learners need to put all the information and ideas until this point to create something new and original. When the learners achieve it, they are considered as practitioners of critical thinking in the subject matter. Creating has sub-categories as generating, planning, and producing.

As well as the importance of critical thinking, the curriculum is a crucial source because it is a starting point for each educational program. Establishing a comprehensive curriculum ensures numerous ways as long as the duration of the program. Bümen (2006) states that objectives have fundamental roles in managing a coherent unity in education. Thus, the content and the core meaning affect the entire program. As well as many linguistic features, current issues need to be included in the curriculum explicitly. The adaptation of critical thinking in the curriculum and objectives could be achieved as one of the 21<sup>st</sup>-century issues. Anderson (2002) affirms that Bloom’s taxonomy could be utilized to assess the critical thinking levels of the target curriculum regardless of the grades or the subject matters. Therefore, it is both useful and beneficial to examine the curriculum from critical thinking perspectives to preview the current situation of the target educational systems.

Considering all the essential aspects mentioned above, this study aims to evaluate English curricula in Secondary Schools to reveal the critical thinking levels of the objectives.

### **Research questions**

1. To what extent do the English curriculum of Secondary-Schools reflect the cognitive levels of Bloom’s Revised Taxonomy?

2. Are there any differences among 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> graders in terms of having lower or higher-level objectives?
3. Are there any significant differences among the language skills in representing Bloom's taxonomy?

### Literature review

#### Studies conducted in English language teaching

The revised version of Bloom's taxonomy is utilized in many different studies of education. Various areas such as curriculum, coursebook, or exam evaluation are touched upon to reflect on the current situation of critical thinking in education. There are some studies trying to determine the critical thinking degree of the English curriculum by using Bloom's revised taxonomy.

In the study of Gökler et al. (2012), the factors such as curriculum objectives, SBS questions, and written examination questions were included in terms of critical thinking. The data is obtained through document analysis and evaluated by considering Bloom's revised taxonomy. Not only the curriculum objectives but also SBS and written examination questions resulted in lower levels of critical thinking. In other ways, the remembering, understanding, and applying levels were dominant throughout the data.

Kozikoğlu (2018) aimed to assess the relationship between the TEOG exam and the English language curriculum of 8<sup>th</sup> graders by concentrating on critical thinking levels. Considering the TEOG exam, only the remembering and understanding levels were promoted. The rest of the levels were not even referred, so the national exam was dominant on lower-order thinking skills. On the other hand, the distribution of the levels was heterogeneous in the English curriculum of 8<sup>th</sup> graders. The applying level was preferred in more than half of the objectives. Understanding, analyzing, and creating levels followed the application with the frequency of 19,10, and 7. Remembering and evaluating were the least repeated objectives. Therefore, an alignment was not found between the national exam and the English curriculum.

Another similar study was conducted by Demirci and Gökdeniz (2020). Their purpose was quite similar to the previous study, so they examined the relationship between TEOG questions and curriculum objectives. 158 teachers were surveyed to express their ideas on the issue. Then, TEOG exam questions and the objectives in the curriculum were classified with document analysis. These processes resulted in the deficiency of higher-order thinking levels both in the exam and the curriculum. The levels of remembering, understanding, and applying were attained, whereas analyzing, evaluating, and creating levels did not exist. Regarding TEOG exam questions, only one question out of 40 related to the analyzing level as higher-order thinking.

#### Studies conducted in other disciplines in Turkey

Since critical thinking is one of the current trends in education, the curricula in various disciplines were evaluated in Turkey to reflect on the critical thinking levels supported in the curriculum. In the following section, the evaluation of curriculum in

different subjects was expressed to present the current situation of Turkey in terms of critical thinking levels.

French is one of the optional foreign languages in high schools in Turkey. As a result, Karagül and Oral (2020) evaluated the curriculum of A1.1 and A1.2 of the French curriculum considering the critical thinking levels. To do so, Bloom's revised taxonomy was used in the coding. Both curricula resulted in the redundancy of the lower levels in the cognitive process dimension and conceptual knowledge in the knowledge dimension. Besides, the skills were differentiated and analyzed separately. The understanding level outnumbered in the listening objectives, while the applying level was more common in the speaking skill objectives. Even though the analyzing level was found to be less ( $n=3$ ), reading skills mostly reflected on the understanding level. The objectives of the writing skill were high in the applying level, yet only one objective was matched with the analyzing level.

Another subject taught in Turkey is social studies, so the critical thinking level of its' curriculum was conducted by Filiz and Baysal (2019). The curricula of fourth, fifth, sixth, and seventh graders were analyzed. Fourth and fifth graders' curricula were supreme in the understanding levels, while sixth and seventh graders indicated the analyzing with the understanding level. Among all the curricula, conceptual knowledge was dominant. Thus, lower levels were highlighted in the secondary schools' curricula of social studies lessons.

Filiz (2019) conducted a study to analyze secondary school curricula of Turkish lessons. The objectives of 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> graders were categorized according to Bloom's revised taxonomy. The results in common are the frequency of the understanding and applying levels. In another way, the lower levels were dominant in all grades. Additionally, the categories of the knowledge dimension are gone through. Factual and procedural knowledge are the most repeated categories. Furthermore, meta-cognitive knowledge was not found in the 5<sup>th</sup> and 6<sup>th</sup> grades, but it was also only detected once in the 7<sup>th</sup> and 8<sup>th</sup> grades. It is evident that lower levels were preminent in the Turkish course curriculum.

The study of Doğan and Burak (2018) investigates the curriculum objectives of the 4<sup>th</sup> grade in the domain of science regarding critical thinking. Similar to other studies, Bloom's revised taxonomy was utilized to gather the data. As comprising nearly half of the objectives, the understanding level was the dominant level in the cognitive process dimension. The applying level came after the understanding as the most frequent level found in the curriculum. The lower levels constituted 70% of the curriculum. The higher levels were not referred to sufficiently, so achieving critical thinking was unsatisfactory with the current curriculum. Besides, conceptual knowledge was the most referenced category in the knowledge dimension, with 48%. Factual and procedural knowledge were at similar rates. However, meta-cognitive knowledge was not found in any of the objectives.

Kablan, Baran, and Hazer (2013) carried out a study on critical thinking in the field of mathematics. The objectives in the sixth to 8<sup>th</sup> graders' curriculum were examined with the help of Bloom's revised taxonomy. The cognitive levels highlighted in the objectives were coded according to the cognitive levels: remembering, understanding, applying,

analyzing, evaluating, and creating. The findings of the overall study inferred that almost half of the objectives in three of the grades promote the understanding level the most. The applying level reveals quite similar findings by including 38.1% of the overall objectives. On the other hand, remembering, which is one of the lower levels, was not found in any of the objectives. The higher levels were slightly referred to and supported in the curriculum. When it comes to the grade levels separately, the 6<sup>th</sup> and 8<sup>th</sup> graders' curricula were dominant in the understanding level while the 7<sup>th</sup> graders' curriculum mostly supported the applying level in the cognitive domain.

## **Methodology**

### **Research design and publication ethics**

The current study was conducted in order to examine the Secondary-School curriculum from the perspective of critical thinking, so the degree to which the curriculum represents critical thinking was evaluated by employing Bloom's revised taxonomy. Each grade in the Secondary-School was included in the research. Thus, the curricula of the 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> graders were taken into account.

### **Data collection and analysis**

The documents were reached in the Monitoring and Evaluating System of Curriculum, so they are official references presented by the Ministry of Education in Turkey. Since the curriculum is a kind of document, a qualitative method was determined initially. In accordance with the data and the method, document analysis was employed as the data was composed of written documents. Two hundred forty-five objectives were obtained in total. The number of objectives ranges from one grade to another. For instance, 5<sup>th</sup> grade has the least number of objectives with a frequency of 52. However, 8<sup>th</sup> grade comes first by having 70 objectives at all. 6<sup>th</sup> and 7<sup>th</sup> grades are quite similar as they involve in 60 and 63 objectives.

### **Procedure**

Following the collection of the objectives, the data were coded and categorized considering the cognitive levels of Bloom's revised taxonomy. Each objective was matched up with one of the cognitive levels of remembering, understanding, applying, analyzing, evaluating, and creating. The frequency and percentages of the results were tabulated. The results were also compared among the grades whether they all were resulted in similar degrees or not. Besides, the findings were analyzed considering four language skills.

Achieving reliability and validity in qualitative studies is significant due to the subjective nature of this method. However, the value of the qualitative method gets higher when these points are considered (Yıldırım & Şimşek, 2018). Within this point of view, the current study aimed to reach a reliable and valid evaluation. In order to attain validity, the processes and the stages of the study were clearly represented in this section. Besides, some coding samples were supplied to reflect on and exemplify the findings in the results section. On the other hand, reliability is about consistency with different coders (Kirk &

Miller, 1986; as cited in Thyer, 2010). To do so, the reliability formula was adopted from Miles and Huberman (1994). This formula (number of agreements/ number of agreements + disagreements) embodies more than one coder and necessitates similar findings among them. Two coders were included in the coding, and it resulted in 84%, so the current study is regarded as reliable as the limit for a reliable outcome is 70.

## Results

Adopting the qualitative method for the current study led to the utilization of document and content analysis because the curriculum as a kind of document was being examined. First of all, some coding samples from the curriculum were provided below in order to increase the validity of the research.

**Table 1.** Samples of the Curriculum Coding

Cognitive levels	Statements of the Objectives Extracted from the Curriculum
Remember	<i>Students will be able to name the common illnesses in a simple way. (5th grade)</i>
	<i>Students will be able to <b>pick up</b> specific information from short oral texts about weather conditions and emotions. (6<sup>th</sup> grade)</i>
Understand	<i>Students will be able to <b>describe</b> people doing different actions. (6<sup>th</sup> Grade)</i>
	<i>Students will be able to <b>understand</b> simple texts about festivals around the world. (5<sup>th</sup> Grade)</i>
Apply	<i>Students will be able to <b>state their preferences</b>. (7<sup>th</sup> Grade)</i>
	<i>Students will be able to <b>talk</b> about their holidays. (6<sup>th</sup> Grade)</i>
Analyze	<i>Students will be able to <b>write simple pieces to compare</b> people. (7<sup>th</sup> Grade)</i>
	<i>Students will be able to <b>make simple comparisons</b> between different tourist attractions. (8<sup>th</sup> Grade)</i>
Evaluate	No objective was found in this cognitive level.
Create	<i>Students will be able to <b>design a brochure</b>, advertisement, or a postcard about their favorite tourist attraction(s). (8<sup>th</sup> Grade)</i>
	<i>Students will be able to <b>write short and simple poems/stories</b> about their feelings and responsibilities. (8<sup>th</sup> Grade)</i>

In accordance with the coding, the findings were demonstrated in another table below. In this table, several dimensions were included. Firstly, the frequency of the cognitive levels in the curriculum objectives was categorized within the grades in the secondary school. Moreover, the percentages were presented to have coherence among the grades since they have variety in the number of the objectives. Therefore, this table clarifies the findings of each grade separately. The relationship between the four skills and cognitive levels was also interpreted following the explanation of each grade.

**Table 2.** Frequency and Percentages of the Coding According to the Cognitive Levels

Grades	Levels	Remember	Understand	Apply	Analyze	Evaluate	Create
5 <sup>th</sup> Grade	Frequency	7	30	15	-	-	-
	Percentage	(13%)	(58%)	(29%)			
6 <sup>th</sup> Grade	Frequency	15	22	19	3	-	1
	Percentage	(25%)	(36%)	(32%)	(5%)		(2%)
7 <sup>th</sup> Grade	Frequency	12	27	19	2	-	3
	Percentage	(19%)	(43%)	(30)	(3%)		(5%)
8 <sup>th</sup> Grade	Frequency	9	29	22	7	-	3
	Percentage	(13%)	(42%)	(31%)	(10%)		(4%)
Total	Frequency	43	108	75	12	-	7
	Percentage	17%	44%	31%	5%		3%

The first research question delivers general findings derived from the curriculum, so it is related to the overall coding of the objective statements according to Bloom's taxonomy. The results of each grade level's coding were clarified below.

In the 5<sup>th</sup> grade's coding, none of the higher levels were found in the objectives, so the analyzing, evaluating, and creating levels were not attained. When it comes to lower levels, the understanding took the majority by having 58%, and the applying followed it with 29%. Remembering was the least practiced level among the levels by covering seven objectives, resulting in 13%.

The findings of the levels according to four skills show that writing skill was not included in the 5<sup>th</sup> grade's curriculum. The reading and listening levels resulted in similar findings. Both levels were high in the 'understanding' level while slightly reflecting on the 'remembering' level. Besides, the speaking skill covered all of the lower levels. Here, the 'applying' levels take the attention by being covered only in the speaking skill.

6<sup>th</sup> grade's curriculum represented each cognitive level except the evaluating. However, the analyzing and creating levels comprised the minority of the objectives by having only 7% altogether. On the contrary, lower levels took the biggest proportion. The understanding attributed this with 36% and applying with 32%. The remembering was not so different from these lower levels.

Four of the skills were represented in the 6<sup>th</sup> grade's curriculum. Receptive skills mostly demonstrate the remembering and understanding levels. This result is quite similar to 5<sup>th</sup> grade's coding. Speaking skills covered the majority of the curriculum, and the frequency of the applying level is also apparent in this skill. Writing, on the other hand, begins in this grade. Even though having a few objectives, higher levels were practiced in this skill. The coding of the 7<sup>th</sup> grade's curriculum is not distinctive from the previous grades. Lower levels attract the attention by covering 92% of all the objectives. At the

same time, the analyzing and creating levels are slightly included with 8%. Within the higher levels, evaluating was not supported.

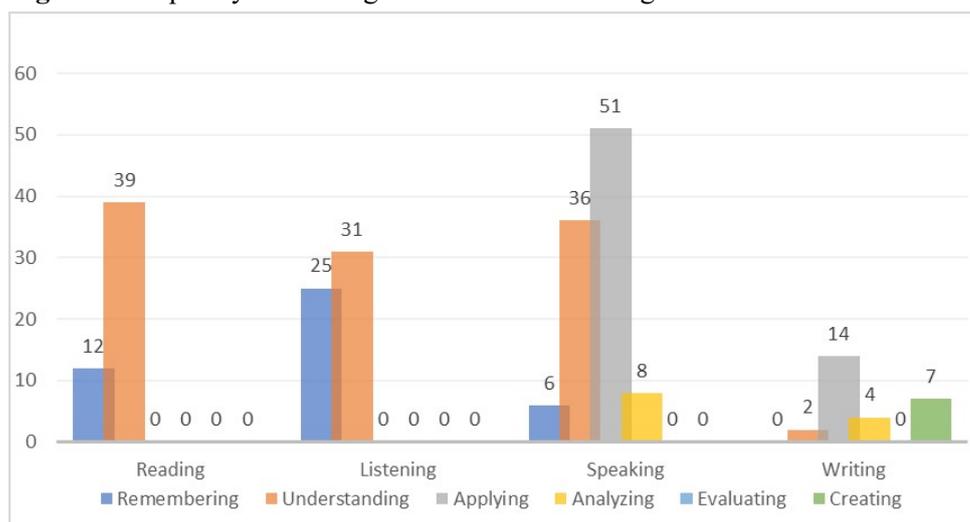
Not surprisingly, reading and listening skills develop the remembering and understanding levels. Covering 26 objectives, speaking skill is dominant in the applying level. At the same time, the frequency of the understanding level was closer to applying by having only three fewer objectives. Besides, writing skill stands out by comprising nearly all of the levels despite their less frequency. At this point, the remembering and evaluating levels were missing.

In the 8<sup>th</sup> grade's curriculum, the numerical data shows that the proportion of the higher levels are 14% altogether. This result is higher than the rest of the grades. Even though this is not a homogeneous distribution, it is clear that the frequency of higher levels gets more as the grade levels get higher. Likewise, the distribution of lower levels proceeds in the order of understanding, applying, and remembering.

Respectively, receptive skills only promote remembering and understanding in the lower levels. Speaking skill includes different dimensions such as understanding, applying, and analyzing. The lowest level is applying in the writing skill, so students were asked to use the information in different ways. Then, they were asked to practice analyzing and creating at the higher levels.

When it comes to the second research question, it intends to compare the grades regarding reflecting lower or higher levels. This question may also be answered by examining Table 2. One of the most remarkable results for this question is the finding of the 5<sup>th</sup> grade's coding because none of the objectives belongs to the higher grades so it ends up with 100% in the lower level. Even though each curriculum in the secondary school predominantly comprises lower levels, the percentage of the higher levels increases as the grades get higher. Therefore, the higher levels have 4% in the 6<sup>th</sup> grade, 5% in the 7<sup>th</sup>, and 10% in the 8<sup>th</sup> grade. Considering the cognitive levels, the remembering and applying levels have generalizable outcomes. The remembering level and its' frequency are inversely proportional, so the number of the remembering level decreases as the grade gets closer to the 8<sup>th</sup> grade. On the contrary, the applying level is directly proportional. Thus, the applying level is encountered more as the grade advances, so the 8<sup>th</sup> graders have more objectives to achieve the third cognitive level.

Coding of the document led to another classification by taking the third research question into account. This last question aims to find out the difference between four skills and the cognitive levels. In line with this question, the figure below displays the overall findings of the skills according to the cognitive levels in Bloom's taxonomy regardless of the grades. In other words, these levels were differentiated considering the four skills: reading, listening, speaking, and writing. This kind of classification is clear in terms of analyzing the relationships between the skills and the cognitive levels by adding up the total objectives in the curricula. In this way, it reflects on the relationship between the language skills and the cognitive levels in the 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grades.

**Figure 2** Frequency of the Cognitive Levels according to Four Skills

With the first glance at the table, it is apparent that reading and listening skills solely reflect on the remembering and understanding levels. The rest of the levels were not aimed to be practiced in this skill. In another saying, receptive skills developed only the lower levels except for the applying.

The speaking skill comprised four of the levels in order from remembering to analyzing. The frequency of the objectives for applying attracted attention as it nearly doubled the number of objectives in the reading and listening skills. Besides, the applying level surpassed the other levels by covering more than half of the objectives, which was a great extent when considering the overall results. The understanding level followed as the second most practiced level in the speaking skill. The remembering and the analyzing levels were notably low. Even though it was less frequent, the analysis was mostly practiced level compared to other skills.

The distribution of the levels in the writing skill was not so divergent. Each level except the remembering and the evaluating was practiced within this skill. The findings were closer to each other when compared to the previous ones. Similar to speaking, which is also one of the productive skills, the applying level was dominant in the writing. It was striking that the creating level was only touched upon here since there was no objective supporting the highest level in the other skills. What is more, creating was the second most practiced level here, so practicing writing skills is significant in the development of critical thinking. On the other hand, the understanding level was barely included, while the analyzing level was not so different.

### Discussion

This qualitative study required to document and content analysis because of curriculum analysis. Bloom's revised taxonomy was utilized in the coding step. As a result of coding and findings, notable results emerged according to the research questions. In pursuit of elucidating the results, they were compared with the other studies in the field.

The first research question concerns the degrees to which the curricula reflect on critical thinking. The findings reveal the preeminence of the lower levels. Most

surprisingly, the 5<sup>th</sup> grader's curriculum resulted in the entire reflection of the lower levels, so only remembering, understanding, and applying levels were stated in this curriculum. Not so distinctively, the rest of the grades signify the dominance of the lower levels by covering 93%, 92%, and 85% from 6<sup>th</sup> to 8<sup>th</sup> graders.

In parallel with this result, the second research question, related to differences among the grades, can be answered by consulting the previous finding. When the percentages of the lower levels were reaffirmed, they ranged from 100% in the fifth grade to 85% in the eighth grade. A decrease in the percentages implies inequality among the grades. Thus, it may be said that the proportion of the higher cognitive levels increases as the grade levels go through. However, this does not even change the dominance of the lower levels.

Another outstanding result was in the domain of the understanding level. Based on the dominance of the lower levels, the frequency of the understanding level attracts the attention by having more than half of the objectives in the 5<sup>th</sup> grade and covering nearly half of the objectives in the 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> grades.

When it comes to four language skills which are about the last research question, it is obvious that certain levels are associated with certain skills. Reading and listening skills only supported the remembering and understanding levels. In this way, it is highly explicit that receptive skills correlate with the lower levels, especially the first two basic levels. Apart from that, the productive skills shine out by covering various levels. In addition to lower levels, higher levels were included and practiced within the productive skills with slight additions. On the other hand, applying was the leading level both in speaking and writing skills.

These substantial results had similarities with the other studies in the literature. First of all, the situation of the curricula in the Secondary Schools in Turkey was analyzed by reflecting on the critical thinking degrees. The results of these studies were significant in terms of seeing the big picture in the Secondary-Schools as the development of critical thinking is interconnected with different branches, and they influence one another.

Aiming to reveal the critical thinking levels, the curricula from 4<sup>th</sup> to 7<sup>th</sup> graders were examined in the social studies lesson by Büyükanal and Baysal (2019). This study resulted in the dominance of the understanding level throughout the grades. In a similar vein, the findings of the current study displayed the superiority of the understanding level. Likewise, the study of Kablan et al. (2013), which evaluated the curriculum of 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> graders, concluded that nearly half of the objectives were covered with the understanding level. In comparison with the present study, the results are quite parallel within the given grades. As a distinctive point, the 5<sup>th</sup> grade in which the understanding level covered more than half of the objectives was not included in the field of math. Not so differently, the curriculum evaluation of the secondary school Turkish lesson (Filiz, 2019) found that the understanding and applying levels were preeminent. The second most practiced level in this study was also the applying level. Lastly, Doğan and Burak (2018) analyzed 4<sup>th</sup> grade's curriculum in terms of critical thinking in the field of science. Seventy percent of the objectives belonged to the lower levels. Although both science and the English lesson resemble having lower levels, the current study revealed redundancy of the lower levels compared to the field of science. To sum up, the present study seems to be

consistent with the research in the other branches in secondary schools. It can be concluded that the different lessons' curriculum objectives in secondary school fail to develop critical thinking.

Another significant issue concerning critical thinking emerges in the field of foreign language teaching. Numerous studies on curriculum, exam questions or coursebooks were conducted in order to reflect on the critical thinking levels of the target matters as it is a trendy and current topic in education and foreign language teaching. Some significant comparisons were made with the current study and the other studies in foreign language teaching. The evaluation made by Karagül and Oral (2020) in the field of the French language teaching department has a crucial similarity with this study from the point of connecting language skills and cognitive levels of Bloom's revised taxonomy. As a result of examining A1.1. and A1.2. coursebooks' curricula, receptive skills were associated mostly with the understanding level while the productive skills developed the applying level. This finding confirms the association between the two studies as they both resulted in the same findings considering the skills and the cognitive levels.

Kozikoğlu's (2018) research is confined to the context of the 8<sup>th</sup> grade. Therefore, the results of the 8<sup>th</sup> graders' curriculum coding were compared with that study. In this point of view, both studies are highly correlated to each other when the 8<sup>th</sup> graders' curriculum coding was considered, which was a reliable result because the understanding and applying levels were dominant in the curriculum objectives of both studies.

As a different source to be analyzed, Evcim and Özenici (2019) dealt with English Language Teaching Profession Field Exam (TPFE) in line with Bloom's taxonomy and critical thinking. In both studies, a high proportion of the objectives belongs to the lower levels. Besides, the absence of the evaluating level was correlative in the findings. However, the creating level was also missing in the TPFE exam questions, which is a distinctive feature of the current study.

There were many other studies (Gökler et al. 2012; Rahpeyma & Khoshnood, 2015; Demirci & Gökdeniz, 2020) in which the English language teaching sources such as the curriculum, exam questions, or coursebooks were examined. Each of the given research resulted in the dominancy of the lower levels. This outcome is broad since many of the studies, including the current one, ended up with this deduction. Thus, English language teaching sources or tools prepared in Turkey are insufficient in supporting critical thinking levels equally. Instead, they turn out to be considerably high in conclusion.

All in all, the current study contributed literature that justifies the findings in a great deal with the previous works both within and out of the field, considering the fact that there were quite a lot of similar findings in the given sample studies.

### **Suggestions for Practice**

In conjunction with these findings, the curriculum developers, teachers, educators, and professionals need to keep some of the suggestions deduced in the current study to increase the number of critical citizens of the future. Therefore, increasing the number of higher levels and designing a more homogeneous curriculum is essential to develop more critical thinkers. A homogeneous curriculum does not demand the accumulation of some

cognitive levels, so each level is to be reflected in similar degrees. As well as the overall homogeneity of the cognitive levels in the curriculum, four skills should be supported equally within these cognitive levels. In other words, skills should not be matched with certain cognitive levels, as in the example of receptive skills in which only the remembering and understanding levels were promoted. Each material needs to support activities, objectives or exam questions from lower to higher levels to form a unity for critical thinking. When it comes to comparing the grades, the lower ones, especially the 5<sup>th</sup> grade, lack higher cognitive levels. However, the higher levels do not have to appear only in the higher grades. Even the primary grades are capable of practicing critical thinking. All in all, consideration and application of these points may help students develop critical thinking habits easier in their lives. As well as the students, EFL teachers may also be encouraged more when they witness the importance of critical thinking in the curriculum explicitly. That's why taking these given concrete steps in this domain of language teaching helps both citizens and the countries for future generations.

### Conclusion

Due to the importance of using critical thinking abilities in the 21<sup>st</sup> century, the field of education takes the lead to prepare students as future influencers of the world. The current study contributed this in the domain of English language teaching by examining the secondary school curricula in Turkey. As there was no other study that evaluates the secondary school curricula within this perspective, the current research crucially contributes to the literature. As a result of the analysis, it was obvious that none of the grades in the secondary school curriculum promoted critical thinking accurately. In each grade, the lower levels were highly predominant. At the same time, receptive skills were related to lower levels while higher levels were only touched upon in the productive skills. Besides, it was overt that the number of objectives promoting higher levels gets more as the grade levels get higher, so 8<sup>th</sup> grade had more higher-level objectives while 5<sup>th</sup> grade had no higher cognitive level. The literature, by the way, showed that the current results were also consistent with numerous research in terms of the predominancy of the lower levels in the English curriculum, coursebooks, or exams. Even though this study shed light on the current situation of the secondary-school English curriculum objectives, some limitations inevitably came out. First of all, the scope of the study was restricted to the pre-assigned groups in the secondary school, which were 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grades. This group is only a part of the whole when the beginning of foreign language education in Turkey is considered. Therefore, future studies may focus on the involvement of the entire foreign education curriculum from the 2<sup>nd</sup> to 12<sup>th</sup> grades in order to broaden the scope. Besides, the objectives stated in the curriculum were taken into account, so the content analysis dealt only with these statements, and it was not checked whether the coursebooks reflect on these objectives. Thus, a comparative study between the objectives and coursebook activities could also be evaluated. Lastly, the current study is purely qualitative in nature due to the analysis of the document. Hence, it evaluated the curricula in depth. For further consideration, the views of teachers or students could also be involved. In addition to this, EFL teachers may be observed in the classroom if they come up with extra solutions to compensate for the deficiencies in the curriculum.

## References

- Amer, A. (2006). Reflections on Bloom's revised taxonomy. *Electronic Journal of Research in Educational Psychology*, 4(1), 213-230.
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching and assessing: A revision of Bloom's Taxonomy of educational objectives: Complete edition*, New York: Longman.
- Anderson, L. (2002). Curricular realignment: A re-examination. *Theory Into Practice*, 41 (4), 255-260.
- Assaly, I.R. & Smadi, O.M. (2015). Using Bloom's taxonomy to evaluate the cognitive levels of master class textbook's questions. *English Language Teaching*, 8(5), 100-110.
- Bümen, N.T. (2006). Program geliştirmede bir dönüm noktası: Yenilenmiş Bloom taksonomisi. *Eğitim ve Bilim*, 31(142), 3-14.
- Büyükalın Filiz, S. & Baysal, S. B. (2019). Analysis of social studies curriculum objectives according to revised Bloom taxonomy. *Inonu University Journal of the Faculty of Education*, 20(1), 234-253.
- Carroll, R.T. (2000). *Becoming a critical thinker: A guide for the new millennium*. USA: Pearson Custom Publishing.
- Demirci, C. & Gökdeniz, M. (2020). TEOG sınavı İngilizce öğretim programına uygunluğu ve yenilenmiş Bloom taksonomisine göre sınıflandırılması. *Education Sciences (NWSAES)*, 15(1), 1-10.
- Doğan, Y. & Burak, D. (2018). 4. sınıf fen bilimleri dersi kazanımlarının revize edilmiş Bloom taksonomisine göre incelenmesi. *Akdeniz Eğitim Araştırmaları Dergisi*, 23, 34-56.
- Ennis, R. H. (1993). Critical thinking assessment. *Theory into Practice*, 32(3), 179-186. <http://dx.doi.org/10.1080/00405849309543594>
- Evcim, H. & Özenici, S. (2019). Analyzing 2016 PPSE English language TPFE according To Bloom's revised taxonomy. *Disiplinlerarası Eğitim Araştırmaları Dergisi*, 3(1), 1-18.
- Filiz, S.B. (2019). Ortaokul Türkçe dersi öğretim programı kazanımlarının revize edilmiş Bloom taksonomisine göre analizi. *İlköğretim Online*, 18(4), 1550-1573.
- Gandimathi, A., & Zarei, N. (2018). The impact of critical thinking on learning English language. *Asian Journal of Social Science Research*, 1(2), 25-35.
- Gökler, Z.S., Aypay, A., Arı, A. (2012). İlköğretim İngilizce dersi hedefleri kazanımları SBS soruları ve yazılı sınav sorularının yeni Bloom taksonomisine göre değerlendirilmesi. *Eğitimde Politika Analizi Dergisi*, 1(2), 114-133.
- Halpern DF 2003. *Thought and knowledge: An introduction to critical thinking* (4th ed). Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers.
- Kablan, Z., Baran, T. & Hazer, Ö. (2013). İlköğretim matematik 6-8 öğretim programında hedeflenen davranışların bilişsel süreçler açısından incelenmesi. *Ahi Evran Üniversitesi Kurşehir Eğitim Fakültesi Dergisi*, 14(1), 347-366.
- Karagül, A. & Oral, B. (2020). Ortaöğretim Fransızca dersi öğretim programının A1.1 ve A1.2 dil düzeyi hedeflerinin yenilenmiş Bloom taksonomisine göre değerlendirilmesi. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, 1(38), 84-100.
- Kozikoğlu, İ. (2018). The examination of alignment between national assessment and English curriculum objectives using Revised Bloom's Taxonomy. *Educational Research Quarterly*, 41(4), 50-77.

- Krathwohl, D. (2002). A revision of Bloom's taxonomy: An overview. *Theory Into Practice*, 41(4).
- Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis*. London: Sage Publication.
- OECD (2018). OECD Learning Framework 2030. Retrieved from:  
[https://www.oecd.org/education/2030/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf)
- Pardede, P. (2020). Integrating the 4Cs into EFL integrated skills learning. *JET (Journal of English Teaching)*, 6(1), 71-85.
- Rahpeyma, A. & Khoshnood, A. (2015). The analysis of learning objectives in Iranian junior high school English text books based on Bloom's revised taxonomy. *International Journal of Education & Literacy Studies*, 3(2), 44-55.
- Thyer, B. (2010). *The handbook of social work research methods*. California: SAGE Publication.
- Van Roekel, N. P. D. (2008). *Technology in schools: The ongoing challenge of access, adequacy and equity*. National Education Association, Washington DC.
- What are the three domains of Bloom's Taxonomy [Online Image]. (2020). Educere Centre.  
<https://educerecentre.com/what-are-the-three-domains-of-blooms-taxonomy/>
- Yıldırım, A. & Şimşek, H. (2018). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık.



## Analysis of Pedagogical Texts Prepared for Academic Turkish as a Foreign Language in Terms of Academic Vocabulary

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### ABSTRACT

In this study, the aim was to determine academic words in academic Turkish teaching sets, to describe the numerical and rational distribution of these academic words, and to make a comparison between the vocabulary of engineering/health sciences and social sciences. Vocabulary units classified as social sciences and engineering/health sciences were evaluated in terms of their percentages in their own categories, the most frequently used word types, and conceptual features, and to analyze the differences in use between social and engineering/health sciences, the Mann–Whitney U test was applied. The result of the study indicated that the frequency of academic words' use (7%-8%) is lower than their use count; however, when the number of single uses was considered in terms of developing comprehension and explanation skills, it is highly important. In this research, it was determined that social science and engineering/health sciences' vocabulary haven't a significant difference in term of both total vocabulary frequency and academic words' frequency. In this case, it can be said that academic vocabulary in academic texts does not contain numerical differences in terms of social sciences and natural-health sciences.

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### Statement of Publication Ethics

### Authors' Contribution Rate

### Conflict of Interest

Please type any acknowledgments here.

The main focus of this study was based on corpus data; therefore, it was not required to obtain ethics approval

If there is more than one author, please indicate clearly the contribution of each author to the manuscript.

I hereby declare that I had no conflicting interests regarding any parties of this study.

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## Introduction

Words, as linguistic units, have a fundamental role in oral and written communication as they illustrate concepts. In this respect, vocabulary teaching is critical in foreign language teaching, the aim of which is to communicate in the target language (Alipoor & Jadidi, 2016). It is a significant issue to decide which linguistic units will be accepted as words in word list development processes (Coxhead, 2000). However, defining words conceptually is not easy. For this reason, there are many definitions of words in the literature. It is seen that the word definitions in the literature are shaped according to the features and functions of the words in the language. In the word definitions created in terms of the features of the words, features such as the presence of spaces between them in the text and their having meanings are stated (Demir, 2017; Jackson, 2016; İmer, Kocaman & Özsoy, 2013). It is known that words have certain limits in the language. However, in Turkish spelling, not every element with spaces, such as mX, dA, and ki, is considered a word (Demir, 2017). Thus, while defining a word, the function of the word in the language is taken into account and a word definition is created according to that function. From a semantic/lexicographic point of view, the word is defined as the smallest independent meaning carrier that is coded in dictionaries (Demir & Yılmaz, 2012). Another definition describes it as “new language units in linguistic operations such as inflection, derivation, or combining, etc., which has the characteristics of a head word in dictionaries, and which are definite or widespread forms of writing and pronunciation” (Yılmaz, 2014). In both definitions, it is stated that the word has a headword feature with definitions in dictionaries. In the present research, according to the Turkish Language Institution Current Turkish Dictionary (CTD), the units defined as head words are accepted as words.

The main purpose of foreign language teaching is to enable the learner to communicate in the target language by improving their reading, listening, speaking, and writing skills. In order to achieve this, learners need to attain a sufficient level of vocabulary knowledge. This is because learners' vocabulary levels are seen as a criterion in terms of their proficiency in a foreign language and their language performance (Juanggo, 2018; Karadağ, 2018), and it is considered an important factor in the development of language skills, primarily of reading and listening (Cheng & Matthews, 2018; Castro-Garcia, 2017; Escobar, Kalashnikova & Escudero, 2018). Moreover, the depth and width of vocabulary knowledge are also indicators of second language speaking skills (Enayat & Derakhshan, 2021). In addition, it is known that vocabulary development activities improve learners' general language levels (Topkaraoğlu & Dilman, 2013; Masrai & Milton, 2018; McLean, Stewart, & Batty, 2020; Matthews, 2018; Koizumi & In'nami, 2013; Stæhr, 2008) and the comprehension levels of learners of Turkish as a foreign language are related to reading texts, but primarily reading words fluently (Ülper, 2018). Therefore, vocabulary teaching plays an important role in the success of foreign language teaching in relation to language skills. The content of the foreign language teaching program varies according to the foreign language learning purpose of the learners: as teaching for general communication purposes or for specific communication purposes. Academic language teaching is a sub-branch of language teaching for specific purposes

that is shaped according to the needs of learners in academic contexts such as education or the work environment. The difference between foreign language teaching for academic purposes and foreign language teaching for general purpose is that the curriculum is designed by focusing on the special communication needs of the learners in a certain academic context, rather than teaching a language for general purpose (Kocaman-Gürata & Durmuş, 2020). In this context, the term academic language typically refers to school or other academic communication environments where the content of knowledge is found, acquired, and applied (Heppt & Stanat, 2020). Although dimensions of general-purpose language and academic language overlap, the differences in the content and form of academic language significantly affect the performance levels of students (Demirel, 2020). The sophisticated vocabulary of academic language is a feature that distinguishes it from the basic language (Zucker, Carlo, Montroy & Landry, 2021). In addition, in terms of education, the qualifications of the educational materials in academic Turkish in terms of vocabulary are taken into account when designing a curriculum for the language that learners will use and encounter in academic environments in academic language teaching. Furthermore, it is important for learners to develop their academic vocabulary in academic Turkish lessons for the success of academic Turkish education.

### **Literature review**

#### **Academic Vocabulary**

Words are units of conceptual or functional value spread throughout the language. Thus, the frequency of use of words may vary according to the texts in which they are used, depending on their conceptual value. It is accepted that some words are used more frequently in academic texts than in other fields (Hyland & Tse, 2007) and words that are used more frequently in academic texts than in non-academic texts are classified as academic words (Malmström, Pecorari, & Shaw, 2018). These words, which become prominent in terms of use in academic texts, are named after being differentiated into general-purpose academic words and special-purpose academic words or academic words and technical words. Accordingly, the vocabulary in academic texts is divided into two categories: special-purpose academic words, which express words that are frequently used in certain disciplines, such as the word ‘mathematics’, and general-purpose academic words, which are commonly used in all disciplines, such as the word ‘examine’. Along with this distinction, in the literature, a distinction between academic words and technical words is also made. According to this, academic words are composed of academic texts, high school and university textbooks and journals, or vocabulary in academic texts other than general texts, while technical words represent words in special fields and specific disciplines such as law, mathematics, chemistry, and philosophy (Nation & Newton, 1996; Yang, 2015). Academic vocabulary is often functionalized as designated academic lexemes that students are likely to use at university (Skoufaki & Petrić, 2021). In general terms, academic vocabulary lists include words that are common in academic texts and do not have this commonality anywhere else such as ‘accumulate’, ‘achieve’, ‘compound’, ‘complex’, and ‘proportion’, while technical vocabulary refers to vocabulary that is useful for learners to use language for specific purposes, such as reading academic texts in certain

disciplines or attending conferences on certain topics (Nation, 2001). While there are academic words in a certain percentage in academic texts, they differ in terms of type, frequency, collocation, and meaning in different disciplines (Hyland & Tse, 2007). The fact that academic and technical words are found in academic texts in a certain ratio in terms of number (frequency and percentage) and usage (type, collocation, meaning) necessitates academic vocabulary teaching in order to understand academic texts. In the literature, it is stated that the vocabulary in the text should be known at the rate of 80-89% in order to understand listening texts and 95% in short texts (Bonk, 2000), but in later research (Schmitt, 2008) there are findings that at least 90% should be known for an ideal level of understanding. A sufficient level of academic vocabulary knowledge is required to attain 95%-98% of the vocabulary in the texts (Pecorari, Shaw & Malmström, 2019). In addition, improving academic vocabulary also contributes to students' academic writing (Vongpumivitch, Huang & Chang, 2009; Khani & Tazik, 2013). In the present research, word lists were extracted from the texts used in academic Turkish teaching and, with the help of these word lists, it was aimed to describe the position of academic words in Turkish in the texts used in teaching academic Turkish and to use them in teaching academic Turkish. Vocabulary lists are a method used in teaching vocabulary (Green, 2019; Lei & Liu, 2016). This method is helpful for learners in terms of where to start, especially at the beginner level, and is of great convenience to educators when preparing materials and textbooks (Brezina & Gablasova, 2013). The present research is important in terms of determining the numerical values of academic words in Turkish in academic texts based on the vocabulary in academic Turkish language sets, their conceptual description by separating them from terms and general usage words, and their application for teaching vocabulary and concepts in academic Turkish classes.

### **Methodology**

The research sample consists of the vocabulary in academic Turkish, social sciences, and engineering/health sciences textbooks. In this context, a total of 2000 different lexemes were obtained from the textbooks "Academic Turkish in Social Sciences for International Students (Volumes I-II)", published by Kültür-Sanat Bookstore for the field of social sciences, and the textbook "Academic Turkish Social Sciences for International Students", prepared by Can Ofset. A total of 1943 different lexemes were obtained from the textbook "Academic Turkish in Science and Health Sciences for International Students (Volume III)", published by the Culture-Art printing house, and "Academic Turkish Sciences for International Students" and "Academic Turkish Health Sciences for International Students", published by Can Ofset, in the field of engineering sciences and health sciences. Non-probability sampling was used in the research. In this type of sampling, the probability of the units entering the sample is not the same or the probability is unknown, so the results cannot be generalized to the population (Erkuş, 2017). In the research, inferences were made on the data and no generalization was made to any population. The research was descriptive, investigating the vocabulary in academic Turkish language sets in terms of academic words. The research was in relational research format. Relational research studies are those in which cause-effect relationships cannot be

established, and where change or control, even partial, is not possible due to its nature or practical reasons (Erkuş, 2017). In the research, the vocabulary between social sciences and engineering/health sciences within the scope of academic Turkish language sets was statistically compared.

### **Data collection and analysis**

The lexemes that make up the research data were obtained from the textbooks used in academic Turkish courses for students who will study at universities in Turkey: “Academic Turkish in Social Sciences for International Students I-II” and “Academic Turkish in Sciences and Health Sciences for International Students III,” which are created by Istanbul University, and the textbooks “Academic Turkish Sciences for International Students,” “Academic Turkish Social Sciences for International Students,” and “Academic Turkish Health Sciences for International Students,” prepared by Erciyes University.

The word list in the academic texts that constitute the research data is divided into 3 categories: general usage words, academic words, and technical words. Like Coxhead (2000), but based on the Turkish language, the first 2000 most frequently used words are accepted as general usage words. To determine this, the lexemes in each category were compared with the 2000 most frequently used lexemes in Turkish according to the Frequency Dictionary of Turkish (FDT) (Aksan, Aksan, Mersinli & Demirhan, 2017), and the words the same as these lexemes were marked as general usage words and excluded from the scope.

Academic words refer to words that are commonly used in different academic texts, while technical words refer to words that are commonly used in certain fields (Nation, 2001). In order to specify technical words, the word list forming the research data was compared with the Turkish Language Association Science and Art Terms Dictionary (TLA-SATD). TLA-SATD is an electronic dictionary that includes a total of 93 dictionaries of terms in various social, natural, engineering, and health sciences disciplines. Based on TLA-SATD, the words used as terms were marked as technical words and excluded from the scope. Vocabulary units other than general usage words and technical words were accepted as academic words and included in the research.

In order to collect these data, the textbooks were first converted into PDF files, and then the word lists in the textbooks in the research and the frequency of use of these words were obtained by using the programs ABBYY Fine Reader 9.0 and kFNgram. Within the scope of the research, first, the word list and frequency of the words in the social sciences and engineering/health sciences textbooks were specified, and the numbers of general usage, academic, and technical words in these fields were determined. By comparing the obtained vocabulary with the FDT and TLA-SATD, general usage and technical words in related fields were extracted. Accordingly, 1176 of the 2000 lexemes in the field of social sciences were marked as general usage words and 465 of them were marked as technical words; thus, 359 academic words were obtained, except for general usage words and technical words in the field of social sciences. In the field of engineering/health sciences,

1012 of 1943 lexemes were marked as general usage words and 643 as technical words, and the remaining 291 lexemes were accepted as academic words and included in the scope of the research. Then the obtained words and their frequencies were analyzed in terms of their conceptual properties and frequency values. Lexemes classified as social sciences and engineering/health sciences words were evaluated in terms of their percentages in their categories, the most frequently used word types, and conceptual features, and the differences in usage between social sciences and engineering/health sciences were analyzed with the Mann–Whitney U test.

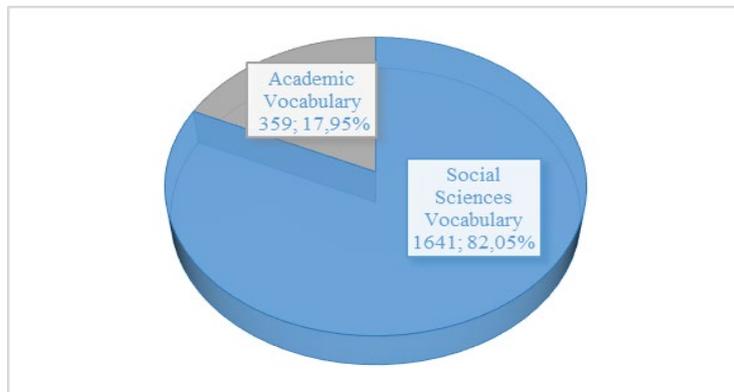
## Results

The numerical values of the lexemes in social sciences and engineering/health sciences textbooks used in academic Turkish lessons are shown below.

### Academic Vocabulary in Social Sciences

In the research, a total of 2000 different lexemes were listed from the words and verbs that have conceptual value from the “Academic Turkish in Social Sciences for International Students I-II” and “Academic Turkish Social Sciences for International Students” textbooks.

**Figure 1.** Academic Vocabulary in Social Sciences



According to Figure 1, there are 2000 words in total in the field of social sciences and 359 of these words are academic words, while the number of general usage and technical words is 1641. Academic words constitute 17.95% of the words in the field of social sciences numerically. Tables 1 and 2 show the 20 most frequently used words in academic Turkish social sciences textbooks that make up the social sciences corpus in the research.

**Table 1.** Social sciences corpus 10 most frequently used words list

Words	Frequency	Words	Frequency
1. ol- (to be/to have)	1516	6. et- (to make)	480
2. insan (human)	545	7. sosyal (social)	452
3. dil (language)	507	8. bilgi (information)	445
4. bilim (science)	490	9. yer (place)	444
5. metin (text)	481	10. aşağı (down)	386

As shown in Table 1, the verb ol- (to be/to have) is the most frequently used auxiliary verb in the field of social sciences and clearly differs in frequency from the

words that follow it. In the field of social sciences, the word *ol-* (to be/to have) is used either as a verb, as in "... problem olabilir (may be a problem), ... etkisi olabilir (may have an effect)", or as an auxiliary verb, as in "ait olduğu... (to belong), sahip olduğu... (to have)". The frequencies of the other words "*et-* (to make)" and "*yap-* (to do)", which are used as auxiliary verbs in Turkish, are lower than those of the verb *ol-* (to be/to have). It is seen that the verb *et-* (to make), with a frequency of 480, is used in auxiliary verb position, as in "dahil *et-* (to include) and ifade *et-* (to express)", and in idioms such as "göz ardı *et-* (to ignore)".

**Table 2.** Social sciences corpus 11-20 most frequently used words list

Words	Frequency	Words	Frequency
11. tartış- (to discuss)	51	16. ayrıl- (to leave)	45
12. tartışma (discussion)	51	17. kavrayabilme (ability to comprehend)	45
13. bırakıl- (to be left)	50	18. literatür (literature)	45
14. maliye (finance)	50	19. dayan- (to hang on)	39
15. yazıl- (to be written)	50	20. satın al- (to buy)	39

The verb *yap-* (to make), with a frequency of 255, is used as "...edebi yapan... (one engaged in literary)". The words "insan (human), dil (language), and önemli (important)", which are among the 20 most frequently used words in the field of social sciences, are among the words that learners can encounter outside of academic Turkish lessons; they are also used in everyday language. However, the words "metin (text), bilgi (information), kaynak (source), and etkinlik (activity)" are of important conceptual value in academic environments. It is noteworthy that these words are used with high frequency in academic texts in social sciences. The 20 most frequently used words in the Social Sciences corpus academic word list are shown in Tables 3 and 4.

**Table 3.** Social sciences corpus 10 most frequently used academic words list

Words	Frequency	Words	Frequency
1. yapıl- (to be done)	176	6. alın- (to be taken)	67
2. bulun- (to be found)	131	7. getiril- (to be brought)	60
3. tarihî (historical)	100	8. başla- (to start)	58
4. edil- (to be made)	76	9. ipucu (clue)	56
5. işaretle- (to mark)	71	10. görül- (to be seen)	55

In the list of the 20 academic words most frequently used in social sciences, passive verbs stand out. Four of the five most frequently used words are verbs (*yapıl-* (to be done), *bulun-* (to be found), *edil-* (to be made), and *işaretle-* (to mark)) and three of these verbs (*yapıl-* (to be done), *bulun-* (to be found), and *edil-* (to be made)) are passive. When examined in terms of frequency, the frequency of use of academic words changes gradually after the first three words. The fact that the words "metin (text), bilgi (information), kaynak (source), and etkinlik (activity)" in Table 1 in the academic word list were not included in the academic word list due to the meaning they have as terms caused an increase in the number of verbs in the 20 most frequently used academic word list. When the 359 academic words in the field of social sciences are examined in general, the most frequently used word is "*yapıl-* (to be done)", with 176 uses. This word, which is the passive form of the word "*yap-* (to make)", has been included in the list as a separate word since it is used as a headword in the GTS. While the word "*yap-* (to make)" is in first place

in the general list, the fact that the passive word “yapıl- (to be done)” is in the academic word list after the general usage and technical words are removed shows that this word and its derivatives appear in academic texts with a high frequency. Academic words in the field of social sciences include words that are used in academic texts such as "tarihi (historical)" and "ipucu (clue)" that do not have a specific use in a particular field.

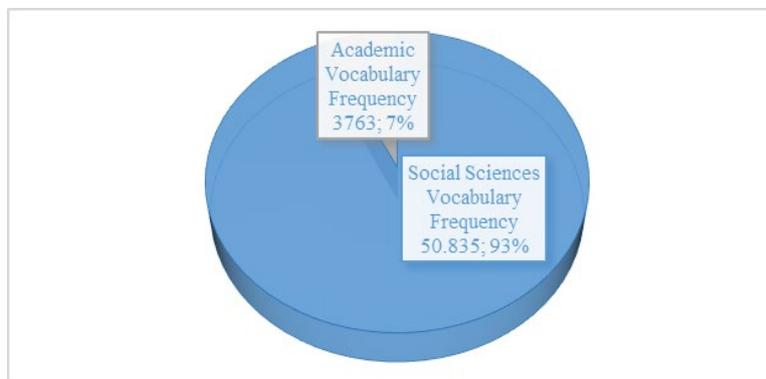
**Table 4.** Social sciences corpus 11-20 most frequently used academic words list

Words	Frequency	Words	Frequency
11. tartış- (to discuss)	51	16. ayrıl- (to leave)	45
12. tartışma (discussion)	51	17. kavrayabilme (ability to comprehend)	45
13. bırakıl- (to be left)	50	18. literatür (literature)	45
14. maliye (finance)	50	19. dayan- (to hang on)	39
15. yazıl- (to be written)	50	20. satın al- (to buy)	39

Academic words in the field of social sciences include words that have a more general meaning compared to the terms used in academic texts such as "katılımcı (participant)", "dinsel (religious)", and "kazanım (learning outcome)". When the verb usages in the academic word list in the field of social sciences are examined, it is seen that "bulun- (to be found)", with 131 repetitions, is the most frequently used verb except for the verb "yapıl- (to be done)". Moreover, the verb “edil- (to be made)” occurs with 76 repetitions in compound words such as “elde edil- (to be obtained), kabul edil- (to be accepted), tercih edil- (to be preferred), and ifade edil- (to be expressed)”. It is noteworthy that these words, which are most frequently used in academic verb usage in the field of social sciences, have a passive structure. Apart from these, there are active verbs such as “başla- (start), tartış- (discuss), dayan- (to hang on), and satın al- (to buy)” in the field of social sciences.

Within the scope of the research, the total vocabulary frequency in the field of social sciences and the frequency of use of academic words were specified and the result is shown in Figure 2.

**Figure 2.** Frequency of Use of Academic Words in the Field of Social Sciences



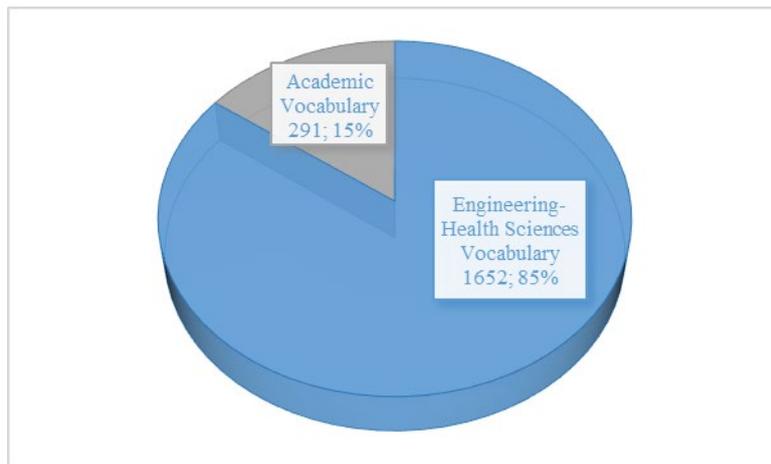
According to the figure above, the total frequency of use of 359 vocabulary units in the field of social sciences is 3763 and the frequency of use of general and technical words is 50,835. When the data are calculated in percentiles, the percentage of academic words in the field of social sciences is 7% in terms of frequency of use. From these findings, it is understood that the numerical percentage of academic words in the field of social sciences (17.95%) is significantly higher than the percentage of usage (7%). In this case, it can be

concluded that the frequency of use of academic words in the field of social sciences is lower compared to the number of words.

### Academic Vocabulary in Engineering/Health Sciences

In the present research, a total of 1943 different lexemes that have conceptual value were listed from the words and verbs in the “Academic Turkish in Engineering Sciences for International Students”, “Academic Turkish in Health Sciences for International Students”, and “Academic Turkish in Sciences and Health Sciences III” textbooks. Figure 3 shows the number and percentage of academic words in the field of engineering and health sciences.

**Figure 3.** Number and percentage of academic words in engineering/health science textbooks



According to Figure 3, 291 out of 1943 vocabulary units in the field of engineering/health sciences were listed as academic words and these academic words constitute 15% of the vocabulary in the field of engineering/health sciences. The total number of technical and general usage words in the field of engineering/health sciences is 1652. Technical and general usage words constitute 85% of the total vocabulary in engineering/health sciences.

**Table 5.** List of the 10 most frequently used words in the corpus of engineering/health sciences

Words	Frequency	Words	Frequency
1. ol- (to be/to have)	1241	6. etkinlik (activity)	584
2. bilim (science)	792	7. et- (to make)	444
3. metin (text)	721	8. aşağı (down)	431
4. böcek (bug)	710	9. sağlık (health)	411
5. akademik (academic)	628	10. iç (inside)	407

The most frequently used word in the vocabulary of the corpus of engineering/health sciences is the verb “ol- (to be/to have)” with 1241 repetitions and a clear difference. In the relevant textbooks, the verb in question is used as a verb, as in “... bilim olarak... (as a science) and ...metodolojik olarak...(methodologically)”, and as an auxiliary verb, as in “...yardımcı olur (helps)”. The auxiliary verb “et- (to make)”, which is in seventh place with 444 repetitions, is used in verbs such as “elde et- (to obtain) and takip et- (to follow)” in the relevant textbooks. Apart from this, it is seen that three of the first five words (bilim (science), metin (text), akademik (academic)) in the list of most frequently used academic

words in engineering/health sciences are words that have conceptual value in academic discourse.

**Table 6.** List of the 11-20 most frequently used words in the corpus of engineering/health sciences

Words	Frequency	Words	Frequency
11. bilgi (information)	391	16. bölüm (section)	284
12. Türkçe (Turkish)	374	17. konu (topic)	274
13. alan (field)	362	18. çalışma (study)	270
14. ilgili (related)	316	19. hastalık (illness)	255
15. kullanıl- (to be used)	286	20. kaynak (source)	252

Words such as "etkinlik (activity), alan (field), kaynak (source)", which are among the top 20 most frequently used words in engineering/health sciences textbooks, can also be evaluated in this way. When the verb usages are examined, it is seen that there is the passive verb "kullanıl- (to be used)", except for words that can be used as auxiliary verbs such as "ol- (to be/to have) and et- (to make)". In this respect, it can be said that there are mostly nouns with conceptual value in the list of engineering/health sciences.

**Table 7.** List of the 10 most frequently used academic words in the corpus of engineering/health sciences

Words	Frequency	Words	Frequency
1. kullanıl- (to be used)	286	6. yapıl- (to be done)	150
2. çalışma (study)	270	7. elde et- (to be obtained)	90
3. bulun- (to be found)	237	8. sosyal (social)	84
4. fen (natural sciences)	217	9. işaretle- (to mark)	80
5. veril- (to be given)	180	10. literatür (literature)	77

The most frequently used lexeme in the research is the verb "kullanıl- (to be used-)", with 286 repetitions. This word is followed "çalışma (study)", with 270 repetitions, and "bulun- (to be found)", with 237 repetitions. It is noteworthy that verbs such as "veril- (to be given, edil- (to be made), yapıl- (to be done), elde et- (to obtain), and işaretle- (to mark)" are in the majority in the ten most frequently used lexical units in the academic vocabulary list in the field of engineering/health sciences. This can be conceptually attributed to the fact that more terms are used in the field of engineering/health sciences than in the social sciences.

**Table 8.** List of the 11-20 most frequently used academic words in the corpus of engineering/health sciences

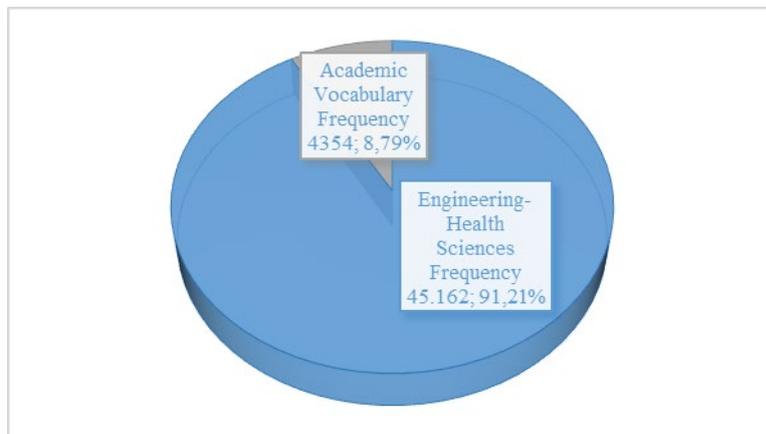
Words	Frequency	Words	Frequency
mühendislik (engineering)	70	getirebilme (to be able to bring)	46
görül- (to be seen)	59	isten- (to be wanted)	44
robotik (robotics)	58	belirt- (to indicate)	44
ayırt (distinguish)	57	edebilme (to be able to make)	43
robot (robot)	56	kavrayabilme (ability to comprehend)	42

When academic words other than general usage and technical words are examined in engineering/health sciences textbooks, it is seen that three of the first five most frequently used words (kullanıl- (to be used), bulun- (to be found), and veril- (to be give)) are verbs and these verbs are in passive form. Then come the verbs "yapıl- (to be done), elde et- (to obtain), işaretle- (to mark), görül- (to be seen), isten- (to be wanted), and belirt- (to indicate)" in the list.

Academic words in engineering/health sciences are similar to those in the field of social sciences in terms of passive verb usage. In this respect, it appears that there is a certain standard in the academic Turkish language structure. In the list, it is seen that the words that are frequently used in academic environments such as "çalışma (study), ayırt (distinguish), kavrayabilme (ability to comprehend), fen (natural sciences), and sosyal (social)" and academic words that fall into the field of engineering such as "robotik (robotics) and robot (robot)" are used.

In the list of academic words in the field of natural sciences and health sciences, there are words that are in more general use in academic texts such as "anlayabilme (ability to understand), kavrayabilme (ability to comprehend), and uygun (appropriate)" along with the words "mühendislik (engineering), robotik (robotics), astrolog (astrologist)". In the use of verbs, it is understood that active and passive verbs such as "tartış- (to discuss), dikkate al- (to take into account), bırakıl- (to be left), and sağlan- (to provide)" and mostly verbs expressing actions in academic discourse are dominant. Within the scope of the research, it was seen that 1943 lexemes are used 49,516 times in the field of engineering and health sciences. The numerical information on the use of academic words and technical and general usage words in the engineering/health sciences corpus is shown in Figure 4.

**Figure 4.** Frequency and frequency percentage of academic words in engineering/health sciences textbooks



According to the chart above, the total frequency of academic words in the field of engineering/health sciences is 4354. The frequency of academic words constitutes 8.79% of the engineering/health sciences corpus. The total usage frequency of technical and general usage words in the field of engineering/health sciences is 45.162 and the percentage is 91.21%. While academic words in the field of engineering/health sciences constitute 15% of the total vocabulary in this field, they constitute 8.29% in terms of use. In this case, academic words in the field of engineering/health sciences also decrease significantly in terms of use.

### Academic Vocabulary Frequency Differences

Within the scope of the research, the total word difference between social sciences and engineering/health sciences was analyzed with the Mann–Whitney U test. The result is shown in Table 9.

**Table 9.** Mann–Whitney U table showing the difference between the frequencies of the lexemes in the fields of social sciences and engineering/health sciences

Social Sciences and Engineering /Health Sciences Total Number of Lexemes	N	Mean	Minimum	Maximum	Z	p
Social Sciences	2000	27.29	1	1516	-1.131	.258
Engineering and Health Sciences	1943	25.48	1	1241		

According to Table 5, the average frequency of 2000 lexemes in the field of social sciences is 27.29 and the average frequency of 1943 lexemes in the field of engineering/health sciences is 25.48. While the lexemes in both fields are used at least once, the most frequently used lexeme in the field of social sciences is used 1516 times, and in the field of engineering/health sciences it is used 1241 times. There is no statistically significant difference between the frequencies of the total lexemes in the field of social sciences and the lexemes in the field of engineering/health sciences ( $p.258 > p.05$ ). From these findings, it is understood that the vocabulary in social sciences textbooks and engineering/health sciences textbooks shows a balanced distribution in terms of their frequencies.

**Table 10.** Mann–Whitney U table showing the difference between the frequencies of academic vocabulary in the fields of social sciences and engineering/health sciences

Academic Vocabulary in the Fields of Social Sciences and Engineering /Health Sciences	N	Mean	Minimum	Maximum	Z	p
Social Sciences	359	10.42	1	176	-1.410	.158
Engineering/Health Sciences	291	14.96	2	286		

According to Table 9, while the average of 359 academic words in the field of social sciences is 10.42, the minimum number of uses is 1, and the maximum number of uses is 176. The number of academic words in the field of engineering/health sciences is 291, the minimum number of uses is 2, and the maximum number of uses is 286. The average number of uses of academic words in the field of engineering/health sciences is 14.96. There is no statistically significant difference between the frequency of use of academic words in social sciences and engineering/health sciences ( $p.158 > p.05$ ). Thus, academic words have a balanced distribution within their fields.

## Discussion

In academic vocabulary studies, first of all, it is necessary to decide which words are academic words. Studies on academic vocabulary have increased in recent years, but it is not easy to create a definite definition of the concept of academic vocabulary. In academic vocabulary studies, academic words are distinguished from words with a high frequency of use in everyday language (Coxhead, 2000; Gardner & Davies, 2015). In this respect, academic words are separated from general usage words in the research. Academic words are also separated from technical words that have the meaning of terms and express the

vocabulary that is used in academic texts but differs from the high frequency words covering the texts in general and terms specific to various disciplines. It is seen that these academic words lexically constitute 17.95% of the texts in social sciences and 15% in engineering/health sciences. It is understood that it constitutes a significant percentage of the texts in terms of the number of single uses. However, in terms of frequency, it decreases to 7% in social sciences and 8.79% in engineering/health sciences. This shows that the frequency of use of words is low, but it is at a significant percentage in terms of single use. This finding is compatible with the finding reported by Coxhead (2000, p. 214) concerning English language: “Academic words (e.g., substitute, underlie, establish, inherent) are not highly salient in academic texts, as they are supportive of but not central to the topics of the texts in which they occur”. Considering the findings of other studies (Bonk, 2000; Schmitt, 2008; Pecorari, Shaw & Malmström, 2019) investigating the relationship between vocabulary knowledge and comprehension, it is possible to say that percentages such as 15% and approximately 18% in terms of single uses are quite decisive. Within the scope of the present research, it was determined that both the total vocabulary frequencies ( $p.258 > p.05$ ) and academic word frequencies ( $p.158 > p.05$ ) in social sciences and engineering/health sciences do not have a statistically significant difference. The absence of a significant difference between the total vocabulary frequencies indicates that the vocabulary in academic texts does not change in terms of disciplines. In addition, academic vocabulary does not differ in terms of frequency on the basis of disciplines either. This enables a generalization of 7%-8% in terms of the frequency percentages of academic words in the texts. This number is also in line with the implications of other studies on English language (Nation, 2001; Hyland & Tse, 2007). From a conceptual point of view, it can be concluded that academic words, with words such as sözlü (verbal), kazanım (outcome), faydalı (useful), belirgin (distinctive), and esaslı (essential), have the characteristics of giving academic quality to written and oral discourse, increasing the impact of the discourse, and, in this respect, it affects the pragmatic aspect of academic discourse. However, there are also words open to discussion regarding the clear distinctions between their category as academic words and terms, such as Hristiyanlık (Christianity), tüzel (corporate), and epigrafi (epigraphy). Since these words are not included as terms in the TDK Science and Art Terms Dictionary, they are listed as academic words. However, they are words worth discussing in terms of conceptual value.

In the present research, finally, a list of words obtained from the textbooks that make up the research corpus and suggested to be used in concept teaching in academic Turkish lessons is presented. Word lists are a technique used especially in purposeful vocabulary teaching. Most word lists are used to determine the purpose of vocabulary teaching, evaluate vocabulary knowledge and its improvement, analyze text difficulty and richness, create and adapt reading materials, design vocabulary teaching tools, decide on the vocabulary of academic curriculum items, and meet other important academic needs (Gardner & Davies, 2014). In addition, by examining the academic word list produced, it is possible to evaluate the academic words presented to the learners in academic Turkish lessons with different studies.

## Conclusion

As a result of the research, academic words with a numerically distinctive feature have been listed, unlike the high frequency words and terms used in everyday language used in academic texts. It is difficult to determine precise boundaries in terms of semantics when distinguishing between academic words and technical words (terms). However, apart from the term feature, it is also a fact that there are words whose frequency of use becomes evident in academic texts compared to the vocabulary in everyday language, and, accordingly, there are words that are used prominently both in academic environments and in the discourses of people with a high level of education. It is seen that these words, which are accepted as academic words, have a lower frequency of use (7%-8%) than the number of lexical uses (15%-18%), but are in a decisive position in terms of improving academic comprehension and expression skills when the number of single uses is taken into account. According to the results of the present research, it is seen that these Turkish words, which do not differ according to the academic types of the texts, are close to English language in terms of frequency of use and the number of occurrences in the texts. In addition, it is understood that academic words generally differ from terms and general usage words in terms of conceptual and usage frequency, and they are in a decisive position regarding academic comprehension skills considering their usage percentages in Turkish academic language.

#### References

- Aksan, Y., Aksan, M., Mersinli, Ü. & Demirhan, U. U. (2017). *A Frequency dictionary of Turkish core vocabulary for learners*. Routledge Pub.
- Alipoor, R. & Jadidi, E., (2016). The Relationship between Iranian EFL Teachers' Reflection and their Cognition about Vocabulary Teaching Style. *Procedia - Social and Behavioral Sciences*, 232, 769 – 775, doi: 10.1016/j.sbspro.2016.10.104
- Beach, K. D., Sanchez, V., Flynn, J. L. & O'Connor E. (2015). Teaching academic vocabulary to adolescents with learning disabilities. *Teaching Exceptional Children*, Vol. 48, No. 1, pp: 36-44.
- Bonk, W. (2000). Second Language Lexical Knowledge and Listening Comprehension. *International Journal of Listening*, 14(1), 14-31. Doi: 10.1080/10904018.2000.10499033
- Brezina, V. & Gablasova, D. (2013). Is There a Core General Vocabulary? Introducing the New General Service List. *Applied Linguistics* 36(1), 1–23. Doi: 10.1093/applin/amt018
- Castro-García, D. (2017). Receptive vocabulary measures for EFL Costa Rican high school students. *International Journal of English Studies*, 17(2), 81–99. 10.6018/ijes/2017/2/265681
- Cheng, J. & Matthews, J. (2018). The relationship between three measures of L2 vocabulary knowledge and L2 listening and reading. *Language Testing*, 35(1), 3-25. <https://doi.org/10.1177/0265532216676851>.
- Coxhead, A. (2000). A New Academic Word List. *TESOL Quarterly*, 34(2), 213-238. Doi: 10.2307/3587951
- Demir, N. (2017). Temel Kavramlar [Basic Concepts]. In H. Pilancı (Eds.), *Türkçe Biçim Bilgisi*, (pp. 2-25). Anadolu Üniversitesi yayıncılık.
- Demir, N. & Yılmaz, E. (2012). *Türk dili el kitabı* [Turkic Language Handbook]. Grafiker Yayıncılık.

- Demirel, G. (2020). Akademik Türkçe derslerinin kapsamı ve uygulama örnekleri [A scope of academic Turkish lessons and examples]. In B. Tüfekçioğlu (Eds.), *Akademik amaçlar için Türkçe öğretimi* (pp. 89-100). Ankara: Pegem Akademi.
- Enayat, M. J. & Derakhshan, A., (2021). Vocabulary size and depth as predictors of second language speaking ability. *System* 99(1), pp: 1-11. Doi: 10.1016/j.system.2021.102521
- Erkuş, A. (2017). *Davranış bilimleri için bilimsel araştırma süreci*. [Scientific research process for behavior sciences]. Seçkin Yayıncılık
- Escobar, G. P., Kalashnikova, M. & Escudero P. (2018). Vocabulary matters! the relationship between verbal fluency and measures of inhibitory control in monolingual and bilingual children. *Journal of Experimental Child Psychology* 170, 177–189. 10.1016/j.jecp.2018.01.012
- Gardner, D. & Davies, M., (2014). A New Academic Vocabulary List, *Applied Linguistics* 35/3: 305–327.
- Green, C. (2019). Enriching the academic wordlist and secondary vocabulary lists with lexicogrammar: Toward a pattern grammar of academic vocabulary. *System* 87(1), 1-10. Doi: 10.1016/j.system.2019.102158
- Heppt, B. & Stanat, P., (2020). Development of academic language comprehension of German monolinguals and dual language learners. *Contemporary Educational Psychology*, 62, July, pp: 1-15. Doi: 10.1016/j.cedpsych.2020.101868
- Hyland, K. & Tse, P. (2007). Is There an "Academic Vocabulary"?, *TESOL Quarterly*, 41(2) pp. 235-253.
- İmer, K., Kocaman, A. & Özsoy, A. S. (2011). *Dilbilim Sözlüğü* [Linguistics dictionary]. İstanbul: Boğaziçi Ünv. Yay.
- Jackson, H. (2016). *Sözlükbilime giriş* [Introduction to lexicography]. (Trans. Gürlek, M. & Patat, E.) Kesit Yay.
- Juanggo, W. (2018). Investigating lexical diversity and lexical sophistication of productive vocabulary in the written discourse of Indonesian EFL learners. *Indonesian Journal Of Applied Linguistics*, 8(1), 38-48. Doi: 10.17509/ijal.v8i1.11462.
- Karadağ, Ö. (2018). Dil eğitimi araştırmaları için bir değişken önerisi: Kelime hazinesi katsayısı [A Variable Suggestion for Language Education Research: Vocabulary Coefficient]. *Ana Dili Eğitimi Dergisi*, 6(2), 532-537. Doi: 10.16916/aded.372078.
- Khani, R. & Tazik, K. (2013). Towards the Development of an Academic Word List for Applied Linguistics Research Articles. *RELC Journal*, 44(2) 209–232. Doi: 10.1177/0033688213488432
- Kocaman Gürata, E., & Durmuş, M. (2020). Özel amaçlı yabancı/ikinci dil öğretimi kapsamında akademik amaçlı Türkçenin yeri [The position of Turkish for academic purposes within the scope of foreign/second language teaching for specific purposes]. In B. Tüfekçioğlu (Ed.), *Akademik amaçlar için Türkçe öğretimi*, (pp. 41-66). Pegem Akademi.
- Koizumi, R. & In'nami, Y. (2013). Vocabulary knowledge and speaking proficiency among second language learners from novice to intermediate levels. *Journal of Language Teaching and Research*, 4(5), 900-913. Doi: 10.4304/jltr.4.5.900-913.
- Lei, L. & Liu, D. (2016). A new medical academic word list: A corpus-based study with enhanced methodology. *Journal of English for Academic Purposes*, 22. 42-53. Doi: 10.1016/j.jeap.2016.01.008
- Malmström, H., Pecorari, D. & Shaw, P., (2018). Words for what? Contrasting university students' receptive and productive academic vocabulary needs. *English for Specific Purposes*, 50(1), 28-39. Doi: 10.1016/j.esp.2017.11.002.

- Masrai, A. & Milton, J. (2018). Measuring the contribution of academic and general vocabulary knowledge to learners' academic achievement. *Journal of English for Academic Purposes*, 31(1), 44-57. Doi: 10.1016/j.jeap.2017.12.006
- Matthews, J. (2018). Vocabulary for listening: Emerging evidence for high and mid-frequency vocabulary knowledge. *System*, 72(1), 23-36. Doi: 10.1016/j.system.2017.10.005.
- McLean, S., Stewart, J. & Batty, A. O. (2020). Predicting L2 reading proficiency with modalities of vocabulary knowledge: A bootstrapping approach. *Language Testing*, 37(3), 389-411. Doi: 10.1177/0265532219898380.
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- Nation, P. & Newton, J. (1996). Teaching vocabulary. In J. Coady & T. Huckin (Eds.), *Second Language Vocabulary Acquisition*, (pp. 238-254). Cambridge University Press.
- Pecorari, D., Shaw, P. & Malmström, H. (2019). Developing a new academic vocabulary test. *Journal of English for Academic Purposes*, 39, 59-71. Doi: 10.1016/j.jeap.2019.02.004
- Schmitt, N. (2008). Instructed Second Language Vocabulary Learning. *Language Teaching Research*, 12(3), 329-363. Doi: 10.1177/1362168808089921
- Skoufaki, S. & Petrić, B. (2021). Academic vocabulary in an EAP course: Opportunities for incidental learning from printed teaching materials developed in-house. *English for Specific Purposes*, 63, 71-85. Doi: 10.1016/j.esp.2021.03.002
- Stæhr, L. S. (2008). Vocabulary size and the skills of listening, reading and writing. *Language Learning Journal*, 36(1). 139-152, 10.1080/09571730802389975
- Topkaraoğlu, M. & Dilman, H. (2013). Sözcük geliştirme aktivitelerinin öğrencilerin sahip oldukları genel dil seviyeleri üzerindeki etkisi [Effects of studying vocabulary enhancement activities on students' general language proficiency levels]. *Batı Anadolu Eğitim Bilimleri Dergisi (BAED)*, 4(8), 15-29.
- Turkish Language Association, (2021, May). Current Turkish Dictionary. <https://sozluk.gov.tr/>
- Turkish Language Association, (2021, May). Turkish Language Association Science and Art Terms Dictionary. <https://sozluk.gov.tr/>
- Ülper, H. (2018). Yabancı dil olarak Türkçe öğrenen öğrencilerin akıcı sözcük ve metin okuma becerileriyle kavrama becerileri arasındaki ilişkinin karşılaştırılması [Comparison of the Relationship between Word Reading Fluency and Text Reading Fluency of Students Learning Turkish as a Foreign Language]. *Dil Eğitimi ve Araştırmaları Dergisi*, 4(1), 1-11.
- Vongpumivitch, V., Huang, J-Y & Chang, Y-C. (2009). Frequency analysis of the words in the Academic Word List (AWL) and non-AWL content words in applied linguistics research papers. *English for Specific Purposes*, 28(1), 33-41. Doi: 10.1016/j.esp.2008.08.003
- Yang, M. N. (2015). A nursing academic word list. *English for Specific Purposes* 37(1) pp. 27-38. Doi: 10.1016/j.esp.2014.05.003
- Yılmaz, E. (2014). *Temel Dil Bilgisi Terimleri Sözlüğü* [Basic Grammar Dictionary]. Pegem Akademi.
- Zucker, T. A., Carlo M. S. Montroy, J. J. and Landry, S. H. (2021). Pilot test of the Hablemos Juntos Tier 2 academic language curriculum for Spanish-speaking preschoolers. *Early Childhood Research Quarterly*, 55, 179-192. Doi: 10.1016/j.ecresq.2020.11.009

## Appendices

### Appendix A. The Academic Word List in Social Science

yapıl-	176	bulunabilme	18	ilişkili	9
bulun-	131	sözlü	18	kullanabilme	9
tarihî	100	aktör	17	kurumsal	9
edil-	76	amaçlı	17	numaralı	9
işaretle-	71	araştır-	17	reklamcılık	9
alın-	67	askerî	17	ahlâki	8
getiril-	60	kurul-	17	basit	8
başla-	58	propaganda	17	başlıklı	8
ipucu	56	anlat-	16	beklen-	8
görül-	55	m.ö	16	belirgin	8
tartış-	51	entelektüel	15	esaslı	8
tartışma	51	kıt	15	filozof	8
bırakıl-	50	davranışsal	14	hristiyanlık	8
maliye	50	endüstriyel	14	karşılanma	8
yazıl-	50	arkeolog	13	kurulu	8
ayrıl-	45	hitap	13	örgütsel	8
kavrayabilme	45	mevcut	13	popüler	8
literatür	45	sosyokültürel	13	sayıl-	8
dayan-	39	zıtlık	13	tasnif	8
satın al-	39	dinsel	12	tramvay	8
ebedî	35	katılımcı	12	tüzel	8
ayırt	34	odaklan-	12	video	8
robot	34	oluşturabilme	12	yakalı	8
isten-	32	sunul-	12	adlı	7
belirt-	31	uygulan-	12	ağırlıklı	7
madenî	31	adlandırıl-	11	asıl	7
dikkate al-	30	düşünsel	11	bağlantılı	7
eşleştir-	29	genişletebilme	11	duyul-	7
tatmin	29	gösteril-	11	geçebilme	7
oluştur-	28	hazırlan-	11	hristiyan	7
üretil-	28	insanoğlu	11	ibadet	7
arkeolojik	27	kazanım	11	ihlâl	7
mitolojik	27	yaşan-	11	istenil-	7
felsefî	24	erdemli	10	kapsamlı	7
türlü	24	geliştiril-	10	kıymetli	7
incelen-	23	kronolojik	10	oluşturma	7
okuyabilme	23	örf	10	sosyolojik	7
belirlen-	22	özetleyebilme	10	sözde	7
ilâhiyat	22	söylen-	10	sürelî	7
kamusal	22	tanımlayıcı	10	şüphesiz	7
meydana gel-	22	temsili	10	yaratma	7
e-tandem	22	bilin-	9	yürütül-	7
karşılaş-	20	blog	9	aktarabilme	6
anlayabilme	19	düşünül-	9	anlaşıl-	6
finansal	19	faydalı	9	anlatıl-	6

arttırılma	6	seramik	5	sebebiyle	4
başlan-	6	sistemli	5	seçmeli	4
belirlenme	6	söz dizimsel	5	sekreterlik	4
belirtil-	6	temelli	5	sınıflandırıcı	4
binlerce	6	toplan-	5	sigortacılık	4
denil-	6	yorumlanma	5	sözel	4
eğlendirme	6	akılsal	4	sözleşmeci	4
fail	6	algılan-	4	şan	4
fişleme	6	amaçlan-	4	tahkim	4
hızlıca	6	anayasal	4	tahsis	4
icra	6	asgari	4	takdirde	4
ilgilendir-	6	ayrıntılı	4	tamamla-	4
iliş-	6	başarısız	4	teamül	4
itibarıyla	6	benimse-	4	tekrarlan-	4
kazandır-	6	benzeri	4	uşak	4
kökenli	6	birleşmiş	4	vaat	4
nitelendiril-	6	bulunma	4	web	4
partner	6	coğrafi	4	yayımlan-	4
sürdür-	6	çeşitlilik	4	âdeta	3
vazgeçil-	6	çevrilme	4	adil	3
yansıtabilme	6	değerlendiril-	4	aktarıl-	3
yapılma	6	değerlendirilme	4	algılayış	3
alanyazın	5	devamsızlık	4	algısal	3
azalma	5	eklektisizm	4	alışılmış	3
başarılı	5	farkındalık	4	anlamlandırabilme	3
başlı	5	geçir-	4	aş-	3
bekçi	5	hukuksal	4	aşamalı	3
bilinçli	5	iradi	4	bakıl-	3
dakikalık	5	islami	4	çözümleyebilme	3
derviş	5	iyileştir-	4	değerli	3
devletlerarası	5	katılabilme	4	denizcilik	3
dilbilimci	5	kıl-	4	detaylı	3
epigrafi	5	kıyas	4	dilsel	3
fen	5	küçümse-	4	diploması	3
finans et-	5	mahrum	4	diplomatik	3
getirme	5	mahsur	4	dizayn	3
girebilme	5	mahsus	4	durul-	3
ilişkilendiril-	5	mahzur	4	duyuşsal	3
izah	5	mevhum	4	dünyevi	3
izlenme	5	modernite	4	düzenlen-	3
konul-	5	motive	4	elektrikli	3
kuralcı	5	mütekamil	4	eleştirel	3
kütüphane	5	nitelikli	4	enerjik	3
manevi	5	ruhsal	4	erdemsiz	3
mecbur	5	sade	4	format	3
neden-sonuç	5	sanatsal	4	geçersizlik	3
nihai	5	sarf et-	4	geçin-	3
ölçekli	5	sayılı	4	geçirme	3

gelişmişlik	3	makroekonomik	3	staj	3
gereksiz	3	maruz	3	sürül-	3
gerektir-	3	masraf	3	tanrısal	3
hareketli	3	mefhum	3	tarafsız	3
hazırlayabilme	3	mesleki	3	teelif	3
icat	3	milyon	3	telsiz	3
ideolojik	3	modernleşme	3	teoloji	3
iletil-	3	muhtelif	3	tesir	3
imparator	3	münhasır	3	teşkil	3
inceleyebilme	3	müracaat	3	tıbbi	3
islamiyet	3	mütekamillik	3	tonoz	3
istatistiksel	3	niceliksel	3	unutul-	3
istikrarlı	3	nüfuz	3	ustalık	3
işlen-	3	öncelikli	3	uyarınca	3
ithal	3	örgütlenme	3	uyulma	3
kablolu	3	peşin	3	vagon	3
karlı	3	plaka	3	vazife	3
karmaşıklaş-	3	planlı	3	vergileme	3
kastedil-	3	politikacı	3	vergilendirilme	3
kazanma	3	sağlanma	3	yaşat-	3
kestirme	3	sanıl-	3	yayınlanma	3
kolayca	3	satım	3	yenilikçi	3
koordine	3	seçil-	3	yorumlan-	3
kripto	3	serbestçe	3	yönetmel-	3
kumaş	3	sırasıyla	3	yüzlerce	3
kurulma	3	sofist	3	meydana çıkar-	1
lisansüstü	3	solu-	3		

## Appendix B. The Academic Word List in Engineering-Health Sciences

kullanıl-	286	belirt-	44	sağlan-	23
çalışma	270	edebilme	43	üretil-	22
bulun-	237	kavrayabilme	42	yazabilme	22
fen	217	tartış-	40	yenilen-	21
veril-	180	anlayabilme	39	başlıklı	20
yapıl-	150	dikkate al-	35	endüstriyel	20
elde et-	90	yapabilme	34	kazanım	20
sosyal	84	alın-	32	meydana gel-	20
işaretle-	80	uygun	31	bilin-	19
literatür	77	tarihi	30	den-	19
mühendislik	70	anlamlı	29	elektrikli	19
görül-	59	bırakıl-	29	geliştiril-	19
robotik	58	cevapla-	28	yazıl-	19
ayırt	57	resmî	28	kullanılma	18
robot	56	dayan-	26	zararlı	18
getirebilme	46	kirlilik	26	saptan-	17
isten-	44	okuyabilme	24	tanımlan-	16

tıbbi	16	kökenli	9	yansıtabilme	6
adlandırıl-	15	numaralı	9	aktarabilme	5
bulaş-	15	oluşturul-	9	bildiril-	5
gösteril-	15	tesir	9	detaylı	5
kullanabilme	15	yetiştiril-	9	farklılaş-	5
entelektüel	14	birleşmiş	8	fizikçi	5
geçebilme	14	çeşitlilik	8	hassas	5
ilişkili	14	düzenlen-	8	kalp-damar	5
zamanlı	14	katılabilme	8	kanserli	5
geliştirilme	13	milyon	8	memnuniyet	5
hazırlan-	13	oluşturma	8	müşahede	5
maruz	13	som	8	OK uygulaması	5
anlatıl-	12	sosyo-kültürel	8	önle-	5
aziz	12	sözlü	8	özelleşmiş	5
çevresel	12	algılan-	7	rehabilite	5
düşünül-	12	anlat-	7	sayıl-	5
fişleme	12	ayrıntılı	7	sıkça	5
glutensiz	12	belirleyebilme	7	sınıflandırılma	5
güvenli	12	benzeri	7	yararlan-	5
kronolojik	12	değerli	7	yayımlan-	5
odaklan-	12	entegre	7	yoluyla	5
özetle-	12	güvenilir	7	yönetil-	5
ruhsal	12	psikolojik	7	alınma	4
türlü	12	robot-cerrah	7	bakıl-	4
beklen-	11	sözde	7	barındır-	4
belirlenme	11	tamir	7	belirlen-	4
boyutlu	11	yataklı	7	bertaraf	4
denil-	11	zıtlık	7	bileşenli	4
genişletebilme	11	anlamlandırabilme	6	çaplı	4
oluşturabilme	11	anlaşıp-	6	elektriksel	4
sıklıkla	11	artırıl-	6	file	4
tanımlayıcı	11	atıl-	6	hasarlı	4
yeterli	11	başlan-	6	hitap	4
adlı	10	belirtil-	6	hücreli	4
alanyazın	10	binlerce	6	ihtiva	4
batırma	10	değerlendirilme	6	ilik	4
derviş	10	getirme	6	kapsamlı	4
girebilme	10	gösterebilme	6	kesitsel	4
incelenme	10	hedeflen-	6	mahrum	4
kütüphane	10	ıslah	6	milyar	4
nakil	10	imal	6	nitelikli	4
tanın-	10	izafiyet	6	nörogelişimsel	4
aktarılma	9	lisansüstü	6	nükleer	4
amaçlan-	9	ölçekli	6	önlenme	4
amaçlı	9	saptanma	6	rahatlıkla	4
ciddi	9	sebep	6	sosyo-ekonomik	4
dağıtık	9	sürelili	6	sözel	4
kıyasla-	9	uğraş-	6	sunili	4

sunul-	4	eleştirel	3	kolayca	3
tamamla-	4	etkilen-	3	konulu	3
tarihsel	4	etkinli	3	koşullandırma	3
telif	4	faydalı	3	mahsul	3
toplumcu	4	feza	3	mesnetsiz	3
tüketilme	4	fren	3	milyonlarca	3
yaralı	4	gelirli	3	muhtemelen	3
asgari	3	gerçekleştiril-	3	odaklı	3
asılma	3	gönderilme	3	okun-	3
ateşli	3	görülme	3	pdf	3
atıl	3	gözlen-	3	psikiyatrik	3
azalma	3	güneşli	3	sedye	3
azaltılma	3	haberdar	3	sıralan-	3
azami	3	hatalı	3	silindirik	3
başlatıl-	3	hazırlayabilme	3	spss	3
batırıl-	3	hazırlıklı	3	staj	3
bilgilendirici	3	ikna edici	3	şarj	3
bilimci	3	ilerledikçe	3	şimdiki	3
birleştirilme	3	imzala-	3	tahrip	3
bulutlu	3	imzalan-	3	teşkil	3
çevrele-	3	incelen-	3	tolere et-	3
çıkarılma	3	isimli	3	uygulan-	3
çizili	3	istatistiki	3	video	3
çözümleyebilme	3	istenil-	3	yapıcı	3
dakikalık	3	kanamalı	3	yararlı	3
damıt-	3	kandır-	3	yaşan-	3
değerlendiril-	3	katil	3	yemle-	3
denizcilik	3	kavlak	3	yetiştirmecilik	3
desteklenme	3	kayıpsız	3	yöneticilik	3
dilsel	3	kazandır-	3	yürütül-	3
duyul-	3	kilolu	3	bertaraf et-	2
eklemle-	3	kireçleştirme	3	emin ol-	2



## Processing of Subject and Object Case Markers in Turkish

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### ABSTRACT

There is no consensus in terms of processing subject-object case markers (Bornkessel, et al., 2004; Schlesewsky & Frisch, 2005; Mueller, et al., 2005; Chow, et al., 2018). The purpose of this study is to determine how [ $\pm$ DEF] objects affect the processing cost and to reveal whether there is a processing difference in subject-object case markers. In the first analysis, it is observed that [+DEF] objects are processed easier than [-DEF] objects. Possible reasons are different definiteness and specificity of [ $\pm$ DEF] objects and [-DEF] objects creating pseudo incorporation with the verb, which causes additional processing cost. In the second analysis, it is observed that subject case creates more processing cost than object case. It is thought that the subject case assignment taking place in TP and object case in VP, linear distance between the subject and the verb, and involvement of extra features in subject case assignment may cause this difference.

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### Statement of Publication Ethics

This study was conducted in accordance with publication ethical principles. All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (İstanbul University Social and Humanities Research Ethics Committee) and with the Helsinki Declaration of 1975, as revised in 2000. The committee approval was received on 19/06/2020- issue: 68637. Before the data was collected, informed consent was obtained from all patients for being included in the study.

### Authors' Contribution Rate

The authors equally contributed for the article.

### Conflict of Interest

There is no conflict of interest in this study.

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## Introduction

Although interpreting language is a process that takes place very quickly and effortlessly, this process is actually very complex. For this reason, different methods are used to explain the processing of the language, especially in recent years.

It is noteworthy that agreement and case assignment processes are among the topics studied extensively on the processing of syntactic structures in the literature. Agreement, with its most general definition, is expressed as the matching of morphological signs that reflect the relationship of the word in a sentence with other arguments in that sentence (Baker, 2013). The co-variance feature of agreement provides the opportunity to establish relationships between non-adjacent elements (Carreiras, Salillas, & Barber, 2015); in other words, it allows the matching of person, number, gender ( $\phi$ -features) and case features among structures that are not in a contiguous relationship in the syntax. There are many studies in the literature that examine the matching relationship of features such as person, number or gender between the verb and the argument structure (Kutas & Hillyard, 1983; Carreiras, Quiñones, Mancini, Hernández-Cabrera, & Barber, 2004; Frenck-Mestre, Osterhout, McLaughlin, & Foucart, 2008). Moreover, it is also possible to mention studies that examine the processing of differences created by the agreement of  $\phi$ -features between the subject and the verb (Hagoort, 2003; Pereyra, Klarman, Lin, & Kuhl, 2005; Nevins, Dillon, Malhotra, & Phillips, 2007; Frenck-Mestre et al., 2008; Zawiszewski & Friederici, 2009; Molinaro, Barber, & Carreiras, 2011; Aygüneş, 2013; Mancini, Molinaro, & Carreiras, 2013).

Another feature that agreement is frequently mentioned together is the case markers. Case markers are defined as the determination of the grammatical functions of an argument such as subject and object in a sentence (Spencer & Zwicky, 1998) and case assignment process is referred to as a highly interactive field that can affect all syntactic, morphological and semantic processes (Frisch & Schlesewsky, 2005). Especially, in the languages where free word order is possible, the word order does not provide a valid clue about the syntactic function of the arguments of the sentence, it is also necessary to analyse the case markers correctly to determine this function (Díaz, Sebastián-Gallés, Erdocia, Mueller, & Laka, 2011).

Considering the issue in Turkish framework, it is known that Turkish has a rich case marker repertoire, a predefined subject-object-verb canonical word order, but it is a language with free word order. As can be seen in the examples below, the subjects in Turkish are nominative case marked in the main clause (see 1 a / b / c) and genitive case marked in the subordinate clause (see 1d) (Kornfilt, 2003; Aygen, 2007; Bakırlı & Ercan, 2010). In addition, it is seen that the subjects in Turkish can be marked with accusative case in subordinate clauses through Exceptional Case Marking (as in 1e) (Aygen, 2002, 2004, 2006; Kornfilt, 2003):

(1a) Ali-Ø kitap aldı.

Ali-NOM book-NOM buy-PST.

“Ali bought a book.”

(1b) Ali-Ø kitab-ı aldı.

Ali-NOM book-ACC buy-PST.

“Ali bought the book.”

(1c) Ben-Ø [Ali-Ø okul-a gitti] sandım.

I-NOM [Ali- NOM school- DAT go- PST] think- PST.

“I thought that Ali went to the school.”

(1d) Ben-Ø [Ali-nin kitab-ı aldığını] biliyorum.

I-NOM [Ali- GEN book- ACC buy- PST- 3SG- GEN] know- PST.

“I know that Ali bought the book.”

(1e) Ben-Ø [Ali-yi okul-a gitti] sandım.

I-NOM [Ali- ACC school- DAT go- PST] think- PST.

“I thought that Ali went to the school.”

There is also a claim that the tense-aspect-modality features (Aygen, 2004) are determinative in the assignment of case markers as opposed to the view that agreement is determinative in the authorization of the subject's case (Kornfilt, 2003).

While nominative case feature of the subject is determined by the agreement between the head of Tense Phrase (TP) and the subject Determiner Phrase (DP), it is stated that the case features of the object is assigned by the verb. In other words, the relation between the head and its complement is established within the Verb Phrase (VP), so it is seen that the object case varies depending on the verb (see 2a / b):

(2a) Ben-Ø okul-a gidiyorum

I-NOM school- DAT go- PRE.

“I am going to the school.”

(2b) Ben-Ø okul-u seviyorum.

I-NOM school- ACC like- PRE.

“I like the school.”

In Turkish, it is seen that the subject case is determined with nominative or genitive case markers while the object case is determined according to the [+DEF] and [-DEF] object features. In Turkish, which is one of the languages in which Differential Object Marking (DOM) is seen, object case is affected by the semantic and pragmatic knowledge provided by the verb (Bossong, 1983; Comrie, 1981; Aissen, 2003). In DOM languages, Bossong (1983) mentions two kinds of semantic properties on differentiating an object: Animacy, which is independent from the context, and definiteness, which varies according to syntagmatic and pragmatic environments. While [HUM]> [+ANI]> [-ANI] scale is mentioned in term of animacy, personal pronoun>proper name>[+DEF] NP>[-DEF] NP>>[-SPEC] NP scale is emphasized for definiteness. At this point, it is suggested that prominence plays an active role in case marking, which suggests that objects in high prominence are case marked. Moreover, Aissen (2003) suggests that DOM is related to the phenomenon of object shift. According to this idea, [+DEF] objects can shift in general, but shifting an [+DEF] object is possible only when it can be interpreted as specific. Therefore, the [+DEF] and [-DEF] structures take an active role in determining referential object

features. Furthermore, it is suggested that [+DEF] structures cause less processing cost than [-DEF] structures (Aissen, 2003). This situation reveals that specificity should be mentioned in determining the [+DEF] and [-DEF] structures in the object position (Enç, 1991; Klein & Swart, 2011). For this reason, it is stated that if the object has the feature of specificity, it should be marked with accusative case, whereas the overt state marking is not observed in [-SPEC] and [-REF] objects (Enç, 1991; Erguvanlı Taylan & Zimmer, 1994; Heusinger & Kornfilt, 2005). When we look at the examples (3a) and (3c) below, the object in (3a) is [-DEF] but [+SPEC], therefore, the object is marked with accusative case, but in (3c), the object is [-DEF] and does not have specificity, so accusative case is not assigned (see 3a / 3c). When we look at the (3b) and (3d) examples, the object in (3b) is accusative case marked and it is known by the speaker which man is being mentioned. However, in the (3d) example, it is unlikely to know which ticket is mentioned or for what the ticket is (see 3b / d):

- (3a) Ali-Ø bir kitab-ı al-dı. ([-DEF], [+SPEC])  
 Ali a book-ACC buy-PAST  
 ‘‘A book is such that Ali bought it.’’
- (3b) Zeynep-Ø adam-ı gör-dü. ([+DEF], [+SPEC])  
 Zeynep man-ACC See-PAST  
 ‘‘Zeynep saw the man.’’
- (3c) Ali-Ø bir kitap-Ø al-dı. ([-DEF], [-SPEC])  
 Ali a book buy-PAST  
 ‘‘Ali bought some book or other.’’
- (3d) Bilet-Ø sat-ıyor-lar. ([-REF])  
 ticket Sell-PRES-(3.PL)  
 ‘‘They are selling ticket.’’ (Papadopoulou ve diğ, 2011)

Emeksiz (2003) argues that specificity stems from the fact that the verb provides real and unreal events in the [+DEF] and [-DEF] object situations and that the verb also has specificity, in other words, the specificity stems from the presumptive referents provided by the verb. In terms of definiteness, there is no need for presuppositions because it is affected by the grammatical features. She also opposes the approach where object specificity is determined by accusative case marking and argues that referential hints in [-DEF] situations give object specificity in real contexts.

As a result, determination of subject and object case markers are syntactically different processes. Agreement (Kornfilt, 1997; Kornfilt, 2003; Heusinger & Kornfilt, 2005) or tense-aspect-modality features (Aygen, 2004) are considered effective in determining the subject case marker in Turkish. On the other hand, it is seen that the verb is determinative for the case features of the objects. At this point, Differential Object Marking (DOM) plays an important role in determining referential object features because DOM allows to distinguish object in terms of animacy and definiteness. Moreover, definiteness brings specificity feature which plays a role in [+DEF] case assignment. By this way, it is suggested that differentiation of subject and overtly case-marked object might be easier.

As can be seen, case assignment is an important process in terms of evaluation of the sentence. In this study, it is aimed to explain the meaning of case processing and therefore, in literature review part, detailed information is given about the case processing and the factors affecting this process.

### **Literature review**

In the literature, there are many studies examining the effect of case markers on syntactic and semantic processes (Cho, et al., 2002; Schlesewsky & Frisch, 2005; Mueller, Hahne, Fujii, & Friederici, 2005; Yang & Bergen, 2007; Mueller, Girgsdies, & Friederici, 2008; Zawiszewski & Friedericia, 2009; Chow, Nevins, & Carreiras, 2018).

### **Processing of subject and object case markers**

In the studies on subject and object processing, it is seen that the Event-Related Brain Potentials (ERP) method is mostly used. Therefore, brief information should be given about ERP components before mentioning the studies in the literature. First, ERP is a method based on measuring the electrical activity produced by the brain against certain stimuli. In the ERP literature, it is suggested that components such as N400, P600, LAN are related to language processing. In this case, the N400 component is defined as a component that peaks in negative polarity 400 ms after stimulus presentation, and the increase in this component is associated with lexical-semantic matching difficulty (Kutas and Hillyard, 1980a, 1980b) and morphological and syntactic processing (Bornkessel, McElree, Schlesewsky, & Friederici, 2004). The P600 component is a component that peaks in positive polarity 600 ms after stimulus presentation and is associated with syntactic processing (Friederici & Mecklinger, 1996; Hagoort et al., 1993; Hagoort, Wassenaar, & Brown, 2003). The LAN component is a component that peaks at 250-500 ms post-stimulus interval and associated with the mismatches between subject and verb (Burkhardt, Fanselow & Schlesewsky, 2007; Coulson, King & Kutas 1998b; De Vincenzi et. al., 2003; Hagoort & Brown 2000; Roehm et. al., 2005) and verbal working memory (Kluender & Kutas, 1993; Münte et. al., 1998).

Schlesewsky and Frisch (2005) examine the process of subject and object case markers in German using the ERP method. In the first experiment of this study, there are non-grammatical structures in which both subject and object are used identically as nominative and dative case marked, and in the second experiment, non-grammatical structures in which both subject and object are used identically as nominative and accusative case marked. As a result of the study, it is stated that the N400 pattern, which reflects lexical-semantic processes, and the P600 pattern that occurs in syntactic disorders are observed in NOM- NOM and DAT- DAT sentence structures. It was also pointed out that if ungrammatical case marking is used in the subject and object position, the processing is negatively affected in both positions, however, it does not make a significant difference in terms of processing the case markers on the subject and the object.

Mueller et al. (2005), on the other hand, analyses the language processing of native speakers and second language learners in Japanese, where they include grammatical structures as well as non-grammatical structures in which the subject and the object are marked with nominative and accusative case. While the P600 pattern is observed in the

second language learners participating in the study, both the N400 and the P600 biphasic pattern are observed in native speakers. This finding reveals that there is a difference in the processing of case markers between native speakers and second language learners. Second language learners notice syntactic violations just like native speakers, but they do not show similar results when compared to native speakers in terms of processing of the semantic violations. For this reason, Mueller et al. (2008) examine the processing of case markers regardless of the meaning (semantics) in terms of the second language acquisition process with a following study. As a result of this study, the participants display the P600-N400 biphasic pattern like native speakers. When the two studies are compared, it is suggested that not using the semantic input facilitates language processing of second language learners like native speakers. This result reveals that case marker violations used in subjects and objects are noticed independently from semantic features. In addition, the effect of positional differences of case markers is not mentioned in both studies. This shows that case markers used in ungrammatical structures are affected by the verb and are effective in determining the positional values of the verb.

Aygüneş, Aydın, & Demiralp (2014) examine the relationship between the agreement and case markers in the embedded clauses in Turkish with the ERP, in which there are violations in the case marker (\* *Benim ağladım sanıyordu* ‘S/he thought I cried.’) and the agreement marker on the verb (\* *Ben ağladın sanıyordu* ‘S/he thought I cried.’). In this study, findings are contrary to the arguments made in Diaz et al. (2011). They observed differences in the processing of the case markers and agreement in both matrix verb and the embedded verb. While N400 is seen in the processing of case morphology in the embedded verb, no such effect is seen in the processing of agreement. In the matrix verb, which provides more reliable information in the comparison of the two features, the right-lateralized N400 is seen in the processing of case morphology, while the left-lateralized N400 is seen in the processing of the agreement. In the study, activation of different neural sources in the processing of agreement and case markers in Turkish weakens the view that  $\phi$ -features authorize the subject case, as standardly assumed in the literature (Kornfilt, 1984; Brendeomon & Csato, 1986, and others), and favours Aygen's (2002, 2007, 2011) view of case synchronism and  $\phi$ -synchronism being independent from each other.

Bornkessel, McElree, Schlesewsky, & Friederici, (2004) focus on the case violations in subject-object positions in their study, in which they examine state properties in German structures with ERP study. In this study, structures in which the phrase structure begins with nominative or accusative case marked words, N400 response was observed in the structures where dative case marked words are used in the sentence initial position instead of nominative case marked words and it has been determined that the processing takes longer. As a result, it is claimed that the difference observed between nominative and the dative case markers is due to the expectation of using the subject in nominative case in German.

In the ERP study on Basque, an ergative language which allows both subject-verb and object-verb agreement, multiple verb agreement and case system are examined to determine whether the subject-verb agreement differs between transitive and intransitive clauses (Chow, et al., 2018). In the study, subject-verb agreement violations are compared in transitive (there is object-action agreement, subject is ergative) and intransitive (no object-

verb agreement, subject is absolutive) (Santesteban, Pickering, & Branigan, 2013) sentences. As a result of the study, it is found that the P600 pattern is observed in both ergative and absolutive case marked subjects while it has been found that the participants have difficulty because of early posterior negativity in the structures using absolutive case marked subject, and that different neurocognitive mechanisms are effective in the processing of the subject with ergative and absolutive case markers (Chow et al., 2018). It is claimed that the difference of the findings obtained in this study from Bornkessel, et al. (2004) may be due to the difference between languages. While the subject is nominative case marked in German, the subject in Basque is used in ergative case, which is not used in German. Although the studies show different results, it is seen that the position of the verb is effective in the processing of the case markers in both studies.

As reviewing the studies on the processing of subject and object case features, it is observed that different findings are obtained. Contrary to the studies that argue for a difference in the processing of subject and object case markers (Bornkessel, et al., 2004; Chow, et al., 2018), there are also studies suggesting that there is no difference (Schlesewsky & Frisch, 2005; Mueller, et al., 2005; Mueller, et al., 2008). In studies that argue that there is a difference in the processing of subject and object case markers, it is emphasized that case markers are syntactically effective in determining the subject and object position and semantically influencing the processing of the sentence. In studies that argue that there is no difference in the processing of subject and object case markers, it is argued that case markers are included in the processing without observing subject-object distinction.

### **Processing [+DEF] and [-DEF] objects**

One of the issues discussed in the processing of object case markers is how this will affect the processing if the object is [+DEF] and [-DEF].

In Chinese, one of the languages which allows DOM (Bussong, 1983; Aissen, 2003), Yang & Bergen 2007 examined how scrambled case markers are determined. According to Aissen, case markers determine the importance degree of the objects used in terms of specificity and animacy. As a result of the study, the use of case markers in scrambled objects showing animacy and human characteristics in Chinese is obligatory while case markers in inanimate objects are optional. On the other hand, different results are obtained in the examinations made in terms of definiteness. It has been stated that case markers are mandatory in [-DEF] and [-SPEC] scrambled objects, and that case markers can optionally be omitted from the sentence in the [+DEF] and [+SPEC] scrambled objects. It is argued that this difference is since the case-marked words used in the pre-verbal position in Chinese are specified and they are [-DEF] in the postverbal position. They argue that the words used in the preverbal position show definiteness regardless of their grammatical task, and the fact reveals the effect of syntactic processes (Yang & Bergen, 2007).

In another study examining the processing of [+DEF] and [-DEF] object case markers in Spanish in terms of native speakers and second language learners, similar results a Mandarin Chinese (Jegerski, 2015). In Spanish, overt case marker *-a* suffix is used to distinguish the [+DEF] object from the subject. Also, the clitics *la / lo* ([+DEF] object) and *le* ([-DEF] object) are used to mark the object position in Spanish. As a result of this study,

it is determined that unlike native speakers, second language learners adhere to the clitics used in the preverbal position to distinguish the [ $\pm$  DEF] object. In addition, the participants are not sensitive to the *-a* case marking of the [+DEF] object when the *lo / la* clitics are not used in the processing. For this reason, it has been suggested that case marking in the second language does not depend on structural and categorical deficiencies during syntactic processing, and case marking does not have an effect on the distinction between [+DEF] and [-DEF] object. Similar results were obtained in another study on Quiteño, a Spanish dialect (Suñer & Yépez, 1988). The Quiteño dialect allows the position of the object to remain empty without the need to use any clitic. It is claimed in the study that there is no distinction between the [+DEF] and the [-DEF] object, and even when clitics are used in the sentence, no difference is observed in the meaning of the sentence. In short, the [ $\pm$  DEF] object distinction is not seen as an important linguistic variable in terms of processing.

Contrary to these studies which argue that there is no difference between the processing of [+DEF] and [-DEF] objects, it is possible to mention a study arguing that there is a difference in the processing of [+DEF] and [-DEF] objects. In a study conducted on the distinction between the [+DEF] and [-DEF] object in Korean, it is observed that second language learners of Korean prefer the [+DEF] object more than [-DEF] object (Cho, et al., 2002). This situation shows that similar to the Accessibility Hierarchy Hypothesis (Keenan & Comrie, 1979a), [+DEF] structures are more accessible than [-DEF] ones.

When we look at the studies focusing on the case of being [+DEF] and [-DEF] of the object location, it is emphasized that there is no difference between the two cases (Yang & Bergen, 2007; Jegerski, 2015; Suñer & Yépez, 1988). It is also possible to mention a study that defends the opposite of these studies (Cho, et al., 2002). For this reason, it is not possible to talk about a consensus in the studies on the [+DEF] and the [-DEF] object case. Based on these studies, it can be claimed that the characteristics of the case markers play an important role in the syntactic and semantic processing.

The aim of this study is to examine the processing of subject and object case markers in Turkish. Aim of this study is to analyse the subject-verb agreement and the effect of the information provided by the verb on the object processing and on the determination of the [+DEF] and [-DEF] object case markers.

### **Research hypothesis**

Hypothesis 1: It is predicted that native speakers will process the object case [+DEF] structures faster than [-DEF] structures. As demonstrated by the Accessibility Hierarchy Hypothesis, [+DEF] structures are assumed to be more accessible than [-DEF] ones (Keenan & Comrie, 1979a). In addition, the fact that it is possible to talk about DOM supports this prediction (Comrie, 1981; Enç, 1991). Moreover, it is emphasized that the relation the object establishes with the verb rather than the case markers is effective in the interpretation of the [-DEF] objects. In other words, it is stated that the locations in which [-DEF] objects can be found in the sentence are limited because they are unmarked objects and the transportation of these structures is essentially carried as pied-piping the entire remnant VP (İşsever & Gracanin-Yüksek, 2011). It is assumed that this limitation of the [-DEF] structures will increase the processing cost.

Hypothesis 2: It is predicted that native speakers will process the object case markers faster than the subject case markers. Object-verb relationship is a more local than the subject-verb relationship. Except for structural cases, case markers are lexically assigned by the verb. It is stated that while the structural cases are mapped by certain functional heads in the derivation, the lexically assigned cases are assigned to its object by verb at the moment of the first Merger, thus occurring at a shorter distance. (Woolford, 2006). This distinction between structural and non-structural cases prolongs the processing, as the distance between processing creates a cost on working memory while processing subject-verb agreement (Zawiszewski & Friedericia, 2009; Haskell & MacDonald, 2005; Franck, Lassi, Frauenfelder, & Rizzi, 2006).

## Methodology

### Context

This study was carried out in Hatay where the first author lived and in Istanbul where the second author lived.

### Participants

There are 23 participants (10 females, 13 males) whose native language is Turkish in the study. A statistical power analysis is performed for sample size estimation using G\*Power3 (Faul, Erdfelder, Lang, & Buchner, 2007). This study's effect size is 0.797, considered very close to the large using Cohen's (1988) criteria. With an  $\alpha = .05$ , power  $(1-\beta) = 0.80$ , the projected sample size needed is 23 ( $N = 23$ ) for this simplest within-group comparison. Thus, our proposed sample size of 23 is adequate for this study's main objective and allowed for expected attrition and our additional objectives of controlling for possible subgroup analysis. All participants are university students or university graduate. Participants are at least high school level and have no neurological or psychological disorders. All participants are right-handed and have normal or corrected vision. Before starting the study, all participants signed the informed consent form.

### Materials

As the experimental conditions, there are two grammatical conditions in which the object has [+DEF] and the [-DEF], as well as two conditions in which there are violations in the object and the subject case (Table 1).

All sentences in the experimental set have SUBJECT-ADVERB OF TIME-OBJECT- VERB word order. Subjects in sentences are formed from occupational names. Past tense -DI suffix is used in verbs and all verbs are conjugated by the third person singular. As object case violation, dative case marker is used where there should normally be a [ $\pm$  DEF] case marker. For the subject case, instead of the correct nominative case marker, genitive case is used as a violation of the subject case. Moreover, fillers are used to both equalize the number between grammatical and non-grammatical conditions and to equalize the distribution between structures in the experiment. Grammatical fillers consist of the sentences which include nominative subject and dative object case marking (Aktör-Ø geçen ay filme çalıştı).

“Actor-NOM worked on the movie-DAT last month”) and genitive subject and accusative object case marking (Aktörün geçen ay filmi çekildi. “the movie-ACC of the actor-GEN was filmed last month”). Non-grammatical fillers consist of the sentences which include nominative subject and the object case marking (\*Aktör-Ø geçen ay film-Ø çalıştı. “actor-NOM worked on a movie-NOM last month”) and nominative subject and accusative object case marking (\*Aktör-Ø geçen ay filmi çekildi. “The actor- NOM movie-ACC was shot last month.”). The purpose of using these fillers is to prevent participants from gaining an advantage in the analysis of the sentence in favour of a condition and to make it possible to decide on the grammaticality of the sentence only by seeing the verb. Fillers are not included in the analysis process.

In the study, a repair test is conducted with 26 participants to determine whether the conditions about object case violation and subject case violation includes a mismatch in the relevant categories. As a result of the analysis, it is seen that there is a significant difference between the conditions,  $X^2(25) = 13080,908, p < .001$ . In the object case violation, it is observed that 94.5% of the participants change the case feature of the object position, 2.9% of the participants change the verb at a rate of 2.2% and the remaining participants use the other forms of repair. Therefore, in the object case violation condition, it is seen that a reinterpretation is made in the object case by the participant. In subject case violation, it is seen that 73.6% of the participants repair the sentence by changing the subject's case feature and 12.7% of the participants change both the case feature of the subject and the action while the remaining participants apply other forms of repair or interpret the sentence grammatically. Therefore, in the subject case violation condition, it is seen that the participants associate the relevant mismatch significantly with the subject case.

**Table 1.** Examples of Sentences in the Experiment

Conditions	Example sentences	N
<b>Grammatical 1</b>	Aktör-Ø geçen ay film-Ø seyretti. Actor-NOM last month a movie-NOM watched. “Actor watched a movie last month.”	30
<b>Grammatical 2</b>	Aktör-Ø geçen ay filmi seyretti. Actor-NOM last month the movie-ACC watched. “Actor watched the movie last month.”	30
<b>Object case violation</b>	*Aktör-Ø geçen ay filme seyretti. * Actor-NOM last month to movie-DAT watched. “Actor watched to movie last month.”	30
<b>Subject case violation</b>	*Aktörün geçen ay filmi seyretti. * Actor-GEN last month the movie-ACC watched. “Actor’s watched the movie last month.”	30

### Data collection procedures

Before starting the study, an application is made to the Istanbul University Social Sciences Ethics Committee and all procedures followed were in accordance with the ethical

standards of the responsible committee on human experimentation (İstanbul University Social and Humanities Research Ethics Committee) and with the Helsinki Declaration of 1975, as revised in 2000 (The committee approval is received on 19/06/2020- issue: 68637). As a result of the examination, it is unanimously decided that there is no ethical problem in the study. Moreover, informed consent was obtained from all patients for being included in the study.

The Self -Paced Reading task is used in the study. In the Self -Paced Reading task, the participants are asked to silently read the sentences presented as words on the computer screen as soon as possible, and then they are asked to evaluate the grammaticality of the sentences with the end each sentence. How long the words stay on the screen is under the control of the participant and they must press the space bar to see each word. The experiments last 30-40 minutes for each participant, including breaks. The response times of the participants to each word, and their responses regarding the evaluation of the grammaticality of the sentence are recorded.

The research is conducted in a quiet environment. Before starting the research, an exercise consists of 15 sentences is made for the participants to have information about the research. 240 sentences including the fillers are presented to the participants in 6 sections in random order. There are 5-10-minutes breaks between each section.

### **Statistical analysis**

Statistical analysis is made on average reading time responses for subject, object and verb areas. However, the processing difference is expected to occur in the area where the verb is presented. In the analyses, the response times of the participants to 30 stimuli presented for each condition are averaged and then we compute a repeated-measures ANOVA. In the study, two statistical analyses are performed regarding the reaction times. In the first analysis, CONDITION (2 Level: [+DEF] objects, [-DEF] objects) is included within subject factors in the repeated measures ANOVA applied to determine the effect of the object being [ $\pm$  DEF]. In the study, a second statistic is applied to determine whether there is a difference in the processing of object agreement and subject agreement. In this second statistic, there is CONDITION (3 Level: grammatical, object-case violations, subject-case violations) within subject factors. In addition to this statistical analysis on reaction times, ANOVA is also applied on the correct response numbers given by the participants for each of the relevant factors.

In the statistical analysis, if the degree of freedom is more than one, Greenhouse-Geisser (Greenhouse-Geisser, 1959) correction is applied. In case of significant difference in the main effect created by the conditions, pair-wise comparisons are made to determine the source of the difference. Bonferroni correction (Bonferroni, 1936) is applied to  $p$  values in pair-wise comparisons. SPSS 24 software is used for statistical analysis.

## **Results**

### **Reaction times related to the first analysis: Object being [+DEF], [-DEF]**

In the first experiment, it is aimed whether there is a processing difference in the processing of two grammatical sentences containing [+DEF] and [-DEF] objects, and within this framework, participants' reading rates of subject-object-verb in the sentence are determined and compared. In other words, this analysis examines whether there is a difference in the form of the following two sentences in terms of in terms of the object being [ $\pm$  DEF]:

**Table 2.** Examples of sentences included in the first analysis

Conditions	Example sentences	N
<b>Grammatical 1</b>	Aktör-Ø geçen ay film-Ø seyretti. Actor-NOM last month a movie-NOM watched. “Actor watched a movie last month.”	30
<b>Grammatical 2</b>	Aktör-Ø geçen ay filmi seyretti. Actor-NOM last month the movie-ACC watched. “Actor watched the movie last month.”	30

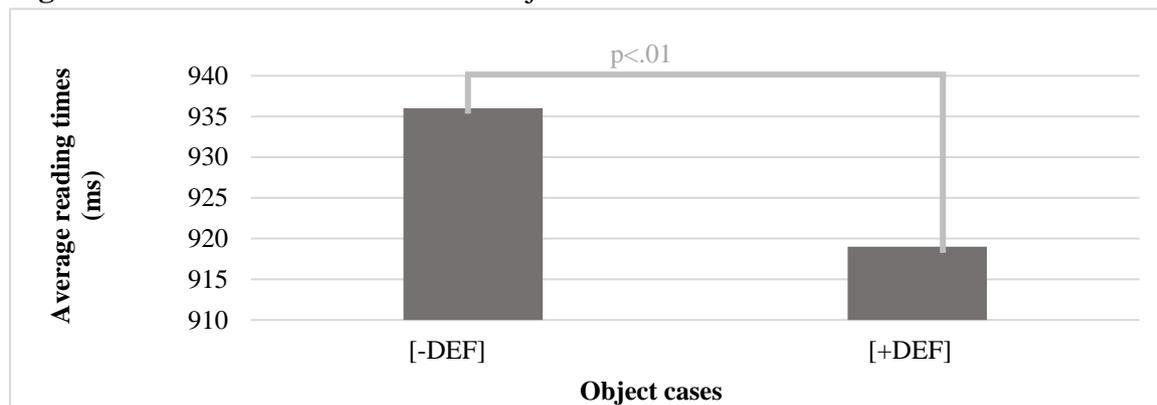
### *Reaction times related to subject position*

When the reading times of the subjects are examined, there is no statistically significant difference in sentence forms in which the object is [+DEF] and [-DEF],  $F(1,22) = 3.969$ ,  $MSE = 31.788$ ,  $p > .05$ ,  $\eta p^2 = .153$ . In other words, it is seen that the participants process the subjects of the sentences in the two conditions for a similar time and there is no significant difference between them.

### *Reaction times related to object position*

When the reading times of the objects are examined, there is a statistically significant difference in the sentence forms in which the object is [+DEF] and [-DEF],  $F(1,22) = 8.703$ ,  $MSE = 6.614$ ,  $p < .01$ ,  $\eta p^2 = .283$ . When pair-wise comparisons are considered, it is seen that reading times of [-DEF] structures are longer than [+DEF] structures. In other words, processing of [-DEF] structures create more cognitive cost (Figure 1).

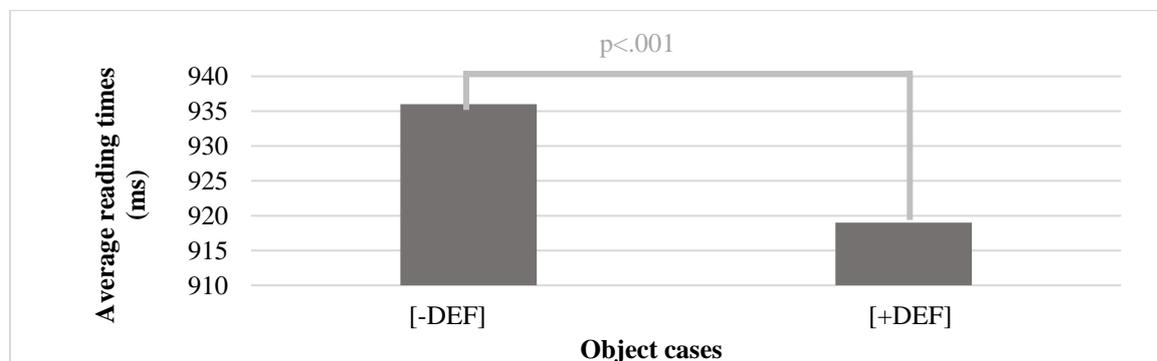
**Figure 1.** Reaction Times About the Object



### ***Reaction times related to the verb position***

When the reading times of the verbs, which are the main critical area, are examined, there is a statistically significant difference in sentence forms in which the object is [+DEF] and [-DEF],  $F(1,22) = 41.534$ ,  $MSE = 75.188$ ,  $p < .001$ ,  $\eta p^2 = .654$ . When looking at pairwise comparisons, it is seen that the reading times of [-DEF] structures are longer than the [+DEF] structures as in the object position (Figure 2).

**Figure 2.** Reaction Times About the Verb



### ***Reaction times related to the number of correct answers***

It appears that there is a significant difference between the two conditions in terms of the number of correct answers,  $F(1,22) = 15.428$ ,  $MSE = 3.113$ ,  $p = .001$ ,  $\eta p^2 = .412$ . When looking at pair-wise comparisons, it is seen that the response is less accurate when the object is [-DEF] ( $M = 26.217$ ,  $Std Err = .522$ ) according to the condition that the object is [+DEF] ( $M = 28.261$ ,  $Std Err = .253$ ).

### **Reaction times related to the second analysis: Processing of case features of subject position and object position**

In the second analysis, it is fundamentally questioned whether there is a difference between the processing of the subject case and the processing of the object case. In this framework, the subject, object and verb fields in the following sentence structures are analysed.

**Table 3.** Examples of sentences in the second analysis

Conditions	Example Sentences	N
<b>Grammatical</b>	Aktör-Ø geçen ay filmi seyretti. Actor-NOM last month the movie-ACC watched. “Actor watched the movie last month.”	30
<b>Object case violation</b>	*Aktör-Ø geçen ay filme seyretti. Actor-NOM last month to movie-DAT watched. “Actor watched to movie last month.”	30
<b>Subject case violation</b>	*Aktörün geçen ay filmi seyretti. Actor-GEN last month the movie-ACC watched. “Actor’s watched the movie last month.”	30

### ***Reaction times related to subject position***

When the reading times of the subjects are examined, there is no statistically significant difference between the grammatical conditions, including the violations of the object case and the subject case,  $F(1.214, 26.706) = 0.651$ ,  $MSE = 26.641$ ,  $p > .05$ ,  $\eta p^2 = .029$ . In other words, it is seen that the participants process the subjects of the sentences in the three conditions for similar periods and genitive case on the subject does not create a processing difference.

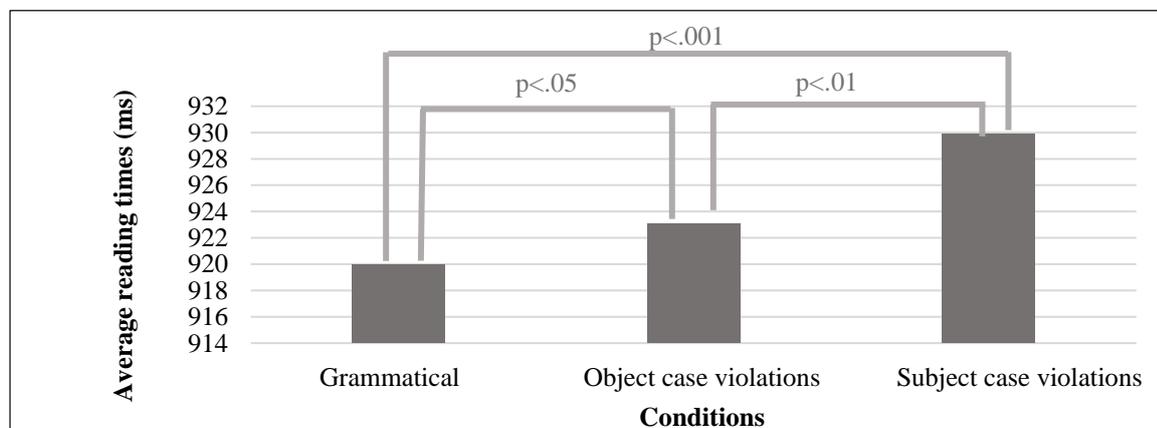
### ***Reaction times related to object position***

Considering the reading times of the object position, there is a statistically significant difference between the three conditions,  $F(1.395, 30.694) = 5.222$ ,  $MSE = 3.358$ ,  $p < .05$ ,  $\eta p^2 = .192$ . However, when the pair-wise comparisons are examined, it is seen that there is no significant difference between grammatical condition and object case violations ( $p > .05$ ), grammatical condition and subject case violations ( $p > .05$ ), object case violations and subject case violations ( $p > .05$ ). In other words, it is seen that the participants process the objects of the sentences in the three conditions at similar times, and there is no meaningful differentiation reflected in their pair-wise comparison.

### ***Reaction times related to verb position***

Considering the reading times of the verb position, there is a statistically significant difference between the three conditions,  $F(1.965, 35.008) = 19.467$ ,  $MSE = 38.277$ ,  $p < .001$ ,  $\eta p^2 = .469$ . When the pair-wise comparisons are examined, it is seen that there is a significant difference between grammatical condition and object case violations ( $p < .05$ ), grammatical condition and subject case violations ( $p < .001$ ), object case violations and subject case violations ( $p < .01$ ). Looking at the average durations, it is seen that grammatical structures are processed the fastest, while the violation in the subject case is the structure that requires the longest time (Figure 3).

**Figure 3.** Reaction times regarding the verb



In summary, in the second experiment, it is observed that a pattern in the form of subject- case violations > object- case violations > grammatical structures in terms of the

length of the reading period in the verb field that constitutes the critical word of the study. In other words, it is seen that subject case violations create more cognitive cost than both object case violations and grammatical condition while object case violations create more cognitive cost than grammatical condition.

### ***Reaction times related to the number of correct answers***

It appears that there is a significant difference between the three conditions in terms of the number of correct answers,  $F(2.44) = 6.714$ ,  $MSE = 1.997$ ,  $p < .01$ ,  $\eta p^2 = .234$ . Considering the pair-wise comparisons, significant differentiation occurs between object case violations ( $M = 28.913$ ,  $Std Err = .320$ ) and subject case violations ( $M = 27.319$ ,  $Std Err = .452$ ) ( $p < .01$ ) and participants respond to the subject case violations condition with lower accuracy. On the other hand, it is seen that both object case violations and subject case violations do not differ ( $p > .05$ ) from the grammatical condition ( $M = 28.261$ ,  $Std Err = .253$ ).

## **Discussion**

### **Discussion on the first analysis: The processing effect of the object being [+DEF] and [-DEF]**

In the literature, there are also studies that indicate that there is no difference between the two structures (Suñer & Yépez, 1988; Yang & Bergen, 2007; Jegerski, 2015), in contrast to the study that suggests difference between the processing of [+DEF] and [-DEF] object case (Cho et al., 2002) is available. In a study on Korean (Cho et al., 2002), participants defined [+DEF] structures as more noticeable, while in studies on Spanish (Jegerski, 2015), Chinese (Yang & Bergen, 2007), and Quito (Suñer & Yépez, 1988), it is suggested that definiteness can be achieved through verbal information, clitics or without any signs.

In DOM languages, it is suggested that case features give the object a quality in terms of definiteness and specificity, and the [+DEF] case marker are used to distinguish subject and object from each other (Heusinger & Kornfilt, 2005; von Heusinger & Kornfilt, 2017). Similarly, the study conducted on Korean shows that the participants prefer to use the [+DEF] object more than [-DEF] object (Cho et al., 2002). Özge, Küntay, and Snedeker (2019) in the study in which they evaluated [-DEF] object in terms of syntactic and semantic processes, it is claimed that some elements in the sentence preserve their position within the sentence for semantic, grammatical or syntactic reasons even though Turkish is a language with scrambling, and [-DEF] object should be in the position just before the verb. It is added that the noun case suffixes give certainty to the words and so, [+DEF] object can be used in different positions in the sentence (Gronbech, 1995).

On the other hand, it is seen that the findings of the first experiment differed with studies on Mandarin Chinese (Yang & Bergen, 2007) and Spanish (Suñer & Yépez, 1988; Jegerski, 2015). In the study conducted on Mandarin Chinese, it is claimed that the feature of definiteness is influenced by the [+ANI] and [-ANI] features and that animacy rather than definiteness is determinative on the object situation. In other words, it is stated that the object with the [+ANI] feature enables an idea about who is mentioned, but it is difficult to process

because [-ANI] object does not refer to something definite (Yang & Bergen, 2007). Similarly, in the study on the second language acquisition of Spanish, it is stated that there is no separation between the [+DEF] and [-DEF] object in the processing (Suñer & Yépez, 1988; Jegerski, 2015).

The findings of the first analysis show that both the object position and verb position [-DEF] structures have longer reading times compared to [+DEF] structures, in other words, they create a higher processing cost. The fact that the difference in processing is seen not only in the field of verb but also in the field where the objects are presented may be due to the non-specificity of [-DEF] objects and the consequence of the fact that they are always VP-internal (even though the entire VP may undergo movement) (İşsever & Gracanin-Yüksek, 2011). However, according to İşsever & Gracanin-Yüksek, this pied-piping does not involve the verb because by the time the VP movement happens, the VP contains only the [-DEF] object, after the verb has vacated it on the way to T<sup>0</sup>. In other words, discrete processing of [-DEF] objects due to the pseudo-incorporation with verb increases the processing cost. Furthermore, they suggest the fact that [+DEF] objects are interpreted as [+SPEC] is not because of accusative case marking. Rather, it is because overt case marking (accusative case) makes it possible for the object to move out the VP. In short, object case marking allows constituents to move individually instead of pied-piping the whole VP phrase, as assumed for [-DEF] objects in İşsever & Gracanin-Yüksek (2011). Overall, this situation causes [+SPEC] reading for [+DEF] objects. In this research, we can suggest the same processing features when we look at the findings. The findings imply that [-DEF] objects and their case-marked counterparts, when they are immediately preverbal, do not in fact occupy the same position, and we could assume that this causes the extra processing cost for [-DEF] objects: [-DEF] objects seem to be internal to the VP, while case-marked objects are not (Çağrı, 2005, 2009; İşsever, 2008) for further reading). If we assume that accusative case is assigned under SPEC-HEAD relation with v<sup>o</sup> (İşsever & Gracanin-Yüksek, 2011), then this implies that [+DEF] objects are assigned accusative case in a local fashion with v<sup>o</sup>, on the other hand, [-DEF] objects are always VP-internal and they lack the higher functional structure to bear overt case morphology, namely the DP and the KP layers (Arslan Kechriotis, 2006; Erguvanlı, 1984; Öztürk, 2005, 2009). For this reason, İşsever and Gracanin-Yüksek's findings and the arguments made therein might be a good explanation for the [+DEF] and [-DEF] object processing differences.

The reflection of the processing difference starting at the object position in the verb field might be caused by the relationship between the object position and the verb position in terms of assignment of the object case. Therefore, it can be thought that the processing difference, which starts with the formal analysis of the [± DEF] structures in the object field, continues in the verb field, and this might be due to the fact that verb plays a fundamental role in the authorization of the case features of the object. In other words, it is seen that the information provided by verb affects the use of object case features (Klein & de Swart, 2011). Emeksiz (2003) argues that specificity in cases of [± DEF] object stems from presupposition referrals provided by verb. Similarly, von Heusinger and Kornfilt (2017) reported in their studies on Turkish and related languages that case markers used in [+DEF] structures are related to specificity. Specificity provided by [+DEF] situation gives [+SPEC]

and distinctive information in contrast to the general information provided by [-DEF] case. Therefore, specificity might have a facilitating effect on the processing as it might be seen in this study.

### **Discussion on the second analysis: The processing of subject and object case markers**

As a result of the second analysis in the processing of subject and object case, it is seen that there is no difference between the conditions in the processing of subject and object positions. Therefore, non-grammatical situations in the subject and object position do not affect the participants' processing, which might show us that case features do not affect the processing. Normally, nominative case used in the subject case is a feature that is expected to be observed in the subject in Turkish, and therefore the participants tend to expect the first element of the sentence in nominative case. On the other hand, genitive case is used to express the subject of the subordinate clause in Turkish and is considered as a category that fulfils the nominal function (Kornfilt, 2003; Aygen, 2007; Karataş, 2019). However, in this study, we can see that using different case features does not affect the processing. It is seen that this multiprobability does not make a difference in terms of processing. Like in subject position, object case violation does not affect the processing and the participants might not take case violations into consideration. Therefore, we might assume that subject and object stand in the same domain and the participants might take into consideration just the word. At this point, it is possible to mention subject-object symmetry in Turkish. Likely, Öztürk (2005) suggests that when the verb moves to a higher position like T, all arguments count as equidistant to verb, which means that all arguments have an equivalent relation to the verb because any argument can move to Spec of TP once verb moves to T. Moreover, Kayne (1994) proposes linear ordering among the segments of the same category. For this reason, we can see that subject and object positions are equidistant from each other and therefore, processing difference might not be the case in this study.

When the reading times of the verb position are examined, it is seen that there is a statistically significant difference between the three conditions, and when the pairwise comparisons are examined, there is a significant difference between the grammatical condition and the object case violation, the grammatical condition and the subject case violation, and the object case violation and the subject case violation. In terms of the length of the reading period in the verb, it is seen that subject case violation creates more cognitive cost than both object case violation and grammatical condition, while object case violation creates more cognitive cost than grammatical condition. These findings might show that the verb is important in the processing of case features and both object case and subject case are determined in this field.

Looking at the average durations, it is seen that while grammatical structures are processed in the fastest way, structures containing violations in subject case require the longest time; in other words, when participants do not see the subject-verb agreement, they need more processing time about the syntactic and semantic order of the sentence (Kutas and Hillyard, 1983; Spencer & Zwicky, 1998; Carreiras et al., 2015). In terms of the length of reading time in the field of verb, it is seen that object case violations create more cognitive cost than grammatical condition, whereas object case violations have a lower reading time

than subject case violations, in other words, it does not create a cognitive cost as much as subject case violations. Thus, besides processing subject-verb non-agreement, a speaker might also have to process the non-matching subject case. To say, while subject case violation causes two violations, object case violation is just one violation. Similarly, Karataş (2019) observes that the processing of genitive case takes longer than the other case markers (nominative, accusative and dative) in the ERP study on the processing of Turkish case features in the mother tongue and the second language and adds that genitive case is not an argument of the verb. She suggests that participants make use of the lexical and syntactic processing of the verb when deciding on non-grammatical case features.

In the study, there are some syntactic possible reasons why the subject case creates more processing cost than the object case. The nature of the relationship between subject-verb and object-verb seems to be one of the reasons for this difference. In subject-verb agreement, there is a pairing relationship between a subject determiner phrase (DP) which has [+PER] and [+NUM] properties, but has the [-CASE] feature, and T<sup>0</sup> head, which has [+CASE] (NOM) feature but has [-PER] and [-NUM] features. On the other hand, the relation between object-verb and the verb is also the result of agreement between the functional head V<sup>0</sup> of verb phrase (VP) and NP, so that V<sup>0</sup> assigns [+CASE] feature (ACC) to NP. Therefore, it can be thought that in the subject-verb agreement there is a need to match  $\phi$ -features between the subject and the verb, which is raised to T<sup>0</sup>, and this may result in a higher processing cost.

Another possible reason why the subject case creates more processing costs than the object case can be that there is an asymmetry in the repair processes of the conditions including subject violations and object violations in experimental conditions. In other words, while non-grammaticalness is noticed in the processing of (4a) while creating VP, there is a more complicated process to recognize the grammaticality in (4b). Because a noun phrase must either have a possessive structure (aktör-ün evi ‘‘actor’s house’’) or a genitive case must be mapped to the relevant unit by a nominalized N (head of the noun phrase) in order to assign a genitive case (Ali [aktör-ün filme git-ti-ğ-in]-i sanıyor. ‘‘Ali thinks that the actor went to the movie.’’) (Pesetsky & Torrego, 2011). Since these two possibilities are out of question for the structure (4b), the sentence is not grammatical. However, in contrast to the violations in the object case, the violation in the subject case requires more possibilities to be checked, such as the subject being in the possessive structure and in the subject position of the embedded clause. As it is referred in the previous section, subject case violation might cause two different violations and as it is seen here, subject case violation might cause different expectations in term of speakers. Therefore, it is possible that both the more possibilities to be checked and that these checks are not made within a limited area such as verb phrase (VP) and extend to tense phrase (TP) cause processing cost.

(4a) \*Aktör geçen ay filme seyretti.

Actor- NOM last month movie-DAT watch-PST.

‘‘Actor watched to movie last month.’’

(4b) \*Aktörün geçen ay filmi seyretti.

Actor- GEN last month movie-ACC watch-PST.

“Actor’s watched the movie last month.”

Another possible reason for the difference between object case marking and subject case marking might be because of feature inheritance approach (Richards, 2007). According to this approach, subject case marking takes place between the spec of TP and T<sup>0</sup> which mediated by phase head C because Chomsky (2005) proposes tense and agreement features related with inflectional system are not property of T; instead, they belong to phase head C. Moreover, object case marking occurs between verb head and object in complement position of the verb phrase (VP). In other words, it is seen that internal VP processing (object-verb agreement) is faster than external VP processing (subject-verb agreement). In internal VP processing, there are accusative case assigning functional head V<sup>0</sup> and its complement while it is seen that external VP processing extends until TP through C. In this case, the relationship between verb and object is within local merge, whereas the relation between T and subject is mediated by C (Richards, 2007). Therefore, the greater structural distance might cause the working memory to be loaded more as it can be seen in his study.

### Conclusion

In terms of syntactic processes, it is stated that case features play an active role in the language processing (Cho et al., 2002; Schlesewsky & Frisch, 2005; Mueller et al., 2005; Yang & Bergen., 2007; Mueller et al., 2008; Zawiszewski & Friederici, 2009; Aygüneş, 2013; Aygüneş, et al., 2014; Chow et al., 2018). In this study, it is aimed to examine processing of subject and object case features and the cognitive effect of object being [± DEF] with Self- Paced Reading Study.

In the literature, there are studies that indicate that there is no difference between the two structures (Suñer & Yépez, 1988; Yang & Bergen, 2007; Jegerski, 2015), whereas there are also study suggesting difference between the processing of [+DEF] and [-DEF] object case (Cho et al., 2002) is available. Looking at the processing process of [± DEF] objects in this study, it is seen that the processing of [-DEF] objects create a greater processing cost, which is consistent with the Differential Case Marking. In DOM languages, case features add quality to the object in terms of definiteness, and [+DEF] structures cause less processing cost compared to [-DEF] structures (Aissen, 2003). More definiteness of the [+DEF] structures (von Heusinger & Kornfilt, 2005; von Heusinger & Kornfilt, 2017)) and [+ SPEC] of these structures (Emeksiz, 2003) provides more clues in terms of processing and facilitate processing. In addition to this, it is possible that [-DEF] objects cannot act independently of the verb and these structures are in a position within VP (İşsever & Gracanin-Yüksek, 2011). The findings of the first analysis also show that both in the object position and verb position, [-DEF] structures have longer reading times compared to [+DEF] structures, in other words, they create a higher processing cost. The reflection of the processing difference starting at the object position in the verb field may be caused by the relationship between the object position and the verb position in terms of assignment of the object case. In other words, it is seen that the information provided by verb affects the use of object case features (Klein & de Swart, 2011).

As a result of the second analysis in the processing of subject and object case, it is seen that there is no difference between the conditions in the processing of subject and object

positions. Therefore, we might assume that non-grammatical situations in the subject and object position do not affect the participants' processing. Even if different case features are used, the participants might not focus on the case in the study. Rather, they might focus on just the word and its relationship with the verb. Moreover, there are two possible interpretations on the first member of the subject case violations condition, NP (Aktör-ün "Of actor/ actor's"), such as being the subject of embedded sentence or the demonstrative position of a possessive phrase at this stage. It is seen that this multiprobability in terms of processing does not make a difference in terms of processing. Like in subject position, object case violation does not affect the processing. Therefore, we can also mention about another possibility which the participants might process the subject and object equidistant. Öztürk (2005) emphasizes that the subject remains in-situ within Specs of vP unless it needs to impose scope properties and the object also raises to adjoin to one of the Specs of vP to check its case feature in a local relation, which might suggest the any type of operation will see those two positions equidistant from each other.

In the second experiment, it is seen that subject case violation creates more cognitive cost than both object case violation and grammatical condition, while object case violation creates more cognitive cost than grammatical condition in terms of the length of the reading period in the verb. In other words, the participants might need more processing time about the syntactic and semantic order of the sentence when they do not see the subject-verb agreement, (Kutas and Hillyard, 1983; Spencer & Zwicky, 1998; Carreiras et al., 2015). Thus, the participants might also have to process the non-matching subject case besides processing subject- verb non-agreement. These findings might also suggest that the verb is important in the processing of case features and both object case and subject case are determined in this field. In the study, there are some syntactic possible reasons why the subject case creates more processing cost than the object case. The processing of the object case in VP and the short distance between the complement and the head; the realization of the subject case feature in TP and the fact that the structural distance between the two elements is long, and the need for some additional operations such as the matching of the agreement features between the subject and verb morpheme are considered as possible reasons under this difference (Pesetsky & Torrego, 2011; Richards, 2007).

### **Suggestions for Practice**

It does not seem possible to determine exactly which or which of the possibilities including more space in the working memory, locality, pseudo-incorporation between verb-object, lexical determination that can underlie the difference of the case assignment processes are effective in the experimental design of this study. Therefore, the development of the issue with new experiment sets to test these sub-explanations will contribute to the literature.

## References

- Aissen, J. (2003). Differential object marking: Iconicity vs. economy. *Natural Language and Linguistic Theory*, 21, 435–483.
- Arslan-Kechriotis, Z. C. (2006). The pragmatic/semantic and syntactic properties of *–(y)All* clauses in Turkish. In S. Yağcıoğlu et al. (eds.), *Advances in Turkish Linguistics: Proceedings of the 12th International Conference on Turkish Linguistics, Aug. 11-13, 2004*, Dokuz Eylül University, Izmir: Dokuz Eylül Yayıncılık, 2006, pp. 65-78.
- Aygen, G. (2007). Syntax and semantics of genitive subject-case in Turkic. *California Linguistic Notes*, 32(2), 1- 39.
- Aygen, G. (2003). *Finiteness, Case and Clausal Architecture (PhD dissertation, Harvard University)*. Cambridge, USA.
- Aygüneş, M. (2013). *Türkçede Uyum Özelliklerinin Olaya İlişkin Beyin Potansiyelleri (OİP) Açısından İncelenmesi (Unpublished PhD dissertation, Ankara University Institute of Social Sciences)*. Ankara.
- Aygüneş, M., Aydın, O., & Demiralp, T. (2014). Özne durumu ile uyum arasındaki ilişki: Olaya ilişkin beyin potansiyelleri (OİP) incelemesi. 28. *National Linguistics Congress Program*. Sakarya.
- Baker, M. C. (2013). On agreement and its relationship to case: Some generative ideas and results. *Lingua*, 130, 14-32.
- Bossong, G. (1983). Animacy and markedness in universal grammar. *Glossologia*, 2(3), 7–20.
- Bornkessel, I., McElree, B., Schlesewsky, M., & Friederici, A. D. (2004). Multi-dimensional contributions to garden path strength: Dissociating phrase structure from case marking. *Journal of Memory and Language*, 51, 495–522.
- Brown, Colin; Hagoort, Peter & Chwilla, Dorothee. (2000). An Event-related brain potential analysis of visual word priming effects. *Brain and Language*, 72, 158-90.
- Burkhardt, P. F., & Schlesewsky, M. (2007). Effects of (in)transitivity on structure building and agreement. *Brain Research*, 1163, 100-110.
- Carreiras, M., Quiñones, I., Mancini, S., Hernández-Cabrera, J. A., & Barber, H. (2015). Verbal and nominal agreement: An fMRI study. *NeuroImage*, 120, 88–103.
- Carreiras, M., Salillas, E., & Barber, H. (2004). Event-related potentials elicited during parsing of ambiguous relative clauses in Spanish. *Cognitive Brain Research*, 20(1), 98- 105.
- Cho, S., Lee, M., O’Grady, W., Song, M., Suzuki, T., & Yoshinaga, N. (2002). Word order preferences for direct and indirect objects in children learning Korean. *J. Child Language*, 29, 897- 909.
- Choudhary, K., Schlesewsky, M., Roehm, D., & Bornkessel-Schlesewsky, I. (2009). The N400 as a correlate of interpretively-relevant linguistic rules: Evidence from Hindi. *Neuropsychologia*, 47, 3012-3022.
- Chow, W.-Y., Nevins, A., & Carreiras, M. (2018). Effects of subject-case marking on agreement processing: ERP evidence from Basque. *Cortex*, 319-329.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2. Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Comrie, B. (1981). *Language Universals and Linguistic Typology*. Chicago: University of Chicago Press.

- Coulson, Seana, King, Jonathan & Kutas, Marta. (1998b). Expect the unexpected: Event-related brain response to morphosyntactic violations. *Language and Cognitive Processing*, 13, 21-58.
- Çağrı, İlhan (2005). *Minimality and Turkish Relative Clauses* ( PhD dissertation, University of Maryland). College Park, MD.
- Çağrı, İlhan (2009). Arguing against subject incorporation in Turkish relative clauses. *Lingua*, 119, 359-373.
- Díaz, B., Sebastián-Gallés, N., Erdocia, K., Mueller, J. L., & Laka, I. (2011). On the cross-linguistic validity of electrophysiological correlates of morphosyntactic processing: A study of case and agreement violations in Basque. *Journal of Neurolinguistics*, 11, 357-373.
- Emeksiz, Z. E. (2003). *Özgüllük ve Belirlilik* (Unpublished PhD Dissertation, Ankara University). Ankara.
- Enç, M. (1991). The semantics of specificity. *Linguistic Inquiry*, 22, 1- 25.
- Ercan, G. S., & Bakırlı, O. C. (2009). Türkçede özne belirtme ve özne yüklem: İşlevsel dilbilgisi çerçevesinde bir çalışma. *Language Journal* (143), 42- 58.
- Erguvanlı Taylan, E., & Zimmer, K. (1994). Case marking in Turkish indefinite object constructions. *Proceedings of the twentieth annual meeting of the Berkeley Linguistics Society: General session dedicated to the contributions of Charles J. Fillmore* (pp. 547-552). eLanguage, the Linguistic Society of America's digital publishing platform.
- Erguvanlı, E. E. (1984). *The function of Word Order in Turkish Grammar*. Berkeley, CA: University of California Press.
- Faul, F., Erdfelder, E., Lang, AG. et al. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.
- Franck, J., Lassi, G., Frauenfelder, U. H., & Rizzi, L. (2006). Agreement and movement: A syntactic analysis of attraction. *Cognition*, 101, 173-216.
- Frenck-Mestre, C., Osterhout, L., McLaughlin, J., & Foucart, A. (2008). The effect of phonological realization of inflectional morphology on verbal agreement in French: Evidence from ERPs. *Acta Psychologica*, 128(3), 528- 536.
- Friederici, A. D., & Mecklinger, A. (1996). Syntactic parsing as revealed by brain processes: First-pass and second-pass parsing processes. *Journal of Psycholinguistic Research*, 25, 157-176.
- Friederici, A. D., & Frisch, S. (2000). Verb argument structure processing: The role of verb-specific and argument-specific information. *Journal of Memory and Language*, 43, 476-507.
- Frisch, S., & Schlesewsky, M. (2001). The N400 indicates problems of thematic hierarchizing. *Neuroreport*, 12, 3391-3394.
- Frisch, S., & Schlesewsky, M. (2005). The resolution of case conflicts from a neurophysiological perspective. *Cognitive Brain Research*, 484-498.
- Gronbeck, K. (1995). *Türkçenin Yapısı*. Ankara: Turkish Language Association Press.
- Hagoort, P., Brown, C. M., & Groothusen, J. (1993). The syntactic positive shift (SPS) as an ERP measure of syntactic processing. *Language and Cognitive Processes*, 8, 439-483.
- Hagoort, P. (2003). Interplay between syntax and semantics during sentence comprehension: ERP effects of combining syntactic and semantic violations. *Journal of Cognitive Neuroscience*, 15(6), 883-899.

- Haskell, T. R., & MacDonald, M. C. (2005). Constituent structure and linear order in language production: Evidence from subject agreement. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 31, 891–904.
- Jegerski, J. (2015). The processing of case in near-native Spanish. *Second Language Research*, 31(3), 281–307.
- Karataş, N. B. (2019). *The Comparison of L1 and L2 Case Processing: ERP Evidence from Turkish*. (PhD dissertation, University of Maryland). College Park, MA.
- Keenan, E. L., & Comrie, B. (1979a). Noun phrase accessibility revisited. *Language*, 55(3), 649–664.
- Kibrik, A. E. (1985). Toward a typology of ergativity. In J. Nichols, & A. E. Woodbury, *Grammar Inside and Outside the Clause* (pp. 268–323). London and New York: Cambridge University Press.
- Klein, U., & de Swart, P. (2011). Case and referential properties. *Lingua*, 121, 3–19.
- Kluender, R., & Kutas, M. (1993a). Bridging the gap: Evidence from ERPs on the processing of unbounded dependencies. *Journal of Cognitive Neuroscience*, 5(2), 196–214.
- Kornfilt, J. (1997). *Turkish*. London: Routledge Press
- Kornfilt, J. (2003). Subject case in Turkish nominalized clauses. In U. Junghanns, & L. Szucsich, *Syntactic Structures and Morphological Information* (pp. 129–215). Berlin and New York: Mouton de Gruyter.
- Kutas, M., & Hillyard, S. A. (1980a). Reading senseless sentences: Brain potentials reflect semantic incongruity. *Science*, 207, 203–205.
- Kutas, M., & Hillyard, S. A. (1980b). Reading between the lines: Event Related brain potentials during natural speech processing. *Brain and Language*, 11, 354–273.
- Kutas, M., & Hillyard, S. A. (1983). Event-related brain potentials to grammatical errors and semantic anomalies. *Memory & Cognition*, 11(5), 539–550.
- Mancini, S., Molinaro, N., & Carreiras, M. (2013). Anchoring Agreement in Comprehension. *Language and Linguistics Compass*, 7(1), 1–21.
- Molinaro, N., Barber, H. A., & Carreiras, M. (2011). Grammatical agreement processing in reading: ERP findings and future directions. *Cortex*, 47(8), 908–930.
- Mueller, J. J., Hahne, A., Fujii, Y., & Friederici, A. D. (2005). Native and non-native speakers' processing of a miniature version of Japanese as revealed by ERPs. *Journal of Cognitive Neuroscience*, 17(8), 1229–1244.
- Mueller, J. L., Girgsdies, S., & Friederici, A. D. (2008). The impact of semantic-free second-language training on ERPs during case processing. *Neuroscience Letters*, 443, 77–81.
- Münte, Thomas & Schiltz, Kolja & Kutas, Marta. (1998). When temporal terms belie conceptual order. *Nature*, 395, 71–3.
- Nevins, A., Dillon, B., Malhotra, S., & Phillips, C. (2007). The role of feature- number and feature-type in processing Hindi verb agreement violations. *Brain Research*, 1164, 81–94.
- Özge, D., Küntay, A., & Snedeker, J. (2019). Why wait for the verb? Turkish speaking children use case markers for incremental language comprehension. *Cognition*, 183, 152–180.
- Öztürk, Balkız (2005). *Case, Referentiality and Phrase Structure*. Holland, Amsterdam: John Benjamins Publishing Company.

- Öztürk, B. (2008). Non-configurationality: Free word order and argument drop in Turkish. In T. Biberauer, *The Limits of Syntactic Variation* (pp. 411–440). Holland, Amsterdam: John Benjamins Publishing Company.
- Papadopoulou, D., Varlokosta, S., Spyropoulos, V., Kaili, H., Prokou, S., & Revithiadou, A. (2011). Case morphology and word order in second language Turkish: Evidence from Greek learners. *Second Language Research*, 27(2), 173-205.
- Pereyra, J.F.S, Klarman, L., Lin, L. J.-F., & Kuhl, P. K. (2005). Sentence processing in 30-month-old children: an event-related potential study. *Cognitive Neuroscience and Neuropsychology*, 16(6), 645- 648.
- Pesetsky, D. &. (2011). *The Oxford Handbook of Linguistic Minimalism*. (C. Boeckx, Ed.) Oxford: Oxford University.
- Richards, M. D. (2007). On feature inheritance: An argument from the phase impenetrability condition. *Linguistic inquiry*, 38(3), 563-572.
- Roehm, Dietmar; Schlesewsky, Matthias; Bornkessel-Schlesewsky, Ina; Frisch, Stefan & Haider, Hubert. (2004). Fractionating language comprehension via frequency characteristics of the human EEG. *Neuroreport*, 15, 409-12.
- Santesteban, M., Pickering, M. J., & Branigan, H. P. (2013). The effects of word order on subject–verb and object–verb agreement: Evidence from Basque. *Journal of Memory and Language*, 68, 160–179.
- Schlesewsky, M., & Frisch, S. (2005). The resolution of case conflicts from a neurophysiological perspective. *Cognitive Brain Research*, 25, 484 – 498.
- Spencer, A., & Zwicky, A. (1998). *The Handbook of Morphology*. Oxford: Blackwell.
- Staub, A. (2009). On the interpretation of the number attraction effect: Response time evidence. *Journal of Memory and Language*, 60, 308–327.
- Suñer, M., & Yépez, M. (1988). Null Definite Objects in Quiteño. *Linguistic Inquiry*, 19(3), 511-519.
- Vincenzi, Marica; Job, Remo; Di Matteo, Rosalia; Angrilli, Alessandro; Penolazzi, Barbara; Ciccarelli, Laura & Vespignani, Francesco. (2003). Differences in the perception and time course of syntactic and semantic violations. *Brain and Language*, 85, 280-96.
- von Heusinger, K., & Kornfilt, J. (2005). The case of the direct object in Turkish: Semantics, syntax and morphology. *Turkic Languages*, 9, 3–44.
- von Heusinger, K., & Kornfilt, J. (2017). Partitivity and case marking in Turkish and related languages. *Glossa: a journal of general linguistics*, 20, 1–40.
- Yang, N., & Bergen, G. v. (2007). Scrambled objects and case marking in Mandarin Chinese. *Lingua*, 117, 1617- 1635.
- Zawiszewski, A., & Friedericia, A. D. (2009). Processing canonical and non-canonical sentences in Basque: The case of object–verb agreement as revealed by event-related brain potentials. *Brain Research*, 1284, 161–179.