THE ROLE OF STRATEGY TRAINING AND INDIVIDUAL LEARNER DIFFERENCES ON L2 READING COMPREHENSION AND STRATEGY USE

HACER KIR

BOĞAZİÇİ UNIVERSITY
2024

THE ROLE OF STRATEGY TRAINING AND INDIVIDUAL LEARNER DIFFERENCES ON L2 READING COMPREHENSION AND STRATEGY USE

Thesis submitted to the

Institute for Graduate Studies in Social Sciences

in partial fulfilment of the requirement for the degree of

Master of Arts

in

English Language Education

by

Hacer Kır

Boğaziçi University

2024

The Role of Strategy Training and Individual Learner Differences

On L2 Reading Comprehension and Strategy Use

The thesis of Hacer Kır

has been approved by:

Assist. Prof. Şebnem Yalçın _____

(Thesis Advisor)

Assoc. Prof. Senem Yıldız _____

Assist. Prof. Yavuz Kurt _____

(External Member)

January 2024

DECLARATION OF ORIGINALITY

I, Hacer Kır, certify that

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
- this is a true copy of the thesis approved by my advisor and thesis committee at Boğaziçi University, including final revisions required by them.

Signature …….……...…….....

Date …….....

ABSTRACT

The Role of Reading Strategy Instruction and Individual Learner Differences On L2 Reading Comprehension and Strategy Use

The present quasi-experimental study investigates if explicit reading strategy instruction improves the L2 reading comprehension skill and strategy use of participants in EFL context. It also explores the effect of individual learner differences on L2 reading comprehension. The participants were 46 EFL university students. Three intact classes were randomly assigned to two experimental (28) and one control group (18). Four-hour explicit reading strategy instruction was given to the experimental group over 2 weeks integrated into their English classes. The instruction was based on CALLA (Chamot & O'Malley, 1994). The participants completed English reading comprehension tests, Survey of Reading Strategies-SORS (Mokhtari & Sheorey, 2002) and Foreign Language Reading Motivation Questionnaire (Mori, 2002). Lastly, I conducted semi-structured interviews to explore the views of participants about the effectiveness of strategy instruction. To analyze the data Mixed design ANOVA and multiple regression analyses were conducted. Mixed design ANOVA results demonstrated that no significant difference was found in reading comprehension and strategy use between the experimental group and control group upon the instruction, indicating that the instruction did not contribute significantly to the improvement of students' L2 reading comprehension. Regression analysis indicated that individual learner differences were not significant predictors of English reading comprehension. Interviews demonstrated that students in the experimental group held positive attitudes toward the strategy instruction.

ÖZET

Okuma Stratejileri Eğitiminin ve Bireysel Farklılıkların Yabancı Dilde Okuduğunu Anlama ve Strateji Kullanımı Üzerindeki Etkisi

Bu yarı-deneysel çalışma, açık okuma stratejisi eğitiminin, yabancı dil öğrenme bağlamında katılımcıların yabancı dilde okuduğunu anlama becerisini ve strateji kullanımını geliştirip geliştirmediğini araştırmaktadır. Aynı zamanda bireysel öğrenci farklılıklarının yabancı dilde okuduğunu anlama üzerindeki katkısını da araştırmaktadır. Katılımcılar, İngilizceyi yabancı dil olarak öğrenen 46 üniversite öğrencisinden oluşmaktadır. Üç sınıftan ikisi deney (28) ve biri kontrol grup (18) olmak üzere üç sınıf rastgele belirlenmiştir. Deney grubuna 2 hafta boyunca CALLA'ya dayalı 4 saatlik okuma stratejisi eğitimi (Chamot & O'Malley, 1994). Katılımcılar İngilizce okuduğunu anlama testini, Okuma Stratejileri Anketi'ni-SORS (Mokhtari ve Sheorey, 2002) ve Yabancı Dil Okuma Motivasyonu Anketi'ni (Mori, 2002) tamamladılar. Son olarak katılımcıların strateji eğitiminin etkililiğine ilişkin görüşlerini belirlemek amacıyla yarı yapılandırılmış görüşmeler yapıldı. Verileri analiz etmek için Karışık desen ANOVA ve çoklu regresyon analizleri yapıldı. Karışık desen ANOVA sonuçları, öğretim sonrasında deney grubu ve kontrol grubu arasında okuduğunu anlama ve strateji kullanımı açısından anlamlı bir fark olmadığını gösterdi; bu da öğretimin öğrencilerin yabancı dilde okuduğunu anlama becerisinin geliştirilmesine önemli ölçüde katkıda bulunmadığını ortaya koydu. Regresyon analizi, bireysel öğrenci farklılıklarının İngilizce okuduğunu anlamanın anlamlı yordayıcıları olmadığını gösterdi. Görüşmeler, deney grubundaki öğrencilerin strateji öğretimine karşı olumlu tutum geliştirdiklerini göstermiştir.

ACKNOWLEDGMENTS

Finally coming to the end of this thesis process, which went through many ups and downs and difficulties and seemed impossible to complete at times, first of all, renewed my belief that I can achieve everything I strive for in this life. That's why I would like to express my deepest and greatest gratitude to myself for being able to manage and successfully complete this process, which perhaps would not have been that difficult under different circumstances. Yes, I know that I did a great job!

In this journey I was surrounded by many people to whom I would like to express my gratitude. First and foremost, I would like to thank my supervisor Assist. Prof. Şebnem Yalçın for her guidance and contribution. I am also grateful for my thesis defense committee who provided their constructive feedback. I would also like to acknowledge the scholarship that I received from the Scientific and Technological Research Council of Türkiye (TÜBİTAK 2210-A). This endeavor would not have been possible without their generous support.

This journey would not have been possible without the constant and sincere support of my family and friends. I offer my heartfelt gratitude to my parents who are my first and foremost teachers. Thank you to my father, Naci Sarı, for always encouraging me to pursue my goals and for teaching me to be virtuous under all circumstances. Thank you to my mother, Hatice Sarı, for teaching me to remind myself to become self-compassionate in difficult times. Thank you to my siblings for being there to encourage me, to support me by all means and to bring joy to my life. I owe a debt of gratitude to Hatice Zülal Boz Yılmaz for being a statistics wizard, great listener, and a lifelong friend; to Kamile İnce for being a great friend with her constant emotional support.

Finally, I would like to express my deepest and heartfelt gratitude to my beloved husband, Özgür Kır, without whom I could not make it through. I have always felt your love, support, and belief in me. Thank you for being with me in this chapter of my life. And my son, Ömer Sami, thank you for being a good boy. It was really precious and meaningful to spend all my break times with you. You were my greatest motivation to complete this thesis successfully.

To my husband and son who were the greatest support in this journey

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION 1

1.1 Background to the study 1

1.2 Purpose of the study 4

1.3 Chapters and organization 5

CHAPTER 2: LITERATURE REVIEW 7

2.1 Definition of reading 7

2.2 Reading comprehension models 9

2.3 L2 reading and individual learner differences 13

2.4 Research into reading strategy instruction 18

2.5 Definition of L2 motivation and models of L2 motivation 34

2.6 Reading motivation in L1 43

2.7 Foreign language reading motivation 45

2.8 Previous studies 46

CHAPTER 3: METHODOLOGY 58

3.1 Research questions and hypotheses 58

3.2 The participants 60

3.3 Research setting 60

3.4 Materials and instruments 61

CHAPTER 4: RESULTS 74

4.1 Participants' previous L2 reading instruction experience. 81

4.2 Effectiveness of the reading strategy instruction 82

4.3 Participants' strategy use and transfer of strategies to different contexts. 82

4.4 Opinions about reading strategy instruction..... 84
CHAPTER 5: DISCUSSION..... 85
CHAPTER 6: CONCLUSION..... 99
APPENDIX A: ETHICS COMMITTEE APPROVAL..... 102
APPENDIX B: THE SURVEY OF READING STRATEGIES (SORS) – TURKISH VERSION..... 103
APPENDIX C: FOREIGN LANGUAGE READING MOTIVATION QUESTIONNAIRE – TURKISH VERSION..... 105
APPENDIX D: INSTRUCTIONAL PLANS..... 107
APPENDIX E: CHECKLIST FOR EVALUATING CALLA INSTRUCTION..... 116
APPENDIX F: INFORMED CONSENT FORM (TURKISH)..... 117
APPENDIX G: SEMISTRUCTURED INTERVIEW QUESTIONS..... 120
REFERENCES..... 121

LIST OF TABLES

Table 1. Dörnyei's three-level framework of L2 motivation 38

Table 2. Participants 60

Table 3. Categorization of Survey of Reading Strategies (SORS) 63

Table 4. List of Reading Strategies 67

Table 5. Descriptive Statistics of Pre and Post Tests of L2 Reading Comprehension Test Scores 75

Table 6. Descriptive Statistics of Pre and Post Scores of Survey of Reading Strategies (SORS) 77

Table 7. Correlations Among the Measures 78

Table 8. Summary of Hierarchical Regression Analysis for Variables Predicting L2 Reading Comprehension 79

LIST OF FIGURES

Figure 1. Definition of reading 7

Figure 2. Interactive model of reading 11

Figure 3. Interrelationships between direct and indirect strategies and among the six strategy groups 16

Figure 4. Gardner's conceptualization of the integrative motive 36

Figure 5. The two-factor motivational measurement model 45

Figure 6. Process of data collection procedure 69

Figure 7. Share of people reading books (%) 89

Figure 8. Rates of book reading by age groups in the last 12 months 90

CHAPTER 1

INTRODUCTION

1.1 Background to the study

Reading has been an indispensable part of human life in modern societies. We read newspapers, magazines, billboards, and e-mails with different purposes in our life to maintain daily routines, gain information or entertain ourselves. It also applies to more formal and academic settings where a great amount of learning emerges with reading. In such settings certain processes such as synthesis, interpretation, evaluation, and use of information selectively from the text are necessary (Grabe, 2009). Although it is a remarkable phenomenon with so many factors called into play "reading is something many of us take for granted" as Grabe stated.

Anderson (1999) defines reading as an active and fluent process involving the reader and the reading material. According to Nunan (2003), reading is the composition of four elements: The text, the reader, fluency, and strategies. Reading skill is considered as the most important skill, which also affects success in other areas of language (Anderson, 2003). In EFL contexts "especially when language students have no direct contact with target language speakers except via written materials, developing motivated fluent foreign language readers is of utmost importance." (Pirih, 2015, p.118).

To explain reading comprehension there are three main models proposed in literature: Bottom-up processing, top-down processing, and interactive processing. To overcome problems in comprehension and develop academic reading comprehension in L2, a number of studies suggested that reading strategy instruction is an effective tool (Aghaie & Zhang, 2012; Akkakosan, 2013; Çubukcu, 2008;

Dreyer & Nel, 2003; Gürses, 2011; Huang, 2014; Li et al., 2022; Salatacı & Akyel, 2002; Taylor et. al., 2006; Macaro & Erler, 2008; Razı, 2014; Ruiz de Zarobe & Zenotz, 2017; Yapp et al., 2021a; Yapp et al., 2021b; Zhang, 2008).

The studies have used a variety of instructional models and Cognitive Academic Language Learning Approach (CALLA henceforth) is one of these models which grounded largely on cognitive theory. Proposed by Chamot and O'Malley (1987), CALLA is based on Anderson's three stage model of skill acquisition (1983, 1985) including cognitive, associative, and autonomous stage. The cognitive stage is conscious, and the learner is instructed how to do the task. The acquired knowledge at this stage is declarative. The next stage is associative where the declarative knowledge is transformed into procedural knowledge. Lastly, at the autonomous stage, the performance becomes automatic with no need for conscience. This study adopted CALLA instructional model and CALLA based instructional plans were embedded into the intervention.

Beyond reading strategy instruction, individual learner differences such as motivation, language aptitude, learning styles and learning strategies might affect reading comprehension. Individual learner differences explored in this study are language learning strategies as cognitive individual variable -mainly focusing on reading strategies- and foreign language reading motivation as socio/affective individual variable. Dörnyei and Skehan (2003) described language learning strategy as "reflecting the learner's active contribution to enhancing the effectiveness of his or her own learning" (p.607). As this study is specifically based on reading strategies, the framework proposed by Sheorey and Mokhtari (2001) is adopted. They grouped reading strategies in three broad categories as *metacognitive*, *cognitive* and *support* strategies. Metacognitive strategies are "intentional and carefully

planned techniques by which learners monitor or manage their reading". Cognitive strategies are "…actions and procedures readers use while working directly with the text. These are localized, focused techniques used when problems develop in understanding textual information". Finally, support strategies "support mechanisms intended to aid the reader in comprehending the text" (p.436).

Motivation is one of the socio/affective individual variables that might affect L2 learning as well as reading comprehension. Dörnyei and Skehan define motivation as "(i) the choice of a particular action, (ii) the persistence with it, and (iii) the effort expended on it. In broad terms, motivation is responsible for *why* people decide to do something, *how long* they are willing to sustain the activity, and *how hard* they are going to pursue it." (2003, p. 614). Unlike L2 learning motivation, reading motivation in L2 research lacked a precise L2-based theoretical model. Therefore, most of the research is influenced by theory and instrumentation from L2 learning motivation or L1 reading motivation literature. The foreign language reading motivation questionnaire that this study adopted was put forward by Mori (2002) who built the theoretical basis upon the theory of L1 reading motivation by Wigfield and Guthrie (1995) as well as including items with reference to Gardner's (1985) integrative orientation concept. In their taxonomy, reading motivation has 11 dimensions under two major motivational factors: Intrinsic and extrinsic. These dimensions are namely: Social, compliance, reading efficacy, curiosity, aesthetics, recognition, grades, challenge, competition, importance, reading work avoidance. While the study of Mori (2002) confirmed the multifacetedness of reading motivation in L2, it did not support that L2 reading motivation is independent of general motivational constructs.

1.2 Purpose of the study

The previous studies in literature has put forward the benefits of strategy training to develop L2 reading comprehension of learners as well as increasing their metacognitive awareness. Thus, the current study first aims to investigate whether explicit instruction of reading strategies have an effect on students' L2 academic reading comprehension and strategy use or not in Turkish EFL context at tertiary level. Although empirical research supported that all learners can benefit from reading instruction, the answer to the question of which strategies are effective is lacking (Yapp et al., 2021b). Therefore, the reading strategies to teach in the current study were compiled based on the findings from a very recent meta-analysis. Based on the Anderson's three-stage model of skill acquisition (1983, 1985) derived from cognitive theory, the current study adopted CALLA instructional model (Chamot & O'Malley, 1994). The number of reading intervention studies in Turkish context that integrate CALLA instructional model is scarce to the best of the researcher's knowledge. In addition to the importance of a systematic strategy-based instruction, language learning strategies and reading motivation also have importance in that they might influence reading comprehension. For this reason, this study also tries to explore the amount that reading motivation and language learning strategies can predict L2 reading comprehension. Although the role of motivation in SLA is a well-established and researched area, most of the studies conducted about motivation in L2 reading emerged from Asia therefore it is an under researched area other than the Asian EFL context. With respect to this, current study is expected to contribute to better understand the L2 reading instruction and how individual differences namely motivation and language learning strategies affect it in an instructed EFL context in Turkey. On the other hand, interviews with the participants in the experimental group

will enable to dive deeper into the participants' opinions about the effectiveness of the instruction. In accordance with the aims stated above following research questions are also informative about the research interests of the current study:

1. Does explicit four-hour-reading strategy instruction have an effect on reading comprehension of Turkish university EFL learners in instructed language contexts?
2. Does explicit four-hour-reading strategy instruction have an effect on Turkish university EFL learners' reading strategy use based on their self-reports?
3. To what extent does reading motivation and reading strategies awareness contribute to reading comprehension of participants?
4. What are the perceptions of participants about the effectiveness of explicit reading strategy instruction?

1.3 Chapters and organization

This study is composed of six chapters. It starts with the introduction which provides a background to the study and states the aims. Chapter 2 provides the literature review of reading definitions, reading comprehension models, language learning strategies, reading strategies, reading strategy instruction, reading motivation and previous studies conducted about reading strategy instruction and L2 reading motivation. Chapter 3 will provide the details of methodology, materials and instruments used, piloting, research setting and data collection procedure. Chapter 4 will report the findings of the study which is followed by Chapter 5 where the findings will be discussed in the light of related theories, hypotheses formulated and previous research in the literature. The last chapter will offer a summary of the study

by providing the limitations as well as implications for classroom and for further studies.

CHAPTER 2

LITERATURE REVIEW

2.1 Definition of reading

Reading is defined in different ways by many researchers. In general terms, it is defined as an active and fluent process involving the reader and the reading material during meaning-making (Anderson, 1999). According to Nunan (2003), reading is a fluent process integrating the information in the text with the background knowledge of the reader to build the meaning. He defines reading as being composed of four elements: The text, the reader, fluency, and strategies (Figure 1).

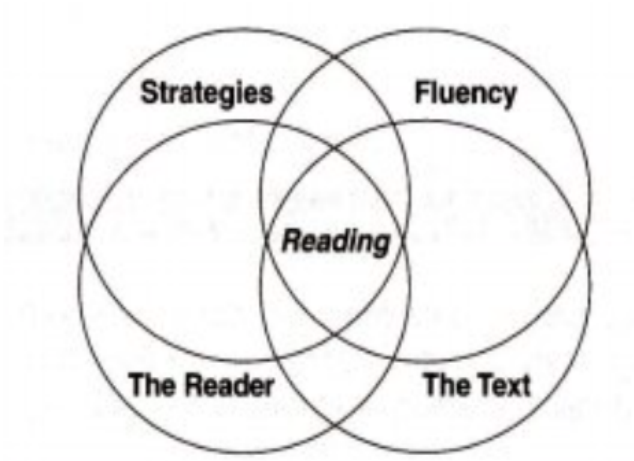

Figure 1. Definition of reading (Nunan, 2003, p.68)

On the other hand, Grabe (2009) found it necessary for a comprehensive definition of reading to include the answers to the following questions: What fluent readers do when they read, what processes they use and how these processes work together to build a general notion of reading. Referring to the views of Grabe, reading is a complex combination of processes. Therefore, reading is a rapid, efficient,

comprehending, interactive, strategic, flexible, purposeful, evaluative, learning, and linguistic process. Grabe explains these processes as follows: (2009, pp.14-15; 1991, pp.378-379) Considering all these processes, reading is by no means an effortless and undemanding activity.

- Rapid process: Reader needs to maintain the flow of information at a sufficient rate to make connections and inferences vital to comprehension.
- Efficient process: Reading is efficient in terms of the ways that various processing skills work together smoothly.
- Comprehending process: The reader typically expects to understand what s/he is reading.
- Interactive process: The reader makes use of information from his/her background knowledge as well as information from the printed page.
- Strategic process: A number of the skills and the processes used in reading call for effort on the part of the reader to anticipate text information, select key information, organize, and mentally summarize information, monitor comprehension, repair comprehension breakdowns, and match comprehension output to reader goals.
- Flexible process: As reader purpose shifts, as comprehension is impeded, or as interest varies, the reader adjusts reading processes and goals.
- Purposeful process: The reader has a purpose for reading, whether it is for entertainment, information, research, and so on.
- Evaluative process: Reading is a continuously evaluative process. Evaluation also occurs when we decide how we should respond to a text.

- Learning process: Ongoing evaluations make reading a learning process.
- Linguistic process: Reading is a linguistic process with making graphemic-phonemic connections, recognizing the words to be read and the structural phrases organizing the words and having a reasonable store of linguistic knowledge of the language of the text.

More recent definitions of reading in 21st century included not only printed page but also digital reading in electronic formats as well. According to PISA (2022), digital reading "requires triangulating different sources, navigating through ambiguity, distinguishing between fact and opinion, and constructing knowledge." (p. 83). In the definition part, I included definitions of reading as well as processes involved proposed by several researchers. Although the definitions differ from each other based on the approach adopted by the researchers, it is clear that there is a consensus on that reading is a complex skill being composed of several elements and different processes.

2.2 Reading comprehension models

Having provided different definitions of reading in the literature and the processes it involves this part will continue with the models to understand the processing patterns of reading comprehension. As reading has been the focus of much research, different models were proposed to understand the processes and the concept of reading comprehension. Emerging from this line of research, these models of how the printed word is understood were most commonly categorized as *bottom-up*, *top-down* and *interactive* models (Anderson, 1999; Grabe, 2009).

The first model, *bottom-up processing*, is fundamentally based on the information presented by the text and it is data-driven (Anderson 1999). "The information is processed from letter features to letters to words to meaning." (p.2). Therefore, the order begins from the smallest units to larger ones and finally to the meaning to achieve comprehension. Bottom-up models mostly highlight the "lower-level" reading processes and Segalowitz, Poulsen and Komoda (1991) stated that these processes are composed of:

> Word recognition and include visual recognition of letter features, letter identification, the generation of grapheme-phoneme correspondences, utilization of orthographic redundancies such as regularities in letter sequences, the association of words to their semantic representations, possibly the identification of basic syntactic structures within the portion of text currently being read, and with the generation of propositional units. (as cited in Anderson, 1999, p.3)

In these models, reading is defined as mechanic requiring the reader to decode the text which is in progress letter-by-letter, word-by-word, sentence-by-sentence. As this mechanical processing converts the information in the text one-by-one, there is little interference from the reader's prior knowledge. Therefore, there is no current reading researchers defining reading as a pure bottom-up process (Grabe, 2009).

The second model, proposed by Goodman (1967), *top-down processing* is mainly based on the active-engagement of the reader with the information presented by the text during processing. The reader in this model is characterized as someone who brings his prior knowledge, expectations, and assumptions about the text to confirm these expectations by focusing on the relevant information in the text (Goodman, 1967). Rather than precisely perceiving and identifying every single element in the text, this model favors the selection of the most productive and the fewest cues required to produce correct guesses. Also known as a psycholinguistic game, in this reading model the reader is being active by making and confirming the

predictions mainly from his prior knowledge of the different linguistic levels such as graphophonic, syntactic and semantic levels (Carrell,1988). Because of the importance of the reader's prior knowledge, inferencing is a noticeable aspect in top-down models as opposed to the bottom-up models (Grabe, 2009). In top-down models, "higher-level" reading processes are pointed out as (Segalowitz, Poulsen and Komoda, 1991):

> higher level is concerned primarily with integration of textual information and includes resolving ambiguities in the text, linking words with their co-referents, integrating propositional units across sentences, generating, and updating a schema or representation of the text as a whole, and integrating textual information with prior knowledge. (as cited in Anderson, 1999, p.3)

There are few reading researchers supporting extreme top-down views (Grabe, 2009).

However, the nature of reading cannot be explained by either of the models mentioned alone. Therefore, researchers beginning with Rumelhart (1977), proposed interactive models of reading and those models have been expected as the most comprehensive description of the reading process. By definition, "interactive models assume that skills at all levels are interactively available to process and interpret the text" (Grabe, 1988, p.59). Figure 2 is a graphical representation of this definition:

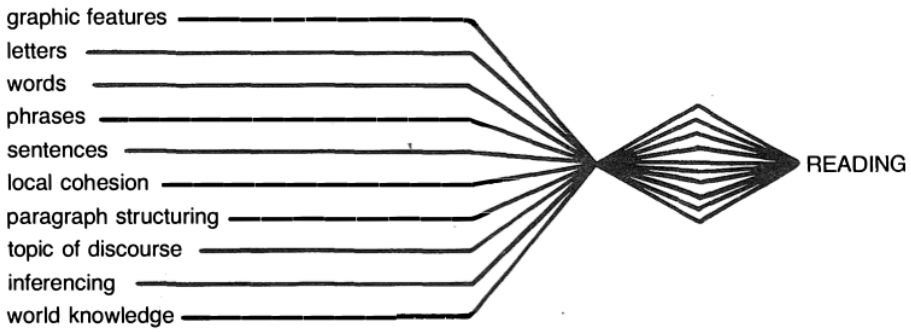

Figure 2. Interactive model of reading (Grabe, 1988, p.59)

An interactive approach includes the elements of both models assuming "that a pattern is synthesized based on information from several knowledge sources (e.g., feature extraction, orthographic knowledge, lexical knowledge, syntactic knowledge, semantic knowledge)" (Stanovich, 1980, p.35). Also, interactive models enable the compensation for deficiencies at any levels, namely "higher-level processes can actually compensate for deficiencies in lower-level processes" (Stanovich, 1980, p.36). That is, a reader with poor word recognition skills can rely on contextual components to obtain extra sources of information.

Grabe (1991) emphasized that the term *interactive approaches* led to two different interpretations in general. The first interpretation refers to the general interaction between the reader and the text while the second interpretation refers to the interaction between many component skills operating simultaneously. Therefore, reading is composed of "both an array of lower-level rapid, automatic identification skills and an array of higher-level comprehension/interpretation skills. (Grabe, 1991, p.383). Although the two interpretations were found to be complementary, the first interpretation was stressed by second language researchers.

To summarize, there are three main models to explain reading skill. Represented by Gough (1972) and LaBerge and Samuels (1974), the bottom-up processing is data-driven, and the reader reconstructs from the smallest text units to larger parts in a linear and hierarchical way (Kong, 2019). The top-down processing, on the other hand, refers to the processing from the largest units to smaller ones in a more predictive way as opposed to the bottom-up processing. Represented by Goodman (1967), top-down processing is reader-driven and the prior knowledge of the reader, called *schemata* (Alderson, 2000) plays an important role for the interpretation of the text. Finally, proposed by Rumelhart (1977), the interactive

processing is a more comprehensive approach in which the readers build up the meaning in combination with both schematic (top-down) and linguistic knowledge (bottom-up).

2.3 L2 reading and individual learner differences

The previous part introduced different processes involved in reading namely, bottom-up, top-down and interactive. These reading processes are automatic in nature which are defined as reading skill (Williams & Moran, 1989). However, the reader, beyond this automatic process, exerts significant level of active control over his/her reading process with the use of strategies which are conscious and deliberate procedures. In this respect, understanding reading strategies can help us understand the interaction of reader with the text as well as how their strategy choice would affect the comprehension of text (Cohen & Upton, 2006). Due to the strategy focus of this study, language learning strategies and in particular reading strategies will be covered in the forthcoming parts. Being among the cognitive individual learner differences, MacIntyre (1994) considered language learning strategies as "One of the most fertile areas of research in language learning." (p. 185). Also, Dörnyei and Skehan (2003) marked the potential between learning strategies and motivation which will be the other individual learner difference to be covered in current study.

2.3.1 Language learning strategies

Researchers have become interested in how language learners process new information and what kind of strategies they benefit to overcome those problems that they come across. This is how language learning strategies have received a great amount of attention since 1970's with the study of researchers exploring the

strategies of good language learners in second language learning (Naiman et al., 1978; Rubin, 1975). Thus, this next part will summarize the background of language learning strategies by providing the concept and characteristics of language learning strategies as well as different taxonomies proposed by different researchers.

According to the definition of learning strategies by Weinstein and Mayer (1986) any learning strategy can affect the way how a learner selects, acquires, organizes, or integrates new information. On the other hand, Oxford (1990, p.8) defined the learning strategies as "..specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations." Finally, Ellis (1994) lists the main characteristics of learning strategies as follow (pp.532-533):

- Strategies refer to both general approaches and specific actions or techniques used to learn an L2.
- Strategies are problem-oriented.
- Learners are generally aware of the strategies they use.
- Strategies involve both linguistic and non-linguistic behaviors.
- Linguistic strategies can be performed in the L1 and L2.
- Some strategies are behavioral while others are mental.
- Generally, strategies contribute indirectly to learning; however, some strategies may also contribute directly.
- Strategy use varies considerably as a result of both the kind of task the learner is engaged in and individual learner preferences.

As indicated by different researchers, learning strategies are accepted to be problem-oriented and they can affect the learning both directly and indirectly.

Strategies are not of a single type; they can be behavioral or mental. Most importantly, learners are generally aware of their strategy use therefore learning strategies are teachable (Ellis; 1994; Oxford, 1990).

2.3.2 Taxonomy of language learning strategies

Much of the earlier research attempted to compile the learner strategies that were found to contribute to learning under general categories (Rubin, 1981; Naiman et al., 1978). The frameworks proposed by O'Malley & Chamot (1990) and Oxford (1990) are among the primary classifications and have been used in numerous studies. O'Malley and Chamot (1990) grouped strategies following the framework of Anderson's cognitive theory (1990). Metacognitive strategies refer to the higher order executive skills requiring planning, monitoring, and evaluating (p. 44). Metacognitive strategies also include thinking about the learning process and monitoring one's own production while it is taking place (O'Malley et al., 1985). The second group of strategies are cognitive strategies. Cognitive strategies work straight on the information and include the manipulation of the learning material. In application, cognitive strategies may be limited to certain tasks in learning activity. The last category, social/affective strategies concern the interaction either with other people or ideational control over affect. Usually, they are applicable to a variety of tasks.

Another taxonomy of language learning strategies was put forward by Oxford (1990). Her system of language learning strategies was more comprehensive, detailed, and systematic compared to the other classifications. In Oxford's system, strategies are grouped in two main categories as direct and indirect which are further subdivided into 6 groups. In this system, all strategy groups are able to both connect

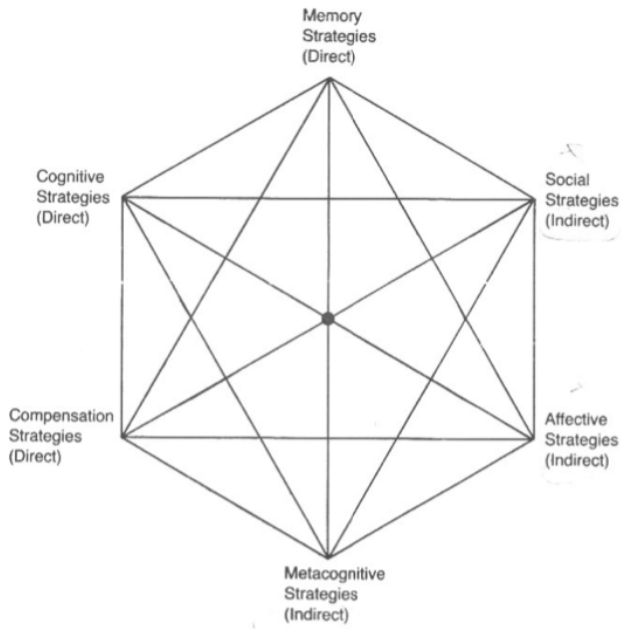

Figure 3. Interrelationships between direct and indirect strategies and among the six strategy groups
(Oxford, 1990, p.15)

with and support each other as shown in Figure 3. It shows the Strategy System proposed by Oxford.

2.3.3 Taxonomy of reading strategies

Along with the taxonomy of general language learning strategies, different taxonomies of strategies were put forward specifically for reading skill as well. Reading was characterized as an active process for comprehension, and it was highlighted to teach strategies to read more efficiently (Grabe, 1991). As the focus of this study is mainly on teaching reading strategies, I included two general categorizations of reading strategies commonly mentioned in literature in this section. The first one is the differentiation of strategies as general/local strategies while the other one is cognitive/metacognitive strategies. Block (1986, pp. 472-474) categorized the reading strategies into two levels as general comprehension and local linguistic strategies:

- General strategies: They refer to strategies required for gathering and monitoring the comprehension. These strategies include anticipating content, recognizing text structure, integrating information, questioning information in the text, interpreting the text, using general knowledge and associations, commenting on behavior or process, monitoring comprehension, correcting behavior, reacting to the text.
- Local strategies: They refer to strategies used to understand linguistic units and they take place in extensive modes. These strategies include paraphrasing, rereading, questioning the meaning of a clause or sentence, questioning the meaning of a word, and solving vocabulary problems.

The second group of strategy categorization is cognitive/metacognitive differentiation accompanied by an additional strategy group named differently in different taxonomies. Such a framework was proposed by Anderson (1999). Anderson categorized the reading strategies into three different groups:

- Cognitive reading strategies: Strategies such as predicting, guessing unknown words, analyzing textual characteristics to improve comprehension, creating mental maps to comprehend the relationships between words and ideas, summarizing etc.
- Metacognitive reading strategies: Strategies such as setting goals, listing relevant vocabulary before reading, working with peers, evaluation etc.
- Compensating reading strategies: Strategies such as taking notes, revision of key ideas and details, making a picture of scenes from text to remember, classification of vocabulary into meaningful groups etc.

Similar to the framework of Anderson (1999), Sheorey and Mokhtari (2001, p.436) grouped the reading strategies in three broad categories as *metacognitive*, *cognitive* and *support* strategies:

- Metacognitive strategies: Intentional, carefully planned techniques by which learners monitor or manage their reading such as setting purpose for reading, previewing the text before reading, using text features.
- Cognitive strategies: Actions and procedures readers use while working directly with the text. These are localized, focused techniques used when problems develop in understanding textual information such as using prior knowledge, adjusting reading rate, guessing meaning of unknown words
- Support strategies: Support mechanisms intended to aid the reader in comprehending the text such as taking notes while reading, underlining information in the text, using reference materials.

Having provided different taxonomies, it is clear that general strategies correspond to metacognitive strategies while local strategies correspond to cognitive strategies in the most general sense. Although they have a number of common features, some groups were named differently as in compensating reading strategies and support strategies. When it comes to individual strategies, although some strategies were grouped under different categories, there are many similarities among different reading taxonomies as well.

2.4 Research into reading strategy instruction

A number of studies have been conducted to examine whether or how use of reading strategies can develop L2 reading comprehension. Reading instruction that includes

reading strategies and promote strategic reading was found to contribute to students' academic reading ability (Yapp et al. 2021a). Although there are studies showing that strategy training is effective on the comprehension and use of strategies, the degree of the effectiveness is unclear (Taylor et al., 2006). Grabe drew attention to the difficulty of coming to an overall conclusion because of moderating variables until many more strategy training experiments are conducted (Grabe, 1991). The number of studies in L2 contexts is limited and there is need for more studies including variables such as age and type of strategy training (Grabe & Stoller, 2002; Taylor et al., 2006). Still, the comparison across studies and a conclusive result is difficult as expressed by Brantmeier (2002):

> The interactive nature of L2 reading, in and of itself, reveals the difficulty in designing studies that examine the L2 process as well as the complexity involved in formulating generalizations across L2 reading strategy studies. Both the nature of the sample and the setting within which a study takes place must be considered when thinking about generalizability. (p. 12)

Intervention studies used varied strategy training types in EFL/ESL contexts including *Explicit Reading Strategy Instruction* (See Taylor et al., 2006 for a meta-analysis), *Experience-Text-Relationship* (Carrell et al., 1989; Salatacı & Akyel, 2002), *Reciprocal Teaching* (Song,1998) and *Cognitive Academic Language Learning Approach-CALLA* (Aghaie & Zhang; 2012; Çubukcu, 2008; Gürses, 2011). CALLA instructional model was chosen as the strategy instruction type for the present study because it promotes both academic language and content development as well as providing explicit instruction and practice of learning strategies (Chamot & O'Malley, 1987).

2.4.1 The cognitive academic language learning approach

The Cognitive Academic Language Learning Approach CALLA was first developed by Anna Chamot and Michael O'Malley in 1987 to develop academic needs of ESL students by integrating (i) content area subject, (ii) academic language development, and (iii) explicit instruction and practice of learning strategies. Thanks to those learning strategies, learners will learn academic language and content more effectively thereby performing better in comprehending and using their second language compared to other learners. In the CALLA method, learners will attain an important understanding of their own learning and they will become more strategic, independent, and self-regulated by use of learning strategies (Chamot & O'Malley, 1994, p.58). Under the premise that learning is active and dynamic there are four basic propositions underlying the use of learning strategies in CALLA (p.59-60): Active learners are better learners, strategies can be learned, academic language learning is more effective with learning strategies and learning strategies transfer to new tasks. The CALLA method has a five-step procedure, and these steps are Preparation, Presentation, Practice, Evaluation and Expansion respectively. More details about the steps of CALLA will be provided along with the intervention in methodology chapter.

CALLA is influenced by cognitive theory heavily based on Anderson's Skill Acquisition theory (1983, 1985). Understanding this framework is important to identify specific learning strategies which are appropriate at different stages in the skill acquisition process. Following Andersons's Information Processing Theory of cognition and memory, the distinction between declarative and procedural knowledge is also crucial to understand the representation of information in memory. What we know about information is declarative knowledge -static- while what we

know how to do is procedural knowledge which is also known as dynamic. In his skill acquisition theory, Anderson presents a three-stage model of skill acquisition including cognitive, associative, and autonomous stage. Cognitive stage is the beginning stage of skill learning where the learner is instructed how to do the task and it involves conscious activity of learner. The acquired knowledge at this stage is typically declarative and can be verbalized by the learner. The next stage is associative and characterized with the transition from declarative knowledge to its procedural form. However, the initial representation of the declarative knowledge still remains at this stage too. The performance at this stage becomes slowly expert with the detection and elimination of errors yet the errors may still occur from time to time. The last stage, autonomous stage, is where the performance becomes increasingly fine-tuned. Automaticity is achieved so that the skill can be performed effortlessly with no need for conscience. (O'Malley & Chamot, 1990, p. 25-26).

2.4.2 Reading strategy instruction and classroom practices

Studies have supported that reading strategy instruction is effective for developing reading comprehension and increased strategy use in different proficiency levels such as beginner (Macaro & Erler, 2008), pre-intermediate (Salatacı & Akyel, 2002), intermediate (Huang, 2014) level students, in different language contexts such as EFL (Salatacı & Akyel, 2002; Ikeda & Takeuchi,2003) or ESL (Dreyer & New, 2003) context and in different teaching modes other than traditional ones such as technology-enhanced instruction (Dreyer & New, 2003; Huang, 2014). Yet, there are some studies that reveal no significant impact of reading strategy instruction on students' reading comprehension (Soleimani & Hajghani, 2013; Steinagel, 2005) or strategy use (Li et al., 2022; Zenotz, 2012).

A growing body of research has been undertaken to investigate whether or how reading strategy instruction can increase reading comprehension in L2 over the past few decades. To give a comprehensive answer to this question, Taylor and his colleagues (2006) attempted for the first time to synthesize the results of the previous studies. Findings of this meta-analysis with the inclusion of 23 unique studies suggested that Explicit Reading Strategy Instruction (ERST) resulted in a better comprehension of L2 texts with a mean effect of $d = .54$. That is, 68% of the average students given ERST outperform the ones who are not given such training on reading comprehension. In addition to the overall effectiveness of ERST, a number of variables involved in the instruction procedure were also considered such as type of strategies (metacognitive or cognitive) and reading comprehension measures, length of study and treatment, language context (EFL or ESL), the participants' age and proficiency level. The findings revealed that there was no significant difference between studies that did or did not use metacognitive strategies in ERST. Similarly, there was no significant difference between studies using different reading comprehension measures and with different language contexts. In terms of length of study and treatment, although no significant difference was found according to the number of instruction hours, in the total time of the treatment -from pre to post test- there was a significant difference favoring the shortest study length (0-4 weeks). The age variable was also found to have an influence on the effectiveness of ERST in that adolescents and adult learners seemed to use it more effectively. With respect to the proficiency level, a certain L2 competency level was found to be necessary to exceed the threshold corresponding to approximately 3.000 word-level knowledge. Finally, the text length of the reading comprehension posttests was considered to be

influential, highlighting that longer texts enable more strategy use. However, the results of this meta-analysis ended up being inconclusive.

Recently another meta-analysis has been conducted by Yapp and her colleagues (2021b). They attempted to compare the effectiveness of individual L2 reading strategies in terms of reading comprehension different from the previous meta-analysis by Taylor et al. (2006). They also focused on other variables such as teacher type and pedagogical approach used in the studies explored. With a total number of 46 studies, the overall effectiveness of reading strategy intervention on L2 reading comprehension was found to be $g = .91$ which was interpreted as a large effect. This finding suggested that students who received a reading strategy instruction showed significantly greater outperformance in reading comprehension than who didn't. According to the study findings, *connecting new knowledge to what is already known* was found to be the most effective strategy followed by *asking oneself questions while reading* and *activating background knowledge* out of 10 strategies analyzed. However, *visualization* and *looking at pictures* didn't reveal any significant influence on reading comprehension. The other strategies found to be effective with significance were *making predictions while reading*, *skimming, and scanning*, *semantic mapping*, *guessing meanings from headings and pictures* and *paying attention to structure.* In terms of the effect of the pedagogical approach, although no main effect was found some of the approaches revealed significant effect when in interaction with the reading strategies. Namely, there was a positive effect of *teacher modelling* when combined with *visualization* and *skimming and scanning, approach of introducing the strategy* with *semantic mapping* and finally *collaborative practice with connecting new knowledge to what is already known.* No reading strategies were found to be effective in combination with other pedagogical

approaches which were *teacher modelling*, *strategy awareness raising* and *student self-practice*. In terms of the effect of the test type, no significant difference was found between standard or non-standard tests. Finally, when there is a non-standard teacher teaching the intervention, it resulted in greater effect sizes compared to standard teachers suggesting the effectiveness of the interventions by unfamiliar teachers.

Ikeda and Takeuchi (2003) carried out a study to examine both immediate and long-term influence of strategy training on strategy use in a variety of proficiency levels. 210 Japanese university level EFL learners participated in this study. Participants were divided into 2 proficiency levels namely higher proficiency (HP) and lower proficiency (LP) with an experimental and control group in each proficiency level. Experimental groups received a 20-minute explicit strategy instruction on a weekly basis during an 8-week treatment period. Meanwhile, the control group received the same reading instruction except for the strategies. Before and after the intervention all four groups were given a strategy inventory developed by the researchers themselves to indicate the frequency of strategy use and three reading texts each from a different genre. The statistical analysis showed that subjects in the HP experimental group used the strategies in significantly higher amount than the control group both in one immediate and two delayed post-tests (3 and 5 months respectively after the instruction). Although the delayed post-test results revealed a fall in the frequency of strategy use compared to immediate post-test, there was still a significant difference between that of the pre-instruction period. However, in the LP group there was no significant difference found. The authors interpreted the ineffectiveness of the strategy instruction for the lower-level group as

the selection of the strategies for the instruction addressing the top-down processing level to which the lower-level group did not attain yet.

Dreyer and Nel (2003) conducted a quasi-experimental study to investigate whether teaching reading strategies and reading comprehension within a technology-enhanced learning environment would assist the development of reading comprehension and strategy use of ESL students in South Africa majoring in Communication Studies. 131 first-year university students taking the English for Professional Purposes course took part in this study. Initially, the participants completed the Reading Strategies Questionnaire to understand their current use of reading strategies and three different tests to measure reading comprehension in English. The experimental group were given a 13-week strategic reading instruction module consisting of an interactive study guide, one-to-one contact sessions and a multiuser digital learning environment called *Varsite* accommodating the learning style preferences of students. With Varsite, students completed a number of assessments requiring the use of certain reading strategies. While doing this, students were exposed to a great amount of authentic information thereby increasing their comprehension level and background knowledge. The post-tests indicated that the experimental group statistically exceeded the control group in all reading comprehension measures as well as in strategy use. Moreover, when the participants in both groups were further categorized as either successful or at-risk students both groups in the experimental group had significantly higher performance on both measures compared to that of control group.

Another study set in the online reading context was carried out by Zenotz (2012) exploring the influence of metacognitive strategy instruction in online reading. Subjects were 143 university students in Spain. Quantitative data was

obtained with reading comprehension level tests and surveys designed as pre/posttest. For the qualitative data, on the other hand, reflective instruments such as metacognitive activity and progressive strategy diary was used obtained from only experimental group. Students received about 14 hours of strategy instruction distributed over one term-16 weeks- covering six strategies considered as essential for online reading. The findings indicated that strategy training for online reading can improve reading comprehension on the Internet significantly. As for the effect on the frequency of strategy use, no significant pattern of development was found.

Similarly, Huang (2014) conducted a quasi-experimental study to investigate whether online or paper-based reading strategy instruction is more effective for improving reading comprehension. The participants were 57 intermediate level EFL learners at a university in Taiwan. After the students were randomly assigned to "*online reading strategies*" or "*paper-reading strategies*" groups, both groups received a four-hour instruction in a single session. The only difference was the medium of the instruction. In the *paper-based module*, all the materials were given through handouts while the *online module* received the modules through a web-based program developed for this instruction by the researcher herself. Findings from written recalls as a measure of reading comprehension revealed that the scores of total reading comprehension as well as that of identifying main ideas and details were significantly greater in the online reading strategy group compared to paper-based reading strategy group. Also, the focus group interviews showed the positive assessment of students of the web-based reading instruction. The positive feedback was given for the following functions of web-based reading instruction: Online dictionary, highlighting, reading rate, music, and online discussion board.

A similar study was conducted by Akkakosan (2013) in which he compared the traditional, teacher-centered teaching of reading (control) and strategies-based approach (experimental group). The total number of participants in both groups were 164 and the participants in each group were stratified into three proficiency levels namely high-level, moderate-level, and low-level. The data collection measures included Nelson-Denny Reading Test used for reading comprehension and a portfolio approach was adopted to explore the students' actual use of reading strategies. To determine the existing L2 reading strategy use, all the participants were given a strategy questionnaire as a pre-test. During intervention, both groups received the same instruction for 14 weeks, three hours per week following the same course book called *More Reading Power* (Mikulecky & Jeffries, 2014). While the control group focused on the coursebook only, the teachers of the experimental group also focused on increasing students' metacognitive awareness and coordinated use of multiple strategies for an effective comprehension. The difference between pre-posttests in reading comprehension scores revealed that the instruction had a small effect, yet it was statistically significant. Also, the qualitative data derived from the portfolio entries revealed important findings in relation to the learning process of L2-based reading strategies in different proficiency levels in the experimental group. Participants in all proficiency levels used more than one strategy and used the different strategies in combination in all their portfolio entries. Also, almost all of them were successful in providing the exact description of strategies. In describing each strategy used and showing an understanding of the purpose and conditions of a particular strategy use higher proficiency levels showed a greater performance. Only the high-level group showed a superiority in providing expressions of their background knowledge and detailed explanation of their personal reflections,

experiences, attitudes, and emotions in relation to what they read in their portfolio entries.

In their study with 90 Iranian pre-university female students, Soleimani and Hajghani (2013) researched the potential of reading strategy instruction in raising the learners' reading comprehension, strategy awareness and employment. The data was collected with a reading comprehension test, questionnaire, and interview. The results of the study revealed that the instruction had no significant impact on learners' reading comprehension, yet it enhanced the reading strategy awareness of learners significantly. Also, interviews revealed that participants in the experimental group held positive beliefs about the instruction supporting perceived effectiveness of the instruction.

As one of the very few reading strategy intervention studies with young learners, Macaro and Erler (2008) conducted a longitudinal study with beginner learners of French as a foreign language. They investigated the effects of a strategy instruction programme on reading comprehension, strategy use and attitudes toward reading in French. The participants were 116 students (11-12 years old) from six matched intact classes of Year 7 to Year 8 in secondary schools in England. The research instruments comprised of reading comprehension tests, learners' strategy use questionnaire and an attitude questionnaire all given as both pre and posttests. The experimental group (three classes) received strategy instruction proposed by Macaro (2001) for two semesters. The instruction consisted of the following five consecutive stages: *awareness raising*, *modelling of strategies*, *scaffolded practice*, *removal of scaffolding* and *evaluation*. The results showed that the experimental group outperformed the control group in both reading comprehension measures namely *translation* and *idea units*. While the observed patterns of change in strategy

use demonstrated a significant increase in “text-engagement” strategies in the experimental group suggesting increasing learner independence and confidence the control group, on the other hand, showed a significant increase in “teacher-reliance” strategies. Finally, the intervention group reported significantly more positive attitudes toward not only reading but also toward other areas of learning such as listening, spelling, homework, textbook and learning in general.

Another study with young learners was carried out by Ruiz de Zarobe and Zenotz (2017) to examine the influence of strategy instruction on reading competence. The participants came from a multilingual society (Spanish-Basque-English) and English was taught through content-based instruction since the age of four. Designed as a quasi-experimental study, the experimental group were given a 7-week instruction on reading strategies explicitly in both Year 5 and 6 following the taxonomy of Chamot (2001). Before and after the treatment procedure, the students completed a metacognitive reading test four times-at the beginning and at the end of each year-. The results of the analysis revealed that the effect of the strategic instruction on reading comprehension was positive, and it reached to the significant level. Upon the analysis of the progression through the whole period (from test one to test four) the outperformance of the experimental group was maintained over two years also reaching the significance level.

In a very recent study, Yapp and her colleagues (2021a) investigated the effects of a seven-week reading strategy intervention on 801 first year university students’ academic reading comprehension. The students were taught seven strategies which were found to be effective in a meta-analysis by the same authors. Students’ reading scores were measured for three times; ten weeks prior to the intervention, at the start of the intervention and after completion of the intervention.

During this period, students didn't receive any English courses. The analysis revealed that, the difference between the first and second measurement was the result of a natural growth whereas the difference between the second and the last measurement exceeded the natural growth indicating that the intervention was successful. In other words, the students' reading comprehension performance significantly improved thanks to the intervention. The findings also showed that less proficient readers benefitted more than proficient readers.

In another very recent study, Li, and her colleagues (2022) researched the effects of strategic reading instruction and its relation to reading comprehension, strategy use, reading motivation and self-efficacy in 117 Chinese EFL university students. The instruments they used included the reading strategy questionnaire that they adapted from previous questionnaires in the field, the reading motivation questionnaire of Mori (2002), the reading comprehension section of the College English Test Band 4 (CET-4) and interviews. Except for interviews, all the questionnaires and reading comprehension test were administered as pre and posttest. A 16-week training session of 80 minutes each was incorporated to the English classes of experimental group. Upon the strategy instruction, the experimental group outperformed the control group in reading comprehension scores. Also, the interview data showed that participants held positive attitudes about the training and extensive application of strategies taught. However, the other measurements (strategy use, reading motivation and self-efficacy) did not yield a significant result after the instruction in the post measurements.

The number of studies conducted in Turkish context is limited. As one of the pioneering studies in Turkey, Salatacı and Akyel (2002) carried out a study which investigated the possible impact of training on strategy use in EFL and Turkish and

reading comprehension in English. 20 pre-intermediate English learners at university level comprised the participants. The researchers used PET (the Preliminary English Test) as a pre-test for English reading comprehension and then the students were given a 4-week course on reading strategies (12 hours in total) including activating the students background knowledge of the text through experience-text-relationship (ETR) method and monitoring their comprehension using Reciprocal Teaching method. After the four-week instruction, students took a similar version of PET (the Preliminary English Test) as a post-test. Other than the reading comprehension test, a background questionnaire, think-aloud protocols, observation, and semi-structured interviews were among the other data collection instruments. The results revealed that there was a significant difference between students' reading comprehension scores in English after the strategy instruction suggesting the positive effect of the instruction on reading comprehension in English. After the reading strategy instruction in L2, the frequency of top-down strategies (namely prediction, using prior knowledge and summarizing) employed by students significantly increased both in English and Turkish while the use of metacognitive strategy (commenting on behavior) increased significantly only in English.

In her study, Çubukcu (2008) investigated the impact of metacognitive strategy instruction on reading comprehension of expository texts and vocabulary learning. The participants were 130 third year teacher trainees in the English language department in a state university in Turkey. In this experimental study, the experimental group were given a weekly 45-minute explicit strategy instruction class for five weeks using the CALLA model. In total they were introduced to ten metacognitive strategies -two strategies per week-. The instruments of the study included a 20-item multiple choice vocabulary test developed by the researcher and a

reading comprehension test of TOEFL. The results revealed that the participants who received the instruction achieved greater reading performance and it was found to be statistically significant.

Gürses (2011), tried to examine the effects of a strategy instruction based on Cognitive Academic Language Learning Approach (CALLA) on reading comprehension and strategy use in French as FL in Turkey. Before the instruction phase, all participants (18 French preparatory class students) completed the survey of reading strategies, and the focus group completed a think aloud procedure and an interview as pretest. Other data collection instruments included a reading comprehension in French, student dairies and survey of student opinion completed by all the participants. Then, the strategy training lasted for eight weeks in a semester with four hours in a week. Following the experiment, the students completed the comprehension test and survey of reading strategies once again as a posttest. The intervention resulted in significantly higher levels of both reading comprehension and strategy use after the training. In addition to the amount of strategy use, the diversity of strategies also increased with the training. When the students were grouped as high, medium, or low achievers according to their reading comprehension success, medium and low achievers were found to have improved more than the high achievers after the training. Finally, the students expressed a better understanding of their reading comprehension levels. Also, their awareness about their comprehension problems and factors affecting their strategy use increased after the training.

Finally, Razı (2014) conducted a study with a metacognitive reading strategy training programme called *METARESTRAP* that he developed himself. He investigated if the employment of this programme had an effect on reading comprehension and on metacognitive reading strategy employment of students. The

participants were 46 English preparatory class students at a state university in Turkey. In addition to their course materials the experimental group received *METARESTRAP* which lasted six weeks. The other instruments were the reading test that the researcher developed and a metacognitive reading strategy questionnaire. According to the statistical analyses, the participants receiving *METARESTRAP* performed better in reading comprehension and reported more metacognitive strategy use in posttests.

Studies conducted in Türkiye have showed the positive effect of reading strategy instruction on reading comprehension and strategy use in L2 in instructed language settings. Still, there are some concerns with these studies. First, Salatacı and Akyel (2002) and Gürses (2011) did not have a control group which makes it difficult to interpret the growth in reading performance whether it is a natural growth or with the contribution of the intervention. Also, Salatacı and Akyel used a combination of two instructional models which complicates to understand the unique contribution of each instructional model. With respect to the participants of studies, the participants of the study conducted by Gürses (2011) were teacher trainees in English department who might be more motivated and have more metalinguistic awareness about strategy training compared to other language learners. None of the studies conducted in Türkiye considered the potential effect of individual learner differences such as motivation and language learner strategies. Finally, none of the studies above provided the detailed instructional plans of strategy training except for Gürses (2011).

2.5 Definition of L2 motivation and models of L2 motivation

21st century has witnessed a growing body of research in L2 motivation literature with an increasing interest in this field. Motivation is cited to have a major role in any learning situation mainly because it plays an important role as a precursor to start language learning as well as a driving force to pursue it (Dörnyei & Ryan, 2015). It is one of the main determinants of achievement (Dörnyei, 1994) and a "key factor" (Ellis, 1994) in L2 learning. Also, it is one of the individual learner differences that generated the most consistent predictors of learning success in second language (Dörnyei & Skehan, 2003).

Several definitions and frameworks have been articulated to explain L2 motivation. Concerning the understanding and definition of motivation, the only aspect that most of the researchers reached consensus on is that "motivation concerns the direction and magnitude of human behavior" (Dörnyei & Skehan, 2003, p. 614). Dörnyei and Skehan further define motivation as "(i) the choice of a particular action, (ii) the persistence with it, and (iii) the effort expended on it. In broad terms, motivation is responsible for *why* people decide to do something, *how long* they are willing to sustain the activity, and *how hard* they are going to pursue it." In an earlier attempt, L2 motivation is defined from more dynamic and process-oriented perspective as "dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritized, operationalized and (successfully or unsuccessfully) acted out." (Dörnyei & Otto, 1998, p. 65) Another characteristic of L2 motivation that most of the research emphasizes is that it is an eclectic and multifaceted construct (Dörnyei, 1994; Komiyama, 2013).

Unlike research on language learning strategies with exploratory observations of "good language learners", L2 motivation research was distinguished as a well-expressed and theoretically direct orientation thanks to the pioneering work of Canadian psychologists (Dörnyei & Skehan, 2003). Among the most influential models of L2 motivation is the one proposed by Gardner and it has been recognized by many researchers from psychology and education for several decades.

2.5.1 Gardner's motivation theory

Following a series of research studying attitudes and motivation in relation to L2 learning, Gardner (1985) put forward the socio-educational model of L2 acquisition to conceptualize the L2 motivation theory. According to this model motivation has an influence on an individual's achievement in learning a second language and it is influenced by several social-psychological variables. In his widely recognized model, L2 motivation is conceptualized as the combination of three components; *effort expended to achieve the goal or motivational intensity, desire to learn the language*, a*ttitudes towards learning the language.* He also stresses that motivation involves goal-directed behavior (Gardner, 1985). Accordingly, to describe an individual as motivated, s/he needs to display the three components together. Along with motivation the term "orientation" is also introduced and these two are generally used interchangeably. However, Gardner differentiated between motivation and orientation. While the motivation is the combination of the three components above mentioned, orientations are referred to as the class of reasons for learning second language (Gardner, 1985). He also adds that the motivation does not necessarily relate to any particular orientation. Although orientations are distinguished from motivation, the two orientations labelled as *integrative,* and *instrumental* have

become one of the most widely recognized concepts associated with the work of Gardner in the field of motivation. Integrative motivation is defined as "…characterized by a willingness to be like valued members of the language community." (Gardner & Lambert 1959, p. 271). This indicates that studying another language is helpful to understand the people of that language and their way of life thereby permitting to meet more and varied people. Instrumental motivation, on the other hand, concerns the utilitarian gains of linguistic achievement such as obtaining job.

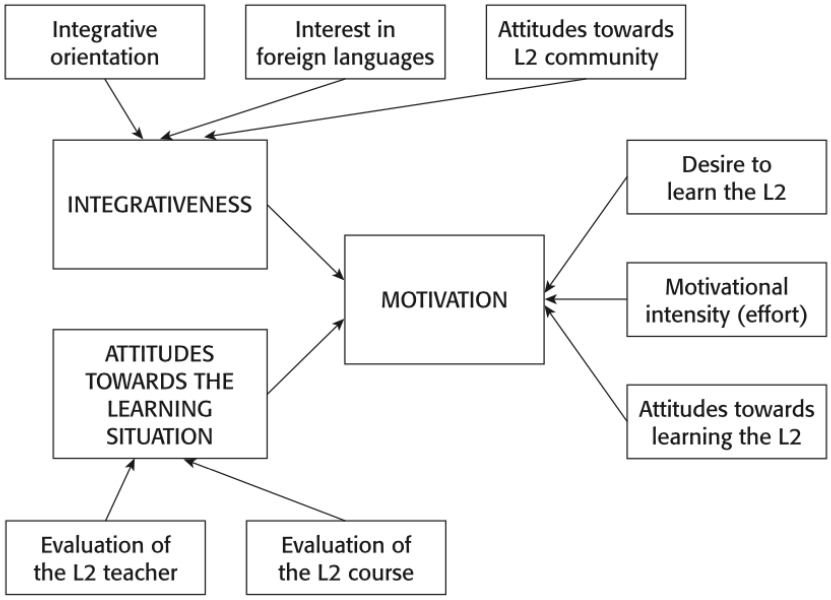

Figure 4. Gardner's conceptualization of the integrative motive
(Dörnyei & Ushioda, 2011, p.42)

Proposing as another influential type of motivation Gardner defines integrative motive as "motivation to learn a second language because of positive feelings toward the community that speaks that language." (Gardner, 1985, p.82-83). In this definition of integrative motive, a number of attitudes closely relate to motivation. Generalized from the studies conducted, two categories of attitudes

toward the language-learning situation are targeted: (i) *Evaluation of the language teacher* and (ii) *Evaluation of the language course*. While explaining what constitutes the integrative motive, integrativeness is another component highlighted that subsumes (i) *Attitudes toward the target language group,* (ii) *Interest in foreign languages,* and (iii) *Integrative orientation* (Gardner & MacIntyre, 1993). Dörnyei and Ushioda (2011, p.42) have presented the conceptualization of Gardner's integrative motive as shown in Figure 4.

Characterized by the work of Gardner and his associates, this period of L2 motivation research was grounded in a social-psychological framework and recognized with its emphasis on the social aspect of learning as well as attitudes towards different language communities. Although social psychological approach contributed to the understanding of the constructs underlying L2 motivation, it remained incapable of immediate classroom application, and it required an educational shift (Dörnyei & Ushioda 2011). Therefore, in an effort to develop L2 models of motivation with a greater explanatory power, new theoretical frameworks of L2 motivation were developed during 1990's within the cognitive-situated period such as Dörnyei's three-level framework of L2 motivation and Self-Determination Theory.

2.5.2 Dörnyei's three-level framework of L2 motivation

Dörnyei (1994) conceptualized an education-friendly framework of L2 motivation with three levels namely Language level, Learner Level and Learning Situation Level (Table 1). Following Crooks and Schmidt's conceptualization of L2 motivation at different conceptual levels, Dörnyei categorized a number of motivational components under each category. In this framework, he mostly refers to

Table 1. Dörnyei's three-level framework of L2 motivation

LANGUAGE LEVEL	Integrative Motivational Subsystem Instrumental Motivational Subsystem
LEARNER LEVEL	Need for achievement Self-Confidence *Language use Anxiety *Perceived L2 Competence *Causal Attributions *Self-Efficacy
LEARNING SITUATION LEVEL	Interest
Course-Specific Motivational Components	Relevance Expectancy Satisfaction
Teacher-Specific Motivational Components	Affiliative Drive Authority Type Direct Socialization of Motivation *Modelling *Task Presentation *Feedback
Group-Specific Motivational Components	Goal-orientedness Norm & Reward System Group Cohesion Classroom Goal Structure

Source: Dörnyei, 1994, p.280

the theories of Gardner and Clément for the first two levels while the last and the most elaborate level is heavily based on findings from educational psychology. Dörnyei rationalizes the separation of the three motivational levels as all the levels have an indisputable effect on the overall motivation independent of one another. That is each level of motivation has its own influence on overall motivation while it

is also capable of invalidating the influence of the motives from the other two levels (Dörnyei & Ushioda, 2011).

- *Language level* is the most general level, and it concerns various aspects of language such as the community it is spoken, the culture it transfers and the pragmatic values of language proficiency it brings about. In line with Gardner's theory, this level include integrative and instrumental motivational subsystems.
- *Learner level* involves the personality traits such as need for achievement and self-confidence that underly the learning process.
- *Learning situation level* encompasses situation-specific motives concerning following areas in a classroom setting: Course-specific, teacher-specific and group-specific motivational components.

2.5.3 Self-determination theory

Self-determination theory (SDT) is among the influential cognitive approaches put forward by Deci and Ryan (1985) in mainstream motivational psychology. Within SDT different types of motivation are given according to varying amount of learner engagement in an activity. These are mainly defined as intrinsic and extrinsic motivation and amotivation. This theory differs from its contemporaries in that it puts the motivation types on a continuum rather than defining it as a dichotomous construct. Within language learning context, much of the research on SDT was carried out by Noels and her colleagues (Noels, 2001, 2009; Noels et al., 1999, 2000, 2001). Noels and her colleagues (2001) define intrinsic motivation in L2 learning context as "the most self-determined form of motivation." (p.426). Accordingly, intrinsically motivated learners have an inherently pleasure in learning L2 and it is voluntary. Thanks to the autonomy and competence that they have those learners

mostly maintain their effort and engagement in L2 learning even if there is no external reward. On the contrary, extrinsic motivation is defined as actions attained with an instrumental end either to earn reward or avoid punishment (Noels et al., 2000). However, this does not necessarily mean that they lack self-determination in their L2 learning process. Instead, extrinsic motivation is categorized into three subtypes from the lowest to the highest level of self-determination. Deci and Ryan expressed that "different types of extrinsic motivation (EM) can be classified along a continuum according to the extent to which they are internalized into the self-concept (that is, the extent to which the motivation is "self-determined") (1985, cited in Noels et.al., 2000, p.61). These types are: (1) external regulation, (2) introjected regulation, and (3) identified regulation. *External regulation* is defined as actions determined by external sources such as career or course benefits. If the external source is removed, the learner is expected to stop his/her effort on L2 learning process. *Introjected regulation* is more internalized type of extrinsic motivation into the self-concept. It concerns reasons which are more internalized to learn an L2. Those reasons are mostly related to guilt or shame such as when a learner feels obliged to speak in L2 so as not to feel ashamed. In this case, learning will only happen as long as the learner requires to remove the guilt. *Identified regulation* is the most self-determined form of extrinsic motivation. Learners with identified regulation learn an L2 because they personally wanted to do so, and it has a value on the part of the learner. The persistence of the learner is parallel to the passion of his/her goals. Finally, amotivation is placed at the far left of the self-determination continuum and it refers to when people see no relation between their actions and their consequences. Also, it arises when learners have no goals of any type therefore, they quit engaging in language learning (Noels et al., 2000; Noels et al., 2001).

Following cognitive-situated period, process-oriented conceptualizations of motivation were proposed such as Dörnyei and Otto's process model. In this period motivation was perceived as dynamic and subject to change contrary to social-psychological approach (Tatar, 2017). This period has finally evolved into socio-dynamic period (Dörnyei & Ushioda, 2011) characterized by Dörnyei's L2 Motivational Self System (2005), Ushioda's Person-in-Context Relational view of motivation (2009), and Complex Dynamic Systems Theory (DST). The socio-dynamic perspective conceptualizes the motivation as dynamic in which individual and learning related factors are in constant interaction with potential impact both on the individual and environment (Tatar, 2017).

2.5.4 Dörnyei and Otto's process model of L2 motivation

With an attempt to model the process aspect of L2 motivation, Dörnyei and Otto (1998) developed the process model. The model is composed of two dimensions which are *Action Sequence* and *Motivational Influences*. The *Action Sequence* suggests that the motivated behavioral process is divided into three phases: preactional stage (choice motivation), actional phase (subtask generation and implementation, appraisal), and postactional phase (evaluation). The second dimension of the model is complimentary dimension of motivation and is made up of *Motivational Influences* that energize the *Action Sequence*. The *Motivational Influences* encompass various motives, and they could be either enhancing or inhibiting.

2.5.5 The L2 motivational self-system

Introduced by Dörnyei (2005) for the first time, the L2 Motivational Self System was an attempt to conceptualize L2 learning motivation within the framework of "self"

(Dörnyei, 2005). It was mainly influenced by the two notable theories from the field of psychology: Higgins's (1987) self-discrepancy theory and Markus & Nurius's (1986) concept of possible selves. Offering a broad construct, the theory consists of three dimensions: The Ideal L2 Self, the Ought to L2 Self, and the L2 Learning Experience (Dörnyei & Ryan, 2015). The first dimension, the Ideal L2 Self, implies a desirable self-image of an L2 user that one would aspire to become in the future. The discrepancy between this ideal image and the current state of a person can foster his/her motivation to learn a new language or develop their proficiency. The ought to L2 Self concerns the characteristics that one believes one ought to own in order to meet expectations or avoid negative outcomes possible to encounter in L2 learning process. As this dimension reflects the Higgins's ought self, it corresponds to more extrinsic types of instrumental motives (Dörnyei, 2009). As for the last dimension, the L2 Learning Experience, "it focuses on the learner's present experience, covering a range of situated, 'executive' motives related to the immediate learning environment (e.g., the impact of the L2 teacher, the curriculum, the peer group, and the experience of success)" (Dörnyei & Ryan, 2015, p.88). To stimulate the motivation and thereby obtain behavioral consequences in the L2 Motivational Self System, Dörnyei (2009) list some conditions to be provided: The desired future self-image must be available to the learner, elaborate, vivid, plausible, be in harmony with the learner's environment; should not be within comfortable reach; should be regularly activated, accompanied by procedural strategies, balanced with counteracting feared possible self.

2.5.6 Person-in-context relational view of motivation

Ushioda (2009) put forward the person-in context relational view of motivation in response to the limitations of traditional linear approaches to L2 motivation research. As limitations, linear models of L2 motivation are reductionist and parsimonious in that they ignore the complex, situational and temporal factors which may affect the individual motivation. Another limitation is the limited analysis of context in linear models (Dörnyei & Ushioda, 2011). In her relational view, Ushioda puts an explicit emphasis on the distinction between real persons and their individual complexity versus individual differences as a static trait. She argues that there is a need to understand the language learners as real people in particular contexts "who shape and are shaped by the context" (Ushioda, 2015, p.48).

2.5.7 Complex dynamic systems theory

The field of applied linguistics has been undergoing a "dynamic turn" with the scholars' focus on exploring the dynamic and nonlinear interactions of variables instead of investigating them in isolation with an attempt to explore simple cause-effect relationship (Dörnyei & Ryan, 2015). The dynamic and emergent characteristics of this new trend of motivation is expressed as "Motivation is less a trait than fluid play, an ever-changing one that emerges from the processes of interaction of many agents, internal and external, in the ever-changing complex world of the learner" (Ellis & Larsen Freeman, 2006, p. 563)

2.6 Reading motivation in L1

Reading motivation has been traditionally explained within the field of psychology therefore conceptualization of reading motivation comes from motivation theories

(Guthrie & Wigfield, 2000). However, it is stressed that motivation to read be differentiated from motivation for language learning generally and therefore there is a need for reading motivation research to be developed for its own domain and construct (Grabe, 2009). With an attempt to research motivation for specific areas rather than in general, Wigfield and Guthrie (1995) hypothesized that students' motivation may be domain-specific meaning that, for example, they could have motivation to listen or speak, but not to read in English. The most influential theory that Wigfield and Guthrie referred to was *expectancy-value theory. (*Eccles & Wigfield, 1995; Wigfield, 1994) according to this theory, achievement is anticipated by two constructs: The individual's expectation of success in a particular activity and the value he or she attaches with accomplishment in that endeavor. It is argued that the first has negative correlation with expectancies for success while that of the latter is positive (Eccles et al., 1983). The association that an individual makes between the value and success in that task has four components: Attainment Value, intrinsic value, extrinsic utility value, and cost. Mainly based on this theory, Wigfield and Guthrie developed the Motivations for Reading Questionnaire (MRQ) to propose several dimensions of children's reading motivation in L1 in a taxonomy. The items in the questionnaire originally come from both literature on reading attitudes and general motivation. 82 items in total were grouped under 11 dimensions namely: Social, compliance, reading efficacy, curiosity, aesthetics, recognition, grades, challenge, competition, importance, reading work avoidance. With the revision of items, final version included 53 items under the same dimensions: challenge, competition, importance, reading work avoidance. Following study of the same authors investigated the children's motivation with the MRQ and concluded that reading motivation is multifaceted in line with similar studies (Wigfield and Guthrie,

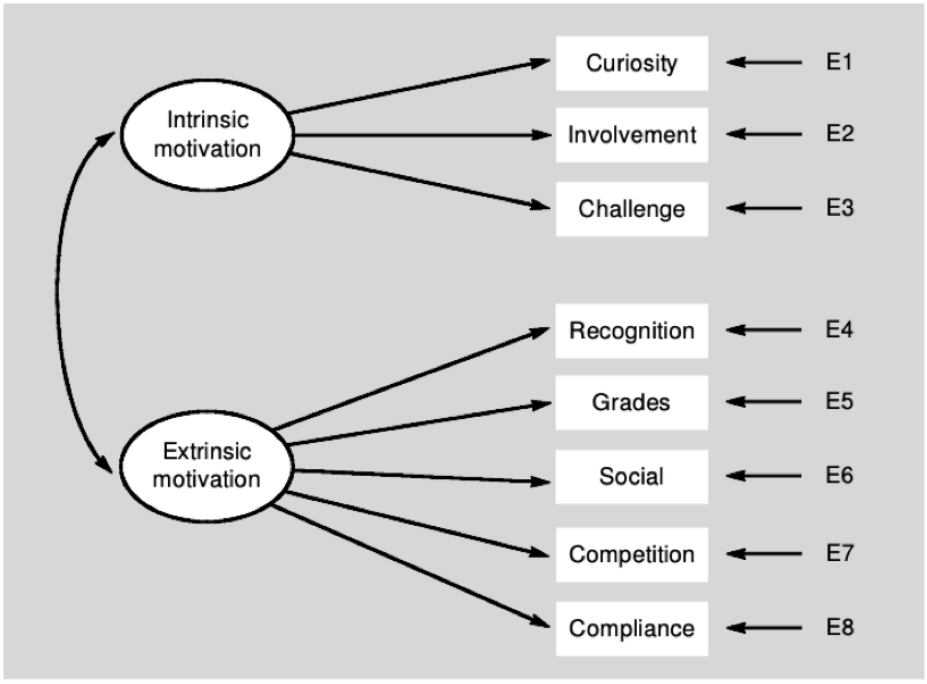

Figure 5. The two-factor motivational measurement model
(Wang & Guthrie, 2004 p. 166)

1997). In a later framework, Wang and Guthrie (2004) revised those 11 dimensions as eight factors under two major motivational factors: Intrinsic and extrinsic. The two-factor motivational measurement model is shown in Figure 5.

2.7 Foreign language reading motivation

As reading motivation in L2 research lacked a precise L2-based theoretical model, most of the research anchor theory and instrumentation from L2 learning motivation or L1 reading motivation literature. To the best of our knowledge, Day and Bamford (1998) attempted to conceptualize reading motivation in foreign language for the first time. They created the expectancy-value model involving four major components: Materials, reading ability in L2, attitudes toward reading in L2, and sociocultural environment, including the influences of family and friends. Materials and reading

ability are related to the expectation component of accomplished L2 reading, the last two components are about the value.

Following Day and Bamford, Mori (2002) researched Japanese university students' L2 reading motivation with an attempt to identify what constitutes foreign language reading motivation. Predominantly, her theoretical basis is built upon the theory of L1 reading motivation by Wigfield and Guthrie (1995) in that reading motivation is domain specific. To investigate foreign language reading motivation of students, she created an original questionnaire based on the model of Wigfield and Guthrie (1995, 1997) as well as including items with reference to the concept of integrative orientation from the socio-educational model proposed by Gardner (1985). This 26-item seven-point Likert scale questionnaire differed in certain items because the target profile is different from the previous groups with university level-students in an EFL context. The items were emerged under four categories namely: Intrinsic value of reading, extrinsic utility value of reading, importance of reading, reading efficacy. The data from the questionnaire with this group of language learners did not support that L2 reading motivation is independent of general motivational constructs. Yet, this study confirmed the multifacetedness of reading motivation. Instead of an overall language learning motivation questionnaire this questionnaire was used in the current study because it was developed as a skill-specific questionnaire.

2.8 Previous studies

To understand what contributions both language efficacy and attitude to English have to the language learning strategies Purdie and Oliver (1999) examined bilingual students aging 9-12 years old. The students participating in this study had reasonable

proficiency both in English with no longer requiring ESL assistance and in their L1. To collect the data, attitude questions were used to assess attitude to English in the classroom, in the playground and at home with a 5-point Likert scale. As for the language efficacy, students rated themselves on a scale from one to three to indicate how good they are at English (listening, speaking, reading, writing, and in general). The language learning strategies section of the questionnaire was developed based on the frameworks of Oxford (1989) and O'Malley and Chamot (1990) but in the analysis only the strategy scores obtained from the O'Malley et al. were used for the parsimony of the study. They performed multiple regression analyses using the total strategy score as the dependent variable and language attitude in the context of the classroom and language efficacy measures (general, listening, speaking, reading, or writing) as the independent variables. Findings revealed that both efficacy and attitude variables can together explain around 15-21% of the variance in the use of language learning strategies.

Magogwe and Oliver (2007) conducted a study to explore the relationship between language learning strategies and self-efficacy beliefs with 480 Botswana students from primary schools, secondary schools, and a tertiary institution. To measure the relationship, this study used a modified version of SILL to collect information on strategies, background questionnaire to collect the students' demographic information and the Morgan-Jinks Student Efficacy Scale (MJSES) to collect self-efficacy information. The findings indicated that there was significant positive correlation between self-efficacy beliefs and overall strategy use at all levels. The correlation was found to be moderate for primary and secondary school while it was weak at tertiary level. Although there is a slight change for students at different levels, the pattern is concerning the proficiency is as follows: the higher the

proficiency level within each level (primary, secondary, and tertiary), the lower the correlation between self-efficacy beliefs and use of strategies.

To understand the relationship between the amount of L1 and L2 reading, different motivational constructs, L2 text comprehension and how it varies for Japanese and Sri Lankan university students Dhanapala (2008) carried out a correlational study. 123 Sri Lankan and 124 Japanese students constituted the participants of the current study. The data was collected with a background questionnaire, a reading comprehension test, and Motivation for Reading Questionnaire (MRQ) adapted from Wang and Guthrie (2004). Pearson Correlation Analysis indicated that amount of reading in both L1 and L2 positively correlated with both extrinsic and intrinsic motivation for students in both groups. On the other hand, while the amount of reading in L2 predicted text comprehension of Sri Lankan students this finding was not found for Japanese students. When it comes to the amount of L1 reading, it had no significant effect on L2 reading motivation for Sri Lankan students while it predicts both intrinsic (strongly) and extrinsic (weakly) motivation in L2 reading of Japanese students. Finally, extrinsic motivational constructs were found to be counterproductive to text comprehension process for Japanese students to a lesser degree and to a larger degree for Sri Lankan students. Overall, it can be shown that motivational factors and their relations to different variables is bound up with contextual factors differing across cultures.

Shih and Reynolds (2015) conducted a quasi-experimental study to investigate the influence of think-pair-share integrated reading strategy instruction on students' English language learning motivation and reading strategy use. The participants were 102 Taiwanese high school students (16-17 years old) enrolled in two-intact classes one receiving reading strategy instruction combined with think-

pair-share and control group receiving traditional reading instruction. The data was compiled with a pre-post intervention questionnaire including background information, motivation components from different studies and the Survey of Reading Strategies (SORS) from both participant groups. Additionally, the intervention group was also administered the think-pair-share questionnaire at the end of the intervention. The intervention took place for two hours twice a week for 18 weeks. The statistical analysis was run to determine if either group's motivation in terms of the four investigated components (intensity, intrinsic, extrinsic, required) increased significantly. Intrinsic motivation increased significantly in both groups showing that there was another factor influencing other than the intervention itself. Also, another significant increase was found in the traditional group's required motivation. Concerning strategy use, the difference between groups failed to reach significance.

Pirih (2015) aimed at determining what influences motivation to read in EFL and the transfer of L1 reading attitudes to L2 reading with young adolescents from a primary school in Slovenia. As one of the few studies shifting focus from university students to young adolescents, this study was conducted with 193 students from the last 4 grades of primary school (11-14-year-olds). The data was collected via a questionnaire made up of four sections with multiple-choice questions and a 4-point Likert scale following Day and Bamford's model of L2 reading motivation. These sections are respectively related to reading materials in English, reading ability in EFL, attitudes towards reading (L1 and EFL reading) and family and friends' influences on reading in L1 and EFL. While administering the questionnaire, students' focus was set on non-compulsory reading in English instead of academic reading. Some important findings were obtained from the study. First, regarding

reading material type in English, this study considered online reading material in virtual world such as subtitles and websites in addition to printed material. Online reading material was found to be the preferable choice by the majority of students as they can find more diverse options for reading in English in different genres. Second, high number of students claimed reading in English frequently, but the frequency of reading drops as the grade level increases. In terms of gender, girls were found to have more favorable attitudes towards free-time and academic reading compared to boys. Another finding of this study suggests that perceived reading ability in English is one of the most influential factor and predictor of motivation different from previous studies finding reading materials and attitudes more influential than reading ability. Regarding family attitudes towards reading, parents' involvement in reading has a more influential effect on students' reading habits than that of friends or peer competition. Also, a meaningful correlation was found between intrinsic motivation and reading frequency while extrinsic motivation does not correlate to EFL reading as much as intrinsic motivation. Finally, the relationship between L1 reading and EFL reading showed negative correlation. That is, their reading activity in one language might not influence reading activiy in another language.

Another study on L2 reading motivation was carried out by Dhanapala and Hirakawa (2015) that investigated the extent of the motivational processes facilitating text comprehension in English as EFL. The data was collected through a reading comprehension test and a reading motivation and attitude questionnaire (RMAQ) that they constructed themselves. The reading test measured the general reading comprehension abilities with four passages along with 40 questions while the RMAQ was a 6-point Likert scale with 60 items. With Principal Component Analysis (PCA), 55 items were loaded on 9 factors namely: Utility value of reading,

curiosity and involvement in reading, positive behavior of reading, challenge for reading that were considered as intrinsic motivational constructs, whereas negative affective attitudes, attitudes toward recognition, compliance, social sharing of reading, and attitude toward grades were considered as extrinsic motivational constructs. The findings indicated that both intrinsic and extrinsic motivation accounted 14% of the variance of Sri Lankan students' text comprehension. However, the direction of the relationship between intrinsic motivation and text comprehension was found to be positive while that of extrinsic motivation was negative.

Shih and Reynolds (2017) conducted a quasi-experimental study to explore the effects of integrating goal setting and reading strategy instruction on reading proficiency and learning motivation in an EFL context with 101 Taiwanese high school students. The study had a pre-post intervention design with a general English proficiency test for reading and a motivation questionnaire for both groups. Following the intervention, the experimental group also completed a goal-setting questionnaire at the end of the intervention to generate feedback about the perceived effectiveness of goal setting with close and open-ended questions. The intervention lasted a whole academic year for two hours twice a week for 36 weeks. The intervention phase covered training both in reading strategies and goal setting. During intervention, the experimental group kept a goal-oriented checklist to set a score goal for their upcoming midterm and final exams. They were also asked to specify three actions that will help them achieve the score goals. They were also encouraged to monitor their actions to reach their goals and change them if needed. In total, students completed 36 entries into their checklists. The statistical analysis indicated that the intervention group outperformed the traditional group on the

reading proficiency. Looking at the effectiveness of goal-setting training on students' motivation towards learning, the intervention did not yield a significant effect concerning the overall learning motivation. However, a clear change in learner motivation was observable with the analysis by motivation type. Extrinsic motivation increased in both groups as all the students felt a need to pass the exam irrespective of the presence of goal setting. The significant change in the rest of motivation components was present only in the intervention group proving the success of intervention in terms of enhancing motivation. With respect to goal setting, half of the students met their mid-term goal scores while three out of four of the intervention students met their final goal scores. Based on students' goal-oriented checklists, two groups of goal setters were found: Static action students and dynamic action students. Although the students in the first group monitored their progress every week, they kept their actions unchanged while the second group used a greater set of alternating actions. Further analyzing the actions by the dynamic action students, most of their actions were classified as language-learning strategies.

Xu and Durgunoğlu (2019) explored the relationship between reading motivation and depth of reading comprehension in EFL reading. They attempted to consider reading comprehension at two levels: Text-based comprehension (TBC) and higher order comprehension (HOC). The former is related to focus on information recall and low-level inference while the latter encompasses making connections, drawing conclusions, and evaluating. The participants of this were 179 Chinese university students. The data collection instruments included a motivation questionnaire and a Critical Reading Inventory with two reading level–appropriate narrative passages followed by 20 questions assessing TBC and HOC scores. The findings of the study revealed that extrinsic motivation had more predictive power

for TBC than HOC. So, even if it predicted reading comprehension performance, it was a weaker predictor in terms of deeper reading. In addition to extrinsic reading motivation construct, another motivation construct "importance of English reading" was among the strongest motivational predictor reflecting a more instrumental characteristic of motivation. On the other hand, intrinsic reading motivation was found to be the strongest predictor of HOC implying a deeper understanding of the material with a more intensive engagement with the text.

In a recent study, Li and Gan (2022) explored the role of reading motivation, self-regulated reading strategies and vocabulary knowledge on students' English reading comprehension with 543 students from five universities. The instruments used in the study were reading motivation questionnaire developed by Wang and Gan (2021) for EFL students, self-regulated reading strategy questionnaire (Zhang et al., 2014), English reading comprehension test, English vocabulary depth and breadth tests. Multiple regression analysis demonstrated that two subscales of English reading motivation, vocabulary breadth and vocabulary depth were significant predictors of L2 reading comprehension.

In another very recent study, Li and her colleagues (2022) researched the effects of strategic reading instruction and its relation to reading comprehension, strategy use, reading motivation and self-efficacy in 117 Chinese EFL university students. The instruments they used included the reading strategy questionnaire that they adapted from previous questionnaires in the field, the reading motivation questionnaire of Mori (2002), the reading comprehension section of the College English Test Band 4 (CET-4) and interviews. Except for interviews, all the questionnaires and reading comprehension test were administered as pre and posttest. For the strategy training, six major categories of learning strategies from Chamot and

O'Malley's (1994) learning strategies were selected covering all 30 strategy items in the reading strategy questionnaire used in this study. A 16-week training session of 80 minutes each was incorporated to the English classes of experimental group. Upon the strategy instruction, the experimental group outperformed the control group in reading comprehension scores. Also, according to the interviews, participants had positive opinions about the instruction and extensive application of strategies taught. However, the other measurements (strategy use, reading motivation and self-efficacy) did not yield a significant result after the instruction in the post measurements. The lack of change in students' reading motivation and self-efficacy was interpreted with two explanations. First, the duration of the training is not sufficient enough to bring about a change in a comparatively stable construct like motivation and self-efficacy. Second, the materials of the intervention were not prepared to increase motivation and self-efficacy but to increase reading comprehension. Therefore, the lack of motivational instructional practices could be the reason for the lack of change in the post test.

Among one of the few studies in Turkey, Senturk (2015) investigated Turkish EFL students' attitudes and motivation towards reading in English and its relation to proficiency and gender. A total number of 61 intermediate, pre-intermediate and beginner level students participated in this study. The data was collected with a perception questionnaire titled "Foreign Language Reading Attitudes and Motivation Questionnaire" (FLRAMS) developed by Turkish researchers Erten et al. (2010). The questionnaire had 31 items under four categories namely: Intrinsic value of reading, reading efficacy, extrinsic value of reading, and foreign language linguistic utility. The results indicated students had neutral attitudes towards reading overall with the extrinsic value having the highest mean score followed by foreign language

linguistic utility. However, the other two categories had means below neutral mark with intrinsic value having comparatively lower means. As for the reading attitudes across proficiency levels, statistically significant difference was found between levels with higher scores in intermediate group. Finally, the scores of females' attitudes towards reading were higher than that of males yet this difference did not reach to significance.

In her study Mendi (2015) focused on the relationship between Turkish EFL university students' reported use of reading strategies in English and motivation level. The participants of this study were 334 preparatory school students at Istanbul Technical University. The data collection instruments were Survey of Reading Strategies of Mokhtari and Sheorey (2002) and the Motivation/Attitude Questionnaire of Dörnyei (1990). She found that there was a significant and positive correlation between reported use of reading strategies and total motivation (r=.414) as well as both motivational subconstructs: Instrumental and integrative motivation. Also, the total motivation scores significantly and positively correlated with all sub-categories of reading strategies: Global strategies (r=.400), problem solving strategies (r=.375) and support strategies (r=.286). Finally, when the participants were grouped as high-motivated and low-motivated, it was found that high-motivated students outperformed significantly in total reading strategy scores as well as in all sub-categories of reading strategies.

Ölmez (2015) investigated the relationship between 114 Turkish university students' L2 reading motivation and their reading achievement. The motivation data was gathered using FLRAMS (Erten et al., 2010). The results revealed that the mostly favored subcomponent of reading motivation was the foreign language linguistic utility, followed by extrinsic utility value of reading, intrinsic value of

reading and their own reading efficacy respectively. Also, no significant correlation was found between students' motivation scores and reading achievement.

The number of studies about motivation to read in foreign language conducted in Turkey is quite limited within my knowledge. As summarized above, the studies researched the L2 reading motivation in relation to proficiency, gender, reading strategy awareness and reading achievement. The studies are either correlational or exploratory in nature. The only study focusing on the relationship between L2 reading motivation and reading achievement is conducted by Ölmez (2015). Therefore, this study is believed to contribute to the field by researching the contribution of L2 reading motivation to the learners' reading performance in L2.

In the previous section, I tried to scrutinize different theories and models of L2 motivation which received a great deal of attention in the field of applied linguistics. Grounded in a social-psychological framework, the most prominent theory was Gardner's socio-educational model which conceptualized the L2 motivation as the combination of three components; *effort expended to achieve the goal or motivational intensity, desire to learn the language*, a*ttitudes towards learning the language.* Another influential concept associated with Gardner was the dichotomy of integrative versus instrumental motivation. Known as the cognitive-situated period, 1990's witnessed a shift with respect to conceptualization of L2 motivation from social-psychological framework to more of an education-friendly framework with Dörnyei's (1994) three-level framework of L2 motivation with three levels namely Language level, Learner Level and Learning Situation Level. Another influential cognitive approach was Self-Determination Theory differing from previous ones in that it puts the motivation types on a continuum rather than defining it as a dichotomous construct (Deci & Ryan, 1985). The process-oriented era was

recognized with the process model proposed by Dörnyei and Otto (1998) focusing on different stages of motivated behavioral processes. Today this period has finally evolved into socio-dynamic period characterized by Dörnyei's L2 Motivational Self System (2005), Ushioda's Person-in-Context Relational view of motivation (2009), and Complex Dynamic Systems Theory (DST) suggesting the dynamic, emergent, and dynamic nature of L2 motivation with various factors (e.g. situational and temporal) involved in.

With an attempt to research motivation as domain-specific (e.g. reading motivation), Day and Bamford (1998) for the first time attempted to conceptualize reading motivation in foreign language based on expectancy-value model involving four major components: Materials, reading ability in L2, attitudes toward reading in L2, and sociocultural environment. Similarly, Mori (2002) built her theoretical basis upon the theory of L1 reading motivation by Wigfield and Guthrie (1995) in that reading motivation is domain specific. However, her study did not support that L2 reading motivation is independent of general motivational constructs.

CHAPTER 3

METHODOLOGY

This chapter will introduce and describe the methodology of this study. It will start with the research questions leading to this study and corresponding hypotheses formulated. It will continue with the detailed information about the participants, instruments and materials, data collection procedures and analysis.

3.1 Research questions and hypotheses

This experimental study attempts to explore the role of explicit reading strategy instruction on students' L2 reading comprehension level and strategy use while reading academic material in English. It also tries to investigate the reading motivation and its relation to reading comprehension and strategy use in L2 reading. For this purpose, this study seeks to answer the following research questions:

1) Does explicit four-hour-reading strategy instruction have an effect on reading comprehension of Turkish university EFL learners in instructed language contexts?
2) Does explicit four-hour-reading strategy instruction have an effect on Turkish university EFL learners' reading strategy use based on their self-reports?
3) To what extent does reading motivation and reading strategies awareness contribute to reading comprehension of participants?
4) What are the perceptions of participants about the effectiveness of explicit reading strategy instruction?

In line with the findings of previous research, following hypotheses are formulated for the research questions. The participants taking explicit reading

strategy instruction will show greater performance in their L2 reading comprehension compared to the control group based on the findings in literature (Akkakosan, 2013; Çubukçu, 2008; Dreyer & Nel, 2003; Gürses, 2011; Huang, 2014; Macaro & Erler, 2008; Razı, 2014; Salatacı & Akyel, 2002; Yapp et al., 2021a Zarobe & Zenotz, 2017). All these studies have confirmed that providing explicit reading strategy instruction to participants has a positive effect on EFL students' reading comprehension in instructed language contexts.

In addition to their reading comprehension growth, reading strategy use of the participants receiving strategy training is expected to be greater than that of the control group after the treatment. Most of the studies reported above also confirmed that strategy training contributes to increased strategy use in L2 reading (Akkakosan, 2013; Aghaie & Zhang, 2012; Dreyer & Nel, 2003; Gürses, 2011; Ikeda & Takeuchi, 2003; Macaro & Erler, 2008; Razı, 2014; Salatacı & Akyel, 2002; Zhang, 2008;).

It is hypothesized that individual learner differences -reading motivation and reading strategies awareness- will be significant predictors of L2 reading comprehension supporting the previous research (Dhanapala & Hirakawa; 2015; Guo, 2018; Li & Gan; 2022; Maghsoudi, 2021; Xu & Durgunoğlu, 2019)

Exploring the students' perceptions about reading strategy use and the effectiveness of the strategy training given to them will contribute to interpreting the study results more effectively. Using a mixed-method design will help us to obtain a complete picture of the effectiveness of reading strategy instruction also enabling data triangulation.

3.2 The participants

The participants of the current research are 46 language preparatory school students enrolled in a one-year intensive English course offered at a university in İzmir, Türkiye. The students are young learners of English as a foreign language. I have conducted this study with the students in pre-intermediate level from two intact classes. Each class was randomly assigned to the experimental group (28) and to the control group (18). The average age of the participants in total is 19. All the participants in this study shared a common native language which is Turkish except for one student whose native language is Kirghiz. The general profile of the participants is given in Table 2 below.

Table 2. Participants

Groups	Gender	L1 Background
Experimental (28)	M (13) F (15)	Turkish (27) Kirghiz (1)
Control (18)	M (14) F (4)	Turkish (18)

3.3 Research setting

This study took place at a state university in İzmir province of Türkiye where the medium of instruction is either 30% or 100% English in certain departments. Therefore, students need to pass an institutional exam to start their academic programme. To assess their proficiency level, the students are asked to take a placement test prepared by the university at the start of the academic year. The students scoring below 55 (out of total score 100) in the placement test are considered to have failed the exam. According to their scores, they are placed in

different classes; elementary, pre-intermediate and intermediate level (equivalent to A1, A2 and B1 respectively) to complete a one-year intensive English course in the preparatory school. The placement test consists of 100 multiple-choice questions assessing linguistic knowledge (vocabulary and grammar) and reading comprehension of students. Pre-intermediate level students get 26 hours of English a week -18 hours in class and 8 hours asynchronous. They take the English lessons as a single main course focusing on four skills integrated -reading, writing, speaking, and listening- as well as grammar and vocabulary development. The coursebook of the programme is *Language Hub* (Brayshaw, Hird & Gough, 2018) by MacMillan Education. The level goals for reading skill include extracting specific information from the text, skimming the text, demonstrating intensive reading strategies, utilizing vocabulary knowledge and guessing strategies to follow a text using contextual clues, identifying references in a text, making simple inferences from a text, identifying the organization of a text, identifying different genres, audience, purpose or point of view and tone accurately in a text, distinguishing facts and opinions using the clues or words/phrases in the text, and identifying the main topics and the key details in factual or narrative texts by the end of the module they are following. The reading texts covered in the coursebook included either authentic or semi authentic texts written in standard English such as short descriptions and narratives, questionnaires, interviews, short simple articles, and biographies of approximately 200 words.

3.4 Materials and instruments

The materials and instruments used in this study included the "Survey of Reading Strategies Questionnaire" (Mokhtari & Sheorey, 2002), "Foreign Language Reading Motivation Questionnaire" (Mori, 2002), English reading comprehension test

of “Cambridge English: Preliminary (PET-2010)”, strategy training intervention and semi-structured interviews. All the materials, instruments, intervention procedures and informed consent form used in this study were approved by Social and Human Sciences Human Research Ethics Committee (SBINAREK) of Boğaziçi University (Appendix A).

3.4.1 Survey of reading strategies (SORS)

With an attempt to measure participants’ degree of reading strategy use while reading in English as a Foreign Language, Survey of Reading Strategies (SORS) was used. SORS was developed by Mokhtari and Sheorey (2002) to measure metacognitive awareness and perceived use of reading strategies of adolescents and adults learning English as a Second Language while reading academic material in English (Appendix B). SORS is a 5-point likert scale with 30 items measuring three broad categories namely, global reading strategies, problem solving strategies, and support strategies. The description and corresponding item numbers of SORS categories are given in Table 3.

Mokhtari and Sheorey found the reliability of the SORS as .89 which was interpreted as a reasonable degree of consistency by the researchers. However, I used the Turkish version to ensure that students understand all the items in the survey considering their English proficiency level. The reliability of the overall reading strategies and three subscales in the Turkish version of SORS was found to be within acceptable limits. Mendi (2009) found Cronbach’s alpha reliabilities for the SORS as .84 and .87 in her pilot and main study respectively. Therefore, the Turkish version was used for Turkish students and the original version in English was provided to the one Kirghiz student having a different native language. Detailed explanations about

the questionnaire were provided when necessary. In this study, SORS was used as pre/posttest to measure the effect of strategy instruction on the use of reading strategies and metacognitive awareness in academic reading for the second research question. Also, SORS was used to measure the contribution of language learning strategies as the predictor of reading comprehension in L2 for the third research question.

Table 3. Categorization of Survey of Reading Strategies (SORS)

Category	Description	Item numbers
Global Reading Strategies (13 items)	Intentional, carefully planned techniques by which learners monitor or manage their reading	1,3,4,6,8,12,15,17,20,21,23,24,27
Problem Solving Strategies (8 items)	Localized, focused techniques used when problems develop in understanding textual information.	7,9,11,14,16,19,25,28
Support Strategies (9 items)	Basic support mechanisms intended to aid the reader in comprehending the text	2,5,10,13,18,22,26,29,30

Adapted from Sheorey and Mokhtari (2002, p. 4)

3.4.2 English reading comprehension test (PET)

In order to examine the effects of strategy instruction, the reading part of Cambridge Preliminary English Test (PET) published in 2010 which was freely available was carried out to measure participants' reading comprehension performance before and after the intervention. To eliminate the practice effect, the tests in the pre and post session were comparable versions yet sharing the same format with equal number of questions and level of difficulty. The University of Cambridge ESOL examinations use an item banking system to determine the difficulty level of items thereby assuring that each PET reading test is of equal difficulty to other PET reading tests (Marshall, 2006). The reliability of the reading and writing part of PET is evaluated overall and reported to be 0.89. PET is a standardized test consisting of five parts with 35 questions in total. These parts are respectively:

- Three-option multiple choice (5 questions)
- Matching (5 questions),
- True/false (10 questions),
- Four-option multiple choice (5 questions)
- Four-option multiple choice cloze (10 questions)

In the first part, students read short texts such as real-world notices, e-mail or text messages and it requires focusing on reading for global understanding. In the matching part, students need to match descriptions of five people to eight short texts -three of them being extra- on the given topic so they are expected to show detailed comprehension. This task also taps reading skills such as scanning and finding keywords. The third part consists of one long text of approximately 400-450 words with a true/false task of ten questions. This task focuses on finding specific

information and detailed understanding. In the next part, there is one long text with multiple choice questions to answer according to the given passage. This task requires the understanding of the overall meaning of the topic and details in addition to recognizing the author's purpose. In the final part, students complete a multiple-choice cloze test which aims to measure vocabulary knowledge as well as grammar such as prepositions, adverbs and linking words. The reason for choosing Cambridge PET as a suitable instrument for this research has a number of reasons. First, it is an acknowledged standardized test compatible with the reading proficiency level of the students participating in this study. Besides, PET can be considered to be an appropriate instrument with high reliability and validity also being a relevant test for academic purposes in higher education. Finally, PET is a distinguished reading test with different types of questions taping different reading sub-skills to measure reading comprehension. In this way, students were given multiple types of questions to perform the reading strategies taught during training. PET -also designed as pre/posttest- was used for the first research question to measure the effect of intervention. Posttest of PET was also used for the third research question as the dependent variable to understand the contribution of other variables on L2 reading comprehension.

3.4.3 Foreign language reading motivation questionnaire

The next instrument used in this study is Foreign Language Reading Motivation Questionnaire developed by Mori (2002) to investigate students' reading motivation in foreign languages (Appendix C). Mori developed the questionnaire largely drawing upon the items from Motivation to Read Questionnaire (MRQ) developed by Wigfield and Guthrie (1995, 1997) for primary school students learning to read in

L1. Therefore, the items were adapted for university-level students learning English in an EFL setting. The questionnaire is a 26-item seven-point Likert scale questionnaire consisting of four motivational components namely, intrinsic value of reading, extrinsic utility value of reading, importance of reading and reading efficacy. The reliability of the questionnaire was calculated, and Cronbach's Alpha was measured as .93. The Turkish translation of the questionnaire was carried out by the researcher herself for the Turkish participants and the English version was provided to the non-native participant. This instrument was used for the third research question to understand the contribution of reading motivation in L2 reading comprehension.

3.4.5 Intervention

In keeping with the findings of a recent meta-analysis (Yapp et. al., 2021b), this study selected seven reading strategies for instruction in the classroom. These strategies were identified to be effective for improving reading comprehension in L2. Those strategies included in the instruction were incorporated into different training sessions determined by the nature of the instructional task (Chamot & O'Malley, 1994). The medium of training was English because there was one participant from a different language background in the experimental group. Also, regular classes in this preparatory school were already conducted in the target language -English-. As for the training of strategies, direct instruction is adopted in which students are directly informed of the purpose and value of strategies to be trained (Chamot & O'Malley, 1990). Delivering the training as fully informed is important for the students to transfer the strategies to different tasks in new situations in addition to the evaluation of the strategy success by the learners. Also, direct instruction is

recommended in order to develop independent learning strategies and to maintain autonomous learning (Oxford, 1990).

The strategy training was delivered in four separate sessions each with a duration of 50 minutes for two weeks. The training sessions were designed and delivered by the researcher herself after agreement with the main course teachers in accord with their curriculum. As the students in the program were following Language Hub-Pre-Intermediate, the lesson plans were prepared in parallel with their schedule and reading material in their coursebook. For the expansion step in CALLA Instructional Plans, extra readings were taken from Natural English: Pre-intermediate Reading & Writing Skills (Theresa Clementson, 2005). This four-hour reading instruction differed from their regular classes in two ways: It was given by a different teacher other than their regular teacher and these four hours were dedicated to the reading skill in their curriculum yet enriched with the predetermined reading strategies following CALLA method.

Table 4. List of Reading Strategies

Weeks	Strategies
Week-1	Skimming Connecting new knowledge to what is already known
Week-2	Activating background knowledge Scanning
Week-3	Paying attention to structure
Week-4	Guessing meanings from headings and pictures Making predictions while reading

Cognitive Academic Language Learning Approach (CALLA) method was implemented in this strategy instruction. The CALLA method has a five-step procedure, and these steps are Preparation, Presentation, Practice, Evaluation and Expansion respectively. In the Preparation Phase, the teacher attempts to develop students' awareness of strategy repertoire and reveals their beliefs about strategy use. By emphasizing metacognitive knowledge, the teacher also introduces the kind of tasks involved in strategic activities and the importance of having strategic awareness to assist in language learning. The examples of activities during this phase included small group discussions, full-class discussion, brainstorming and think- aloud model by the teacher. These activities aim at revealing the strategies that students are already using in their native language and identifying appropriate strategies for different tasks. Next in the Presentation Phase, there are three important criteria to meet: Explicit instruction to teach the intended learning strategy, explicitly naming the strategy and step by step teacher modeling of strategy. During this phase, the teacher explicitly teaches the intended strategy by first naming and then describing how it can be used with specific tasks. The teacher also explains the importance of using the particular strategies which leads to an increased metacognitive awareness of its connection with learning. The teacher gives the steps and description of strategies with caution and as complete as possible. Also, s/he demonstrates that one particular strategy can be used with different tasks. That is, students are informed that the strategies are transferable across activities. In the following Practice Phase students practice a strategy either individually or as a group. It is important that the given task/activity should resemble to what the teacher has modelled in the presentation stage. The role of the teacher in this stage is scaffolding at the onset of teaching strategies and it is gradually withdrawn once the students get more

independence and become comfortable with using the strategies. Immediately after practice, in the Evaluation Phase, the teacher leads the class to reflect on strategy use and self-evaluate strategy application. The teacher starts a whole-class discussion about the target strategy and asks students following questions: “Did this strategy work well with this task?”, “How were you able to apply the strategy?”, “Would you use it next time with different tasks?”, “If it didn’t work, what could be the reason and how to overcome the problem?” The last phase, Expansion Phase aims at transferring the taught strategies to new reading tasks. The teacher brings additional material to the classroom for the students to practice the taught strategies with new activities. This phase is quite critical because students are encouraged to use a variety of strategies depending on their effectiveness in a new task. This decision-making process helps them to become automatic and skilled in strategy application. The researcher followed the provided steps of each phase (See instructional plans, Appendix D) and checked them according to the Evaluation Checklist of CALLA Instruction (Appendix E). The lesson plans were also double-checked with two other researchers in the field.

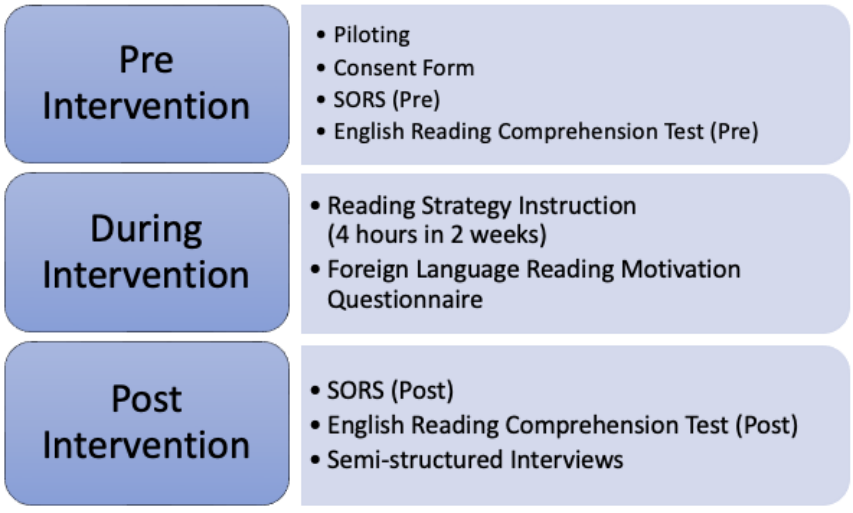

Figure 6. Process of data collection procedure

3.4.6 Procedure

The participants of this study were in three intact classes. Two of the participating classes were randomly assigned to be the experimental class (28) while the other class was randomly assigned to be the control group (18). First, the participants were informed about the content of the study, and they were given a consent form (Appendix F) for their participation in the study. Then in the first session of data collection, the participants in both experimental and control groups completed the Survey of Reading Strategies (SORS) and Cambridge Preliminary English Test (PET) as pre-tests. Upon the administration of pre-tests, the researcher started the instruction for the experimental group. The instruction took place in four hours in total and it lasted two weeks. The researcher met the participants twice a week and they followed their regular reading material in their coursebook: "Language Hub". The lessons were prepared based on the CALLA Instruction Plan in line with the Checklist for Evaluating CALLA Instruction (Chamot & O'Malley, 1994; p.101). Unlike the participants in the experimental group, the control group received no explicit reading strategy instruction. However, the amount of English reading lessons they were provided remained the same with the experimental group. Along with the intervention period, the participants in both experimental and control groups completed "Foreign Language Reading Motivation Questionnaire" via Google Forms in a classroom environment. The questionnaire took approximately 15 minutes to fill in. Following the intervention, the researcher administered Survey of Reading Strategies (SORS) and Cambridge Preliminary English Test (PET) to both groups again as post-tests. Finally, the researcher conducted semi-structured interviews individually with five voluntary participants from the experimental group each lasting approximately 15 minutes.

3.4.7 Semi-structured interviews

Interviews provide qualitative information on the research being conducted and enable the identification of emerging themes in self-report data (Nunan, 1992). Also, combining the quantitative and qualitative data and interpreting the findings in the light of these insights is important for a holistic perspective. Thus, in addition to the quantitative data, interviews were employed to explore the beliefs and perspectives of participants about the strategy training in this study. They may help the researcher both to better understand the effectiveness of the training on the part of the participants and to make revisions as necessary after receiving feedback from the students. At this point, interviewing has importance as Patton (2015) explains: "We interview people to find out from them those things we cannot directly observe. . .. We cannot observe feelings, thoughts, and intentions" (p. 426). Therefore "The purpose of interviewing, then, is to allow us to enter into the other person's perspective."

In this study, I decided to conduct semi structured interviews. Semi-structured interview includes a mix of more and less structured interview questions and they can be all used flexibly. In this type of interview, usually specific data is required from all respondents, however, predetermined wording or order of questions is not necessary. To answer the question of how many people to interview, I considered the recommendation of sampling until the point of saturation or redundancy reached (Lincoln & Guba, 1985). Reaching saturation or redundancy is defined as the point you start to receive the same responses to your interview questions with no new insights forthcoming (Merriam & Tisdell, 2016). Convenience sampling as a non-probability sampling method was employed with the qualitative aspect of this research. Because in qualitative research generalization in a statistical

sense is not the main goal. Semi-structured interviews were conducted with five volunteers from the experimental group (Appendix G). Before interviewing, participants were informed about voice recording for further and detailed analysis and their consent was received. Each participant was interviewed individually after the end of training sessions. Each interview lasted approximately 10-15 minutes. Four of the participants were interviewed in Turkish -their native language- and one participant was interviewed in English because he is non-native of Turkish. The interview was centered around the questions related to training and their English language learning experiences. The interview questions were compiled from similar studies in the field.

3.4.8 Piloting

Prior to the main study, a pilot study was conducted to check whether the instruments and materials which were planned to be used were functioning smoothly. The pilot study was conducted at the same university with the preparatory school students from three classes. Two classes were randomly assigned to be the experimental group (51) and given intervention while the other class was randomly assigned to be the control group (32). The piloting lasted for six weeks in October-December. All three groups first completed pre-tests and the motivation questionnaire and then the intervention started in the experimental group lasting for four weeks. The intervention took place once in a week for 50 minutes. Following the four-week intervention, students took post tests for reading comprehension and SORS.

The piloting had a few implications for the main study. The first adaptation was made regarding the reading comprehension test. In the piloting process it was planned to give an identical test of reading comprehension for both pre and posttest

considering a five-week interval would be enough to eliminate practice effect because majority of the test consisted of non-multiple choice question types. In the post test session, students showed reluctance to complete the test because they expressed that it was the same test and didn't understand why they needed to complete once again. Therefore, most of the students kept some parts blank complicating interpretation of the results. Because of this practice effect two different tests in the same format were used in the main study as pre and posttest. Another change was made regarding the total time of the training. As practice effect factor was eliminated with the removal of the identical pre and posttest of reading comprehension, the total time of the training was also reduced to be two weeks as similar studies favored the shortest study length for significant results (Taylor et al., 2006). However, the hour of overall teaching remained the same with four hours. That is, the researcher and the students two times a week in the main study instead of once a week. Finally, in the pilot study, reliability statistics of the materials were calculated with Cronbach's Alpha. Survey of Reading Strategies (SORS) and Foreign Language Reading Motivation Questionnaire both had high reliability Cronbach's $\alpha = .920$ and $\alpha = .927$ respectively. The reliability of English Reading Comprehension Test (PET) was Cronbach's $\alpha = .70$

CHAPTER 4

RESULTS

This chapter will report the results of the data analysis with the descriptive statistics and effect sizes. For the Research Questions 1 & 2, Mixed Design ANOVA was conducted on the measures of reading comprehension and strategy use. For the Research Question 3, a multiple regression analysis was conducted. These statistical analyses of quantitative data are conducted using SPSS version 29.0. The alpha level is set at .05 to achieve statistical significance. For the last research question, the qualitative data is analyzed using thematic analysis.

Research Question 1: Does explicit four-hour-reading strategy instruction have an effect on reading comprehension of Turkish university EFL learners in instructed language contexts?

Prior to the data analysis, the assumptions were checked. After examining the descriptives and Q-Q plots, I performed Shapiro-Wilk test to check if the data was normally distributed. The data was normally distributed for each group. The pre and post test scores of experimental group, respectively, W (28) = .97 and .98, p > .05 and control group, respectively, W (18) = .94 and .92, p > .05. I checked the homogeneity of variance using Levene's test. The variances were homogeneous for all levels of the repeated measures with significance values greater than 0.5. So, the homogeneity of variance was assumed with the data of this group. Concerning sphericity, Field states that if there is a repeated-measures variables with only two levels, then sphericity is met. Table 5 presents the means and standard deviations of pre and post-tests of L2 reading comprehension tests. Besides, reliability statistics of the English Reading Comprehension Test (PET) was calculated with the Cronbach's

Alpha. The values for Cronbach's Alpha for pre and post reading comprehension tests are respectively $\alpha = .687$ and $\alpha = .679$.

In the pretest reading comprehension scores of control group ($M = 13.33$, $SD = 4.16$) is higher than the scores of experimental group ($M = 12.71$, $SD = 5.46$). In the posttest, the control group has lower scores ($M = 15.61$, $SD = 4.06$) than the experimental group ($M = 16.29$, $SD = 5.38$). A 2x2 design Mixed ANOVA was conducted to investigate the statistical significance of the mean differences.

To answer the first research question, I conducted a Mixed design ANOVA to determine the main effect of time and intervention on EFL students English reading comprehension test scores. The analysis revealed that there is main effect of time $F(1,44) = 13.581$, $MSe = 13.801$, $\eta^2 = .24$, $p < 0.001$, meaning that time is significantly effective for the improvement of reading comprehension scores irrespective of the group whether experimental or control. On the other hand, the experimental and control group did not differ significantly regardless of time factor, $F(1,44) = .0005$, $MSe = 35.329$, $\eta^2 < .001$, $p = .983$. Finally, considering the interaction of time and group no significant result is observed $F(1,44) = .664$, $MSe = 13.801$, $\eta^2 = .015$, $p = .419$ which means that the intervention did not yield a significant effect on reading comprehension scores of students.

Table 5. Descriptive Statistics of Pre and Post Tests of L2 Reading Comprehension Test Scores

		N	Mean	SD
Eng_Reading (Pre)	Control	18	13.33	4.16
	Experimental	28	12.71	5.46
	Total	46	12.96	4.95
Eng_Reading (Post)	Control	18	15.61	4.06
	Experimental	28	16.29	5.38
	Total	46	16.02	4.87

Research Question 2: Does explicit four-hour-reading strategy instruction have an effect on Turkish university EFL learners' reading strategy use based on their self-reports?

For the second research question again I performed Mixed ANOVA to determine if the instruction had significant effect on participants reading strategy use based on their self-reports. The reliability of the overall reading strategies survey (SORS) is examined, and Cronbach's Alpha reliability is $\alpha = .912$. Normality was checked for each group separately. Pre and post data of experimental group is normally distributed upon examining the descriptives, Q-Q plots and performing Shapiro-Wilk test. Pre and post survey scores of experimental group are, respectively, $W(28) = .93$ and $.98$, $p > .05$. For the control group, while the pre survey scores are normally distributed $W(18) = .92$, $p > .05$ a Shapiro-Wilk test showed departure from normality $W(18) = .837$, $p = .005$ for the post scores. Therefore, z-scores were checked, and no extreme values were found. I kept the data unchanged, and normality was assumed. Levene's test for equality variances indicated that homogeneity of variances assumption was not violated $ps > 0.5$. Concerning sphericity, again for the same reasons as the prior ANOVA analysis sphericity is assumed.

Table 6 presents the initial diagnostic descriptive statistics of pre and post scores of SORS with the means and standard deviations. The pre SORS scores of control group ($M = 3.50$, $SD = .56$) is higher than pre scores of experimental group ($M = 3.36$, $SD = .66$). In the posttest, the scores of the control group remains the same ($M = 3.50$, $SD = .72$) while the scores of the experimental group increase ($M = 3.72$, $SD = .53$) As can be seen in the table, the increase from pre to post scores is greater in the experimental group compared to the control group meaning that

students in the experimental group reported higher scores in the overall SORS than the control group after receiving 4-hour reading strategy instruction. A 2x2 design Mixed ANOVA was conducted to investigate the statistical significance of the mean differences.

Table 6. Descriptive Statistics of Pre and Post Scores of Survey of Reading Strategies (SORS)

		N	Mean	SD
SORS (Pre)	Control	18	3.50	.56
	Experimental	28	3.36	.66
	Total	46	3.41	.62
SORS (Post)	Control	18	3.50	.72
	Experimental	28	3.72	.53
	Total	46	3.63	.61

A 2X2 Mixed ANOVA indicated that the difference between SORS scores in pre and post tests were insignificant F (1, 44) = 3.39, MSe = .223, η^2 = .072, p = .072. But it should be noted it can be considered to be marginally significant for some with a high effect size observed. On the other hand, the experimental and control group did not differ significantly regardless of time factor, F (1, 44) = .056, MSe = .537, η^2 = .001, p = .814. Finally, the interaction effect of time and group was also not statistically significant F (1, 44) = 3.112, MSe = .223, η^2 = .066, p = .085. Again, it should be noted it can be considered to be marginally significant for some. Supporting the initial diagnostic descriptives a noteworthy effect size observed in the interaction (6%) favored the increase in the SORS scores of experimental group.

Research Question 3: To what extent does reading motivation and reading strategies awareness contribute to reading comprehension of L2 learners beyond baseline reading ability and reading strategy instruction?

To analyze the relative importance of baseline reading ability, reading strategy instruction, reading strategies awareness, and reading motivation in predicting reading comprehension of L2 learners I conducted a hierarchical regression analysis. The reliability of the "Foreign Language Reading Motivation" questionnaire is examined, and Cronbach's Alpha reliability is $\alpha = .902$. Regarding the assumptions of multiple regression, I checked linearity, normality of residuals, homoscedasticity, multicollinearity, and presence of influential cases.

Table 7. Correlations Among the Measures

		Post-Reading	Pre-Reading	Motivation	SORS
Post-Reading	Pearson's r	—			
	df	—			
	p-value	—			
Pre-Reading	Pearson's r	0.432**	—		
	df	44	—		
	p-value	0.003	—		
Motivation	Pearson's r	0.285	0.069	—	
	df	44	44	—	
	p-value	0.055	0.651	—	
SORS	Pearson's r	-0.029	0.028	0.223	—
	df	44	44	44	—
	p-value	0.850	0.854	0.135	—

Note. * p < .05, ** p < .01, *** p < .001

Table 8. Summary of Hierarchical Regression Analysis for Variables Predicting L2 Reading Comprehension

		Unstandardized Coefficients		Standardized Coefficients			
Model	Measures	*B*	*SE*	*B*	*t*	*F*	R^2
1	Constant	10.52	1.85			10.11*	.19
	Reading Pretest	.43	.13	.43	3.18*		
2	Constant	9.87	2.08			5.24*	.20
	Reading Pretest	.43	.14	.44	3.2*		
	Group	.94	1.35	.10	.70		
3	Constant	4.41	3.65			4.76*	.25
	Reading Pretest	.41	.13	.42	3.12*		
	Group	.37	1.36	.04	.27		
	Motivation	1.29	.71	.25	1.8		
4	Constant	6.50	4.70			3.65**	.26
	Reading Pretest	.41	.13	.42	3.10		
	Group	.20	1.38	.02	0.15		
	Motivation	1.42	.74	.27	1.90		
	SORS	-.78	1.1	-.10	-.70		

Note. *p < .01, ** p < .05

The baseline reading scores entered the analysis in the first step and it was followed by the intervention which entered the analysis as a categorical variable in

the second step. In the third step, the reading motivation entered the analysis. Lastly, SORS scores entered the analysis. The summary of hierarchical multiple regression analysis were provided in Table 8. Although all four models were significant ($p < .05$), students' reading motivation score that entered the analysis in the third step was insignificant, but it should be noted that it can be considered as marginally significant for some ($p = .063$). Also, students' SORS score that entered the analysis in the last step was insignificant too. Overall, 26% of the variance in L2 reading comprehension was explained by these four predictors with only baseline reading being significant predictor. The baseline reading scores entered the analysis in the first step and it was followed by the intervention which entered the analysis as a categorical variable in the second step. In the third step, the reading motivation entered the analysis. Lastly, SORS scores entered the analysis. The summary of hierarchical multiple regression analysis were provided in Table 8. Although all four models were significant ($p < .05$), students' reading motivation score that entered the analysis in the third step was insignificant, but it should be noted that it can be considered as marginally significant for some ($p = .063$). Also, students' SORS score that entered the analysis in the last step was insignificant too. Overall, 26% of the variance in L2 reading comprehension was explained by these four predictors with only baseline reading being significant predictor.

Research Question 4: What are the perceptions of participants about the effectiveness of explicit reading strategy instruction?

To understand the perceptions of participants about the effectiveness of explicit reading strategy instruction, five voluntary participants from the experimental group were interviewed. The results of the analysis were discussed in parallel with the emerging themes from the interviews as follow: Participants'

previous L2 reading instruction experience, effectiveness of the reading strategy instruction, participants' strategy use and transfer of strategies to different contexts and opinions about reading strategy instruction (Gürses, 2011; Li et al., 2022; Zenotz, 2012;).

4.1 Participants' previous L2 reading instruction experience.

The participants were asked if they had received a similar explicit reading strategy instruction in English. None of the participants reported having a similar strategy-focused reading instruction experience in their English classes. When the participants were asked to define the previous English reading classes, they reported that they had not been taught how to read in language classes focusing on strategies. The participants defined their reading classes as only focusing on reading texts and completing the corresponding activities while one participant reported that they hadn't focused on reading skill- it was all about grammar. Another participant said that they even hadn't had any reading in English at all let alone focusing on strategies. One participant indicated that they had reading activities which were mainly translation-based.

Student excerpts:

> I can't even say we did much reading in high school or secondary school. (S2: Translated by the researcher)
>
> So, all we knew was to translate a text completely by reading the text and translating the English words we knew into Turkish. We were translating and answering questions for this. (S3: Translated by the researcher)
>
> In other words, just a text and the reading activity were being read and answered. No advice (strategy) was given. (S4: Translated by the researcher)
>
> Reading was not taught specifically. (S5: Translated by the researcher)

4.2 Effectiveness of the reading strategy instruction

With respect to the effectiveness of the reading strategy instruction, all five participants expressed positive feelings about it. When asked whether their reading skills developed or not with the instruction, all the participants reported that their reading skills developed. To understand in what ways their reading skills improved, I asked for the details. Students interpreted their improvement either in terms of the process of reading or the output of reading. The former is about the way they read, and the participants commented that they learned how to read faster, more carefully, and meaningfully after the training. As for the latter one, they reported that they can score better in reading comprehension questions thanks to the instruction. The participants reported that they found the instruction to be effective in that it provided more opportunities to practice strategies rather than pure theory.

Student excerpts:

> We learned very good tactics. Now we can understand what we read more easily. (S1: Translated by the researcher)
>
> There were more extra methods for us. In this way, we learned to read faster and more meaningfully. (S2: Translated by the researcher)
>
> For example, if I answered two out of five questions correctly, they (strategies) gave me the chance to answer four questions correctly. (S3: Translated by the researcher)
>
> It seems to me that many people have made much better results with the advice (strategies) you gave. (S4: Translated by the researcher)

4.3 Participants' strategy use and transfer of strategies to different contexts.

I asked the participants which strategies they found the most useful from the instruction, the most popular response was skimming and scanning each reported by four participants. It was followed by the strategy of guessing meanings from headings and pictures. As for the least useful strategy, three participants expressed

that connecting new knowledge to what is already known, and one participant reported activating background knowledge. The participants reported that they continue using strategies for upcoming English exams. Also, one participant expressed he already started using the strategies for his daily life including spending time on English forums, surfing on the Internet and reading for entertainment showing that they can transfer the strategies to varying contexts. Finally, one participant expressed that he could use the strategies even without realizing.

Student excerpts:

> For example, the last time we took an exam. Again, I used the methods of "Connecting new knowledge to what is already known" and "Scanning". (S3: Translated by the researcher)

> For example, I read a text on the internet two days ago. I read it quickly, skimming it there first. Then I read it cover to cover and it worked, so it made sense. For example, what I thought at first turned out to be true. (S2: Translated by the researcher)

> In the last exam, for example, there were only three minutes left and I had two questions in the reading, and I looked directly at the keywords and the sentences around those words, and I was able to answer two questions in three minutes. (S1: Translated by the researcher)

> So, I used all of them here. I can't say that I didn't benefit from one of them, or that I benefited little from it. I use them all without even realizing it. (S3: Translated by the researcher)

> I can say that it has been useful for us in that respect, as we will, from now on, read more usefully and understandably by applying strategies when we read different texts. (S2: Translated by the researcher)

> Also, in my daily life, there are forums and websites in English, it worked for me there too. In the past, even if there were words that I didn't know, I wouldn't understand the text at all. I was using translator. But even if there is a word that I don't know, when I understand the rest of the text, it works for me because I can understand the general meaning of the text. In general, it is useful for me, in my daily life, for my classes, or for reading a book. (S2: Translated by the researcher)

4.4 Opinions about reading strategy instruction.

When the participants were asked to share their opinions about the instruction, they all reported that they would like to receive a similar reading strategy instruction for a longer period in the future. One participant stated that she found the class hours to be short preferring a longer one than 4-hour-instruction. Another participant expressed that such a training should be given at all high-school and university levels.

Student excerpts:

> I wish our training hours were a little longer. I would like to spend more time with you. Since I wanted to be an academic, it was a little more important for friends like me in the future, so the hours were a bit insufficient. (S1: Translated by the researcher)

> Frankly, it seems to me like something that should be done in all high schools and universities. (S4: Translated by the researcher)

CHAPTER 5

DISCUSSION

This chapter will discuss the findings referring to previous studies in literature. The focus of this study is to understand the effect of reading strategy instruction on participants' academic reading comprehension and strategy use in L2, investigate to what extent reading motivation and reading strategies awareness can explain L2 reading skill, and understand the perceptions and opinions of participants about the effectiveness of L2 reading strategy instruction.

For the first research question, the findings showed that in four-hour-reading strategy instruction the experimental group outperformed the control group in reading comprehension gain scores however this increase from pre to posttests did not reach significance. This can be interpreted as four-hour-reading strategy instruction was not efficacious to increase the reading comprehension scores of EFL learners in academic reading. This finding contradicts most of the studies conducted favoring the effectiveness of explicit reading strategy training (Aghaie & Zhang, 2012; Akkakosan, 2013; Çubukçu, 2008; Dreyer & Nel, 2003; Gürses, 2011; Huang, 2014; Li et al., 2022; Macaro & Erler, 2008; Razı, 2014; Ruiz de Zarobe & Zenotz, 2017; Salatacı & Akyel, 2002; Taylor et. al., 2006; Yapp et al., 2021a; Yapp et al., 2021b; Zarobe & Zenotz, 2017; Zhang, 2008). Yet it is consistent with some intervention studies finding no significant effect on students' reading comprehension (Soleimani & Hajghani, 2013; Steinagel, 2005).

With respect to the ineffectiveness of the intervention possible explanations can be listed. First, the effect of pedagogical approach could influence the effectiveness of the intervention. Although this study adopted CALLA based reading

strategy training, studies revealed that reading strategies were found to be effective when in interaction with certain pedagogical approaches such as teacher modelling and collaborative practice as suggested by Yapp et al.(2021b). For example, positive significant effect was found for teacher modelling when combined with *skimming* and *scanning* while collaborative practice was effective when combined with *connecting new knowledge to what is already known*. So, beyond following CALLA method, those pedagogical approaches could have been matched with appropriate strategies and integrated to the corresponding steps of CALLA when necessary. With respect to the intervention, the way the steps of CALLA were explained and modeled to the students might not be effective enough to apply those strategies. Another interpretation could be the selection of strategies such as *activating background knowledge, connecting new knowledge to what is already known,* and *prediction* addressing top-down processing level to which the learners at this level haven't reached yet (Ikeda & Takeuchi, 2003). To make those strategies more perceptible and the steps clearer, I could have elaborated the traditional written text with multimodal input. Written texts can be made multimodal by adding images, accompanying audio, and hyperlinks (Montero Perez, 2020). Studies have confirmed that enhancing written texts with visual annotations can contribute to activate background knowledge (Sakar & Erçetin, 2005) thereby enabling the use of that strategy by providing extra information about the topic. Overall, I could have given more preference to multimodal input rather than conventional reading texts so that the students could find more chance to practice directly in the practice step of CALLA and internalize the strategies better.

Another factor related to the intervention was the non-standard or outsider teacher teaching the intervention instead of standard/regular teacher of the target

class. Although non-standard teacher teaching the intervention was found to be more effective (Edmonds et al., 2009; Yapp et al., 2021b) as unfamiliar teacher can arouse interest on the part of students, this effect did not last very long in this study. This is partly because the intervention did not motivate the students because it was not part of their regular curriculum, nor did it effect the assessment of students. Even though I stressed the importance of student participation to the intervention which can contribute to their academic performance in reading tests, not all the students were motivated enough or showed much interest when they were informed that their participation or scores will not affect their preparatory school final grading.

The discrepancy between the proficiency level of participants and the reading comprehension pre/posttests posed another difficulty for understanding the actual performance of participants. As the researcher, I decided to use a standard measurement for reading comprehension and therefore chose Cambridge Preliminary English Test (PET) corresponding to CEFR B1. Although the participants were grouped as B1 level with the placement test at the beginning of the preparatory school, it turned out that the proficiency level of most of the participants did not reach to pre-intermediate level of CEFR. So, the perceived difficulty of the tests, also reported by some of the participants, could be inescapably demotivating that resulted in the reluctance to complete the reading comprehension tests. These reasons might hamper to observe the real potential performance of participants. Another explanation can be made with respect to the proficiency level. As a good predictor of reading ability, the turning point of lexical size for a reasonable reading comprehension is 3000 word (Laufer, 1996). Besides, a certain threshold for reading comprehension competence is found to be necessary to profit from how to apply reading strategies (Laufer & Sim, 1985). However, the actual proficiency level of the

participants which is around B1/minus B1 is below this reported lexical threshold and it could be another factor explaining the ineffectiveness of the intervention with this proficiency level (See Taylor et al., 2006). Thus, learners with this relatively lower proficiency level may not qualify to benefit from reading strategy instruction sufficiently. Consistent with this finding, the study of Ikeda and Takeuchi (2003) revealed that the lower-level proficiency group did not differ than control group in strategy use after receiving strategy instruction compared to the higher-level proficiency group who achieved significantly higher. On the contrary, the study of Yapp and her colleagues (2021a) showed that less proficient readers benefitted from strategy instruction more than proficient readers. Similarly, studies with beginner level young learners revealed significant gains of strategy instruction (Macaro & Erler, 2008; Ruiz de Zarobe & Zenotz, 2017). With the age factor brought into equation, studies on the effectiveness of strategy instruction with respect to the proficiency level seems to be inconclusive with the findings of current research. In summary, the difficulty of drawing an overall conclusion and comparing the findings across studies was echoed in relation to moderating variables and the interactive nature of L2 reading (Brantmeier, 2002; Grabe, 1991).

One final comment can be made in relation to students' PISA (Programme for International Student Assessment) results. In principle, PISA evaluates the education systems of participating countries by testing the knowledge and skills of 15-year-old students in reading, mathematics, and science every three years since 2000. The tests developed by PISA are not directly linked to school curriculum but designed to assess how well students can apply their knowledge to real life at the end of the compulsory education. According to the results of 2022, reading performance of Turkish students are found to be below the OECD average (Organization for

Economic Co-operation and Development) and the trend of reading performance from 2018 to 2022 shows a decrease (OECD, 2023). The reading performance in L1 according to PISA results with respect to students' strategic practices and metacognitive awareness of reading might be influential on their reading performance in L2 supporting cross linguistic transfer. As Grabe (2011) stated, the abilities that students possess in their L1 reading determine the upper level "of what can be expected for linguistic transfer, strategic practices, problem-solving abilities, task-completion skills, and metacognitive awareness of reading processes" (p. 49). All these skills can affect L2 reading on the condition that they are already developed as L1 reading abilities. This study originally attempted to include the reading activity of participants however, the number of participants completing the reading activity questionnaire dropped in data analysis falling short of statistical analysis. . As the data of participants reading activity is incomplete, I have used some reading rates of

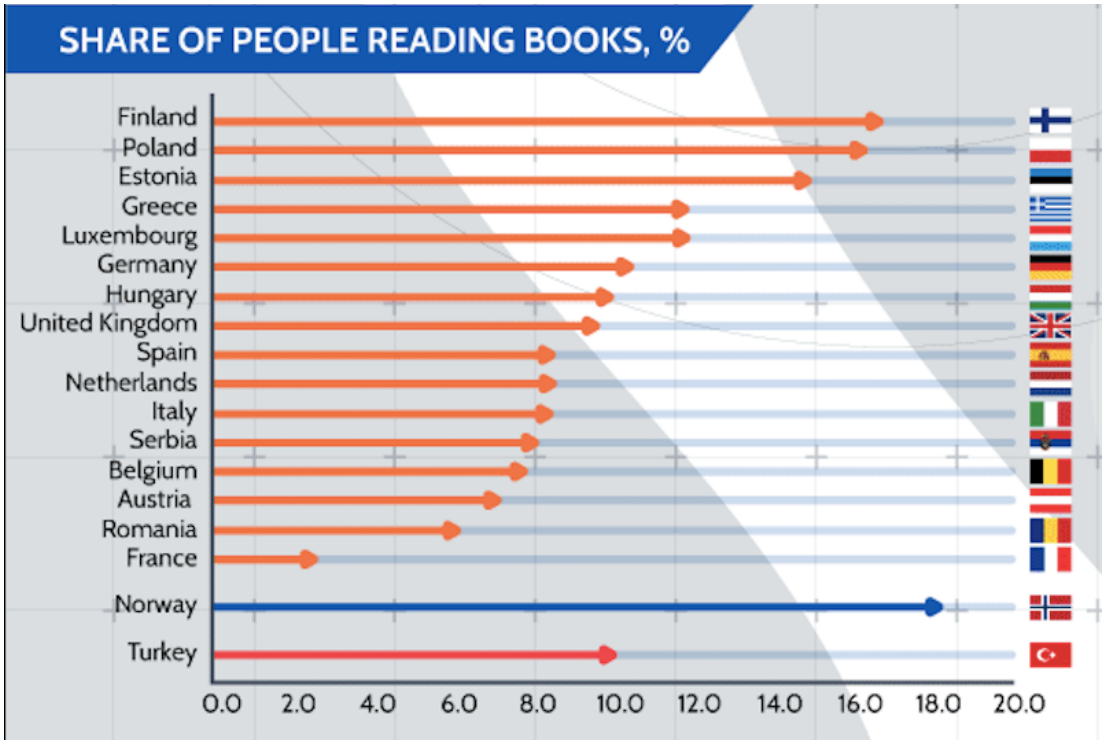

Figure 7. Share of people reading books (%)

Turkish people published online. To interpret the effectiveness of the strategy training and participants' performance in L2 reading comprehension, participants' L1 reading activity should be also taken into consideration as it could be a good indicator in relation to their reding achievement in L2 (Grabe 2011). According to the data published by Global English Editing (Cabrera, 2021) the share of people reading books in Turkey in 2021 is around 10% (Figure 7). Also, TÜİK-Turkish Statistical Institute (TÜİK, 2023) published book reading rates in Turkey by age groups in the last 12 months (Figure 8). When asked if they read books in the last 12 months, the highest amount of positive response was given by the age group of 15-24 which is the target age of the participants of current study. Although, this age group has the highest frequency of reading habits compared to the other age groups, the frequency of reading even in L1 is low indicating that one in every two people does not read books.

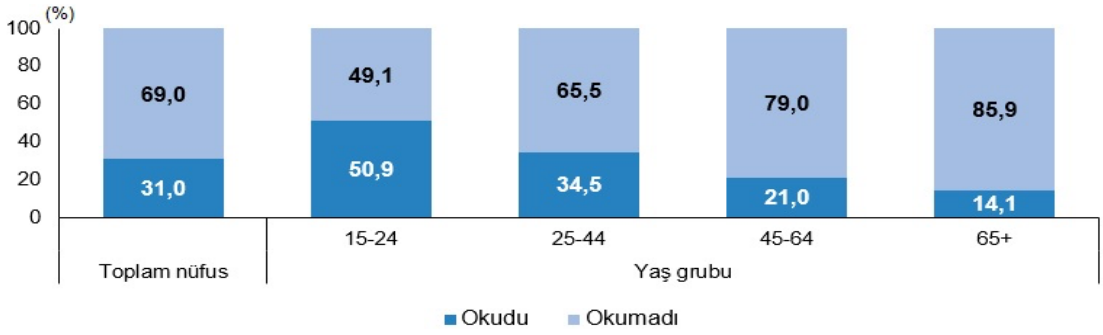

Figure 8. Rates of book reading by age groups in the last 12 months

For the second research question, this study attempted to explore the effect of four-hour reading strategy instruction on participants' perceived use of reading strategies and metacognitive awareness in academic reading. Looking at the descriptives of pre and post scores of both experimental and control groups, it is seen

that there is a greater increase in the experimental group compared to control group after receiving the instruction. This difference across groups is not significant according to the results of Mixed ANOVA analysis, yet it is marginally significant with high effect size observed. Taking the increase in descriptive statistics and high effect size into consideration, it can be interpreted that the intervention was effective to increase the participants' perceived use of reading strategies and metacognitive awareness. It is consistent with the findings of previous research (Aghaie & Zhang; 2012; Akkakosan, 2013; Dreyer & Nel, 2003; Gürses, 2011; Ikeda & Takeuchi, 2003; Macaro & Erler, 2008; Razı, 2014; Salatacı & Akyel, 2002; Zhang, 2008). The findings of this study indicated that Turkish EFL students showed progress in perceived use of reading strategies and metacognitive awareness after the reading strategy instruction. There could be several reasons to explain the progress.

As we can remember, the instructional model used in the intervention was CALLA. In theory, CALLA drew upon the theory of skill acquisition by Anderson's adopting the components of declarative and procedural knowledge. In the beginning stage of this three-stage model, the acquired knowledge of the learner is typically declarative and can be verbalized by the learner. The declarative knowledge here is static and it is the answer to *what* we know about the information. So, the metacognitive awareness of the experimental group in this study was enhanced upon the instruction as documented in the *Survey of Reading Strategies* (SORS). The learners are aware of the strategies, they can verbalize and specify the frequency of use of strategies which can be interpreted as corresponding to declarative knowledge. So, the participants in this study seem to acquire the knowledge of reading strategies as documented in self-reports. However there seems to be a discrepancy between the first two research questions. While there is a progress in the perceived use of reading

strategies of participants, the reading comprehension scores does not reveal the same progress since the gain scores were not significant in the experimental group. One possibility is that the instructional procedures resulted in learning and awareness of reading strategies in the experimental group, yet the students might not have opportunities to perform them in reading comprehension tests somewhat contradicting some of the previous studies in the literature where it is vice versa (Zenotz, 2012; Li, 2022). In these studies, strategy instruction had no impact on strategy use while it boosted reading comprehension. The finding of the current study could be either because the students did not internalize the strategies taught yet or some test-taking anxiety might interfere to perform the strategies during comprehension tests.

Another explanation for the progress in reading strategy awareness after the training could be the constructivist nature of the training program echoing the findings of similar quantitative research (Li et al., 2022). CALLA is partially based on constructivism in addition to cognitive theory (Suh, 2012). According to the constructivist point of view, "learners who construct their own knowledge of subject areas rather than being taught such knowledge have a greater ownership of the material" (Allen, 2003, p. 326). In the procedures of CALLA, the interaction between the teacher and the students can support them to construct a comprehension of the strategies and the ways to use them similar to different constructivism-based instructional models such as *Transactional Strategy Instruction* (Suh, 2012). Following this procedure enables the students to acquire a deep and personal understanding of the strategies on their own. The progress in strategy use and awareness in the experimental group after training suggests increasing learner independence and confidence which is consistent with what Macaro and Erler (2008)

found in their study. Considering all of these, the instructional nature of the training program could explain why the participants acquired increased metacognitive awareness and use of reading strategies in academic reading after the intervention.

For the third research question, hierarchical multiple regression analysis was performed to understand the contribution of reading motivation and reading strategies awareness (SORS) beyond baseline reading scores and intervention. The analysis revealed that in the first level the baseline reading scores explained 19% of the variation in L2 reading comprehension and it reached to only 20% variation in reading comprehension in the second model after adding the intervention. The third model after adding reading motivation accounted for 25% variance in L2 reading comprehension. Finally, with the entry of SORS scores, this value increased to only 26%. The findings indicated that only baseline reading scores significantly predicted the L2 reading comprehension. Reading motivation was found to be insignificant predictor of L2 reading comprehension however it can be considered as marginally significant for some. Overall, 26% of the variance in L2 reading comprehension was explained by these four predictors with only baseline reading being significant predictor. However, strategy training and SORS were not significant predictors of L2 reading comprehension. The findings will be discussed with respect to previous studies in literature.

Concerning motivation, the result of the current study contradicts the findings of previous research suggesting motivation as a significant predictor of text comprehension in L2 reading (Dhanapala & Hirakawa; 2015; Li & Gan; 2022; Maghsoudi, 2021; Xu & Durgunoğlu, 2019). There might be possible interpretations for why motivation did not predict L2 reading comprehension significantly. The conceptualization of motivation and the depth of reading comprehension assessed in

this study might have affected the findings. For the assessment of reading comprehension, this study adopted Cambridge Preliminary English Test (PET) with different types of questions taping different reading sub-skills. However, the depth of comprehension questions of the current test may not necessitate higher order comprehension of which intrinsic value of English reading was found to be a significant predictor in the study of Xu and Durgunoğlu (2019). So, the differentiation of reading comprehension level whether text-based comprehension or high order comprehension and choosing the assessment type accordingly could help us understand the predictive power of both overall motivation and its subcomponents in L2 reading comprehension more accurately. Because defining reading comprehension as a single outcome ignores the complexity of reading and the processes at different levels (Koda, 2005).

As for the conceptualization of motivation, I chose the Foreign Language Reading Motivation Questionnaire on purpose in that it is a skill-specific instrument different from the ones used in previous studies such as Motivation/Attitude Questionnaire developed by Dörnyei (1990) measuring general motivational constructs in foreign language learning. Using a skill-specific questionnaire for the motivation construct could have helped us understand the contribution of motivation on reading comprehension better than a general motivation questionnaire. Nevertheless, even with the conceptualization of motivation for reading as domain specific, the results of this study showed that the strength of the motivation's impact might not be equally powerful in all domains of language (Maghsoudi, 2021).

The lack of contribution of motivation to reading comprehension could also result from the nature of the specific constructs measured by the questionnaire. The scale measures might not have interacted with students' comprehension levels of the

texts used in this study. As Ölmez (2015) found in her study with Turkish university students, the mostly favored type of motivation for reading in English was reported to be *foreign language linguistic utility* which was among the subscales of a recent reading motivation scale "Foreign Language Reading Attitudes and Motivation Scale (FLRAMS)" developed by Turkish researchers (Erten et al., 2010). Considering the importance and perception of linguistic utility for L2 learners of English in Turkish EFL context, the predictive power of motivation would be different with the construct of *linguistic utility* included in the questionnaire.

Finally, as recent theories such as Ushioda's (2009) "Person-in-context view" and "Complex dynamic systems theory view motivation as dynamic and emergent individual learner difference rather than a static trait, it is important to consider complex, situational and temporal factors while exploring the role of motivation (Dörnyei & Ushioda, 2011; Ellis & Larsen Freeman, 2006). In accordance with Dörnyei's three-level framework (1994) the participants' motivation might be shaped by course-specific motivational components such as interest, relevance, expectancy and satisfaction or teacher-specific motivational components at learning situational level. Considering the context of the current study with an outer teacher delivering a noncompulsory strategy instruction, the motivational components at the learning situation level might transfer to the language and learner level which could possibly invalidate the influence of motives at these levels (Dörnyei & Ushioda, 2011).

The other individual difference -reading strategies awareness- was not found to be a significant predictor of reading comprehension in L2 concurring with what Li and Gan (2022) found and contrary to some studies revealing significant contribution (Guo, 2018; Park, 2015). The most plausible interpretation could be the language proficiency being a cornerstone of strategic practices and metacognitive awareness

for the optimum effect on L2 reading (Guo, 2018). That is, certain level of proficiency is required as a mediator of metacognitive knowledge for L2 reading (Maghsoudi, 2021). So, considering the low proficiency level of (B1/Minus B1) the participants of the current study, it can be interpreted that their low proficiency level avoided the potential contribution of reading strategies awareness to L2 reading comprehension.

For the last research question, I conducted semi structured interviews with voluntary participants from the experimental group to explore their perceptions about the strategy instruction. The emerging themes revealed that none of the interviewees had prior experience of a similar reading strategy instruction. The participants reported that their previous L2 instruction mainly focused on teaching grammar and the reading activities were mainly translation-based. This reflects the lack of focus on teaching L2 reading as a skill when considering the local dynamics of Turkish context where the focus of students is directed towards high-stake exams. As for the effectiveness of the instruction, all participants expressed positive feelings about the instruction. They all reported that they believed their reading skills to have improved thanks to the instruction which corroborates the previous research supporting the agreement of students on the effectiveness of reading strategy instruction (Gürses, 2011; Soleimani & Hajghani, 2013; Zenotz, 2012). The reason why the participants found it as effective could be related to having ample and direct exposure to reading strategies which was not available in their previous L2 reading instruction as reported by themselves.

Mix-method design of the current study with the inclusion of the interview data in an intervention study revealed a complete picture to understand the intervention effect (Li et al., 2022). Also, similar to what Li and her colleagues

discussed, the interview data provided supportive evidence that no changes in reading comprehension scores documented in pre/posttests did not mean that there is no learning or acquisition of strategies taught. As reported in SORS survey and revealed in interview results, students might internalize the strategies and find more chances to practice in future.

Participants reported the least useful strategies as *connecting new knowledge to what is already known* and *activating background knowledge.* The reason could be that these strategies are addressing top-down processing level to which the focus group of this study did not attain yet. Therefore, participants could perceive the strategies more abstract for which the operationalization and application would require more time and effort. Although the steps for the strategies were clearly stated and practiced, participants might require more and diverse reading practices to integrate them more easily into their reading. As for the most useful strategies, the most popular two strategies are skimming and *scanning.* It could be because these strategies include the components of both top-down and bottom-up processing.

Students expressed using the strategies for daily life including spending time on English forums, surfing on the Internet and reading for entertainment showing that they can transfer the strategies to varying contexts. The transfer of strategies taught to the outside classroom reading is important especially for EFL contexts where the exposure to L2 reading is limited. The increased metacognitive awareness and use of reading strategies might contribute to an increased amount of reading by easing the comprehension difficulties encountered in L2 reading. The instruction used in the current study might enable learners to become aware of the existence of reading strategies and help them overcome reading difficulties in the long term. This

would lead them to be more motivated to read in English both for academic and non-academic purposes.

CHAPTER 6

CONCLUSION

The main purpose of this study was to investigate the effect of CALLA based explicit reading strategy instruction on reading comprehension and strategy use of EFL learners. It also aimed to explore the contributions of individual learner differences: reading motivation and reading strategies awareness. In order to understand the effectiveness of the intervention, the data was triangulated with the data collection instruments such as English reading comprehension pre and posttests, Survey of Reading Strategies-SORS (pre and post) and semi-structured interviews to explore students' opinions.

The results of the intervention showed that 4-hour reading strategy instruction did not increase L2 reading comprehension significantly which contradicts the majority of previous research (Aghaie & Zhang, 2012; Akkakosan, 2013; Çubukcu, 2008; Dreyer & Nel, 2003; Gürses, 2011; Huang, 2014; Li et al., 2022; Macaro & Erler, 2008; Razı, 2014; Ruiz de Zarobe & Zenotz, 2017; Salatacı & Akyel, 2002; Taylor et. al., 2006; Yapp et al., 2021a; Zhang, 2008) while it enhanced the strategy use of students which was in line with the research findings (Aghaie & Zhang; 2012; Akkakosan, 2013; Dreyer & Nel, 2003; Gürses, 2011; Ikeda & Takeuchi, 2003; Macaro & Erler, 2008; Razı, 2014; Salatacı & Akyel, 2002; Zhang, 2008). Conducting interviews with the participants following the intervention enabled to obtain a holistic understanding of its effectiveness.

Although there was no observable increase in the reading comprehension of students, interviewees reported that they believed their reading skills to have improved thanks to the instruction which provided them ample and direct exposure

to reading strategies. The interview data also revealed that, some students started to transfer reading strategies to extracurricular reading activity. As reported in Survey of Reading Strategies and revealed in interview results, students might internalize the strategies and find more chances to practice in future. As for the contribution of individual learner differences, reading motivation and reading strategy awareness were not significant predictors of L2 reading comprehension. However, it is possible that insignificant results could be obtained because of conceptualization of motivation and reading in a more traditional manner. Future research could focus on the changing and evolving aspect of reading concept in digital world and the dynamic and context-sensitive facet of motivation.

Some of the limitations of this study can be listed. The first limitation is the outsider teacher teaching the intervention. Although the strategies used in the intervention were chosen among the effective strategies, the attempt to integrate strategies into the classes might have ended up being inauthentic with an outsider researcher. If this process had been planned and organized in collaboration with the members of teaching staff at the university where the intervention took place, the integration of strategy instruction, reading material and themes, in the bigger picture, could enhance the effectiveness of the instruction.

Another limitation is the number of instruction hours. The number of instruction hours was limited to four hours which was based on the findings of a meta-analysis suggesting the shortest study length for reading strategy instruction (Taylor et al., 2006). However, it might be insufficient to gain maximum advantage of the training. Another limitation can be related to the assessment. In this study I have adopted pretest posttest design. Yet, in addition to immediate posttest, a delayed posttest could have given the opportunity to obtain the long-term effects of the

instruction. Also, the relatively small sample size of the study with 46 participants (28 experimental, 18 control) prevents the generalizability of the results to a broader context.

One final limitation can be uttered with respect to the current conceptualization of reading with the concept of digital reading becoming more and more common with the availability of electronic sources. This study originally attempted to include the reading activity of participants including print reading such as textbooks, magazines, newspaper, fiction, and digital reading such as social media, watching with subtitles, and videogames. However, the number of participants completing the reading activity questionnaire dropped in data analysis falling short of statistical analysis. In short, if the data of participants' reading activity had been collected completely, the results could have been interpreted more comprehensively.

With respect to the pedagogical implications, the planning of strategy instruction could be integrated into process of curriculum development for more authentic matching of strategies with the reading texts, material, and themes to fit in the overall curriculum. With a thorough examination of curriculum programs of teaching L2 reading skill, explicit strategy training in L2 reading can be added to the teaching agenda. Also, to increase the awareness and knowledge of in-service teachers as well as pre-service teachers, strategy training courses can be offered at ELT departments of universities. Concerning individual learner differences, this study has shown that teachers should be aware of different individual learner differences while teaching L2 reading. Teachers can develop students' reading motivation and maintain their interests by providing meaningful reading tasks in English.

APPENDIX A

ETHICS COMMITTEE APPROVAL

Evrak Tarih ve Sayısı: 04.10.2022-90836

T.C.
BOĞAZİÇİ ÜNİVERSİTESİ
SOSYAL VE BEŞERİ BİLİMLER YÜKSEK LİSANS VE DOKTORA TEZLERİ ETİK İNCELEME KOMİSYONU
TOPLANTI KARAR TUTANAĞI

Toplantı Sayısı	:	34
Toplantı Tarihi	:	28.09.2022
Toplantı Saati	:	16:00
Toplantı Yeri	:	Zoom Sanal Toplantı
Bulunanlar	:	Prof. Dr. Feyza Çorapçı, Doç. Dr. Arhan S. Ertan, Doç. Dr. Senem Yıldız, Dr. Öğr. Üyesi Yasemin Sohtorik İlkmen, Dr. Öğr. Üyesi Ayşegül Metindoğan
Bulunmayanlar	:	Dr. Öğr. Üyesi Harun Muratoğulları

Hacer Kır
İngiliz Dili Eğitimi

Sayın Araştırmacı,

Daha önce SBB-EAK 2022/50 sayısı ile onay almış "Strateji öğretiminin ve bireysel farklılıkların yabancı dilde okuduğunu anlamaya ve strateji kullanımına etkisi" başlıklı araştırmanızda yapmış olduğunuz değişiklikler komisyonumuz tarafından 28 Eylül 2022 tarihli toplantıda incelenmiş ve uygun bulunmuştur.

Bu karar üyelerin toplantıya çevrimiçi olarak katılımı ve oy birliği ile alınmıştır. Onay mektubu üye ve raportör olarak Yasemin Sohtorik İlkmen tarafından toplantıya katılan bütün üyeler adına e-imzalanmıştır.

Saygılarımızla, bilgilerinizi rica ederiz.

Dr. Öğr. Üyesi Yasemin
SOHTORİK İLKMEN
ÜYE

e-imzalıdır
Dr. Öğr. ÜyesiYasemin Sohtorik
İlkmen
Öğretim Üyesi
Raportör

SOBETİK 34 28.09.2022

Bu belge, güvenli elektronik imza ile imzalanmıştır.

APPENDIX B

THE SURVEY OF READING STRATEGIES (SORS) – TURKISH VERSION

Yabancı Dil Okuma Stratejileri Ölçeği

Bu ölçeğin amacı **akademik amaçlı İngilizce bir metin okurken (ödev için metin okuma, makale okuma, vb.)** kullandığınız stratejilerle ilgili bilgi edinmektir. Aşağıdaki tüm maddeler İngilizce **akademik** materyal okumakla ilgilidir **(gazete ya da dergi okumakla ilgili değil)**.
Hiçbir madde için doğru ya da yanlış cevap yoktur. Lütfen ifadeleri dikkatlice okuyup size uygun olanı işaretleyiniz

'1' : **Hiçbir zaman** ya da **neredeyse hiçbir zaman** bunu yapmam.
'2' : **Ara sıra** bunu yaparım.
'3' : **Bazen** bunu yaparım.
'4' : **Genellikle** bunu yaparım.
'5' : **Her zaman** ya da **hemen hemen her zaman** bunu yaparım.

1.Belirli bir amaca göre okurum.	1	2	3	4	5
2.Okurken anlamama yardımcı olması için not alırım.	1	2	3	4	5
3.Okurken anlamama yardımcı olması için konuyla ilgili ne bildiğimi düşünürüm.	1	2	3	4	5
4.Okumaya başlamadan önce konuyu anlamak için metne genel olarak göz atarım.	1	2	3	4	5
5.Metin zorlaştıkça okuduğumu daha iyi anlamak için metni sesli okurum.	1	2	3	4	5
6.Okuma amacıma uygun olup olmadığını anlamak için metnin içeriğine bakarım.	1	2	3	4	5
7.Okurken anladığımdan emin olmak için yavaşlar ve daha dikkatli okurum.	1	2	3	4	5
8.Metni okumaya başlamadan önce metnin uzunluğuna ve organizasyonuna göz atarım.	1	2	3	4	5
9.Dikkatimi kaybettiğimde okuma işlemine geri dönüp dikkatimi toplamaya çalışırım.	1	2	3	4	5
10.Okuduğum bilgiyi hatırlamak için metinde ilgili kısımların altını çizerim.	1	2	3	4	5
11.Okuduğum metnin türüne göre okuma hızımı ayarlarım.	1	2	3	4	5
12.Okurken neyi daha dikkatli okuyacağıma neyi önemsemeyeceğime karar veririm.	1	2	3	4	5
13.Okurken sözlük gibi kaynaklara başvururum.	1	2	3	4	5
14.Metin zorlaştıkça metni daha dikkatli okumaya başlarım.	1	2	3	4	5
15.Okuduğumu daha iyi anlayabilmek için metindeki tablo, şekil ve resimlerden faydalanırım.	1	2	3	4	5
16.Zaman zaman durup okuduğum konu hakkında düşünürüm.	1	2	3	4	5
17.Okuduğumu daha iyi anlamama yardımcı olması için konuyla ilgili ipuçlarını (resim, alt başlık, tekrarlanan kelimeler vb.) kullanırım.	1	2	3	4	5

18.Okuduğumu daha iyi anlayabilmek için okuduklarımı kendi kelimelerimle yeniden ifade ederim.	1	2	3	4	5
19.Okuduğumu hatırlamama yardımcı olması için okuduğum noktayı kafamda canlandırmaya çalışırım.	1	2	3	4	5
20.Önemli noktaları anlayabilmek için koyu (bold) ya da eğik (italic) yazılış gibi yazım özelliklerine dikkat ederim.	1	2	3	4	5
21.Metindeki bilgiyi eleştirel biçimde analiz eder, değerlendiririm.	1	2	3	4	5
22.Metindeki fikirler arasındaki ilişkileri bulabilmek için okurken ara ara daha önce okuduklarıma geri dönerim.	1	2	3	4	5
23.Yeni bir bilgiyle karşılaştığımda anlayıp anlamadığımı kontrol ederim.	1	2	3	4	5
24.Okurken metnin içeriğini tahmin etmeye çalışırım.	1	2	3	4	5
25.Metin zorlaştıkça daha iyi anlamak için metni yeniden okurum.	1	2	3	4	5
26.Okurken kendime metinde cevaplanmasını istediğim sorular sorarım.	1	2	3	4	5
27.Metinle ilgili tahminlerde bulunur, okurken doğru mu değil mi bakarım.	1	2	3	4	5
28.Okurken anlamını bilmediğim kelime ya da kelime gruplarının anlamlarını tahmin etmeye çalışırım.	1	2	3	4	5
29.Okurken İngilizce'den Türkçe'ye çeviri yaparım.	1	2	3	4	5
30.Okurken metindeki bilgi hakkında hem İngilizce hem Türkçe düşünürüm.	1	2	3	4	5

APPENDIX C

FOREIGN LANGUAGE READING MOTIVATION QUESTIONNARRIE

Yabancı Dil Okuma Motivasyonu Ölçeği

Bu ölçek İngilizce okuma motivasyonunuz hakkında bilgi edinmek için hazırlanmıştır. Hiçbir madde için doğru ya da yanlış cevap yoktur. Lütfen verilen ifadeleri dikkatlice okuyup size en uygun olan seçeneği işaretleyiniz.

'1': Kesinlikle katılmıyorum
'2': Katılmıyorum
'3': Kısmen katılmıyorum
'4': Fikrim Yok
'5': Kısmen katılıyorum
'6': Katılıyorum
'7': Kesinlikle katılıyorum

1. İngilizce okumayı öğrenerek, İngilizce romanlar okumayı umuyorum	1 2 3 4 5 6 7
2. İngilizce yazılmış olsalar bile ilginç hikayeleri okurken kendimi okumaya kaptırırım	1 2 3 4 5 6 7
3. İngilizce okumayı öğrenmek küreselleşmeyle baş etmemiz gerektiği için önemlidir.	1 2 3 4 5 6 7
4. İngilizce okumayı öğreniyorum çünkü ilerde yurtdışında okuyabilirim.	1 2 3 4 5 6 7
5.İngilizce okuyarak, İngiltere ve Amerika gibi İngilizce konuşulan ülkelerin kültürlerini ve yaşam tarzlarını daha iyi anlamayı umuyorum.	1 2 3 4 5 6 7
6.Uzun ve zor İngilizce metinler okuma hevesimi kırar.	1 2 3 4 5 6 7
7.İngilizce'de iyi bir okuyucuyum.	1 2 3 4 5 6 7
8.İngilizce romanlar okumaktan hoşlanırım.	1 2 3 4 5 6 7
9.İngilizce okumayı öğrenerek, İngilizce gazete ve/ya dergi okumayı umuyorum.	1 2 3 4 5 6 7
10.İngilizce okumak eğlencelidir.	1 2 3 4 5 6 7
11.İngilizce gazete ve/ya dergi okumaktan hoşlanırım.	1 2 3 4 5 6 7
12.İngilizce okumak zayıf olduğum alanlardan biridir.	1 2 3 4 5 6 7
13.İngilizce okumayı öğrenmek önemlidir çünkü genel eğitimime yardımcı olacaktır.	1 2 3 4 5 6 7
14.İngilizce okumayı öğrenerek, dünyadaki çeşitli görüşleri öğrenmeyi umuyorum	1 2 3 4 5 6 7
15.Ortaokul ve lisedeki İngilizce okuma derslerimdeki notlarım pek iyi değildi.	1 2 3 4 5 6 7
16.Zor İngilizce metinlerden keyif alırım.	1 2 3 4 5 6 7
17.Konusu ilgi çekici olsa bile İngilizce okumak için hiç hevesim yok.	1 2 3 4 5 6 7
18.İngilizce okumayı öğrenmek ufkumu genişleteceği için önemlidir	1 2 3 4 5 6 7
19.İngilizce okumayı öğrenmek önemli çünkü beni daha bilgili biri yapacak.	1 2 3 4 5 6 7
20.İngilizce okumayı öğrenmek vakit kaybı.	1 2 3 4 5 6 7

21.Ödev olarak verilmediği sürece kendi isteğimle İngilizce bir şeyler okumam.	1	2	3	4	5	6	7
22.İngilizce okurken derinden meşgul olma eğilimindeyim.	1	2	3	4	5	6	7
23.İngilizce okumak benim için bir eziyettir.	1	2	3	4	5	6	7
24.Okuma dersi zorunlu bir ders olmasaydı bile yine de alırdım.	1	2	3	4	5	6	7
25.İngilizce okuma dersinde öğrendiklerimi içeren bir işte çalışmak isterdim.	1	2	3	4	5	6	7
26.Ortaokul ve lisedeki okuma etkinliklerini severdim.	1	2	3	4	5	6	7

APPENDIX D

INSTRUCTIONAL PLANS

CALLA INSTRUCTIONAL PLAN-1

Task: Reading

Level: B1

Target strategies: Skimming & Connecting new knowledge to what is already known.

Materials: Language Hub, Unit 9 & Extra Reading

Time allocated: 45 minutes.

Procedures:

1.Preparation:

To understand the strategy awareness of students, the teacher starts with a whole class discussion and asks “What do you do before/while/after reading academic material in English or Turkish to understand it better? Do you use any special techniques when you are reading in English or in your native language? Why/when do you use these strategies?”

2.Presentation & 3. Practice:

Today, we are going to focus on 2 new strategies. The first strategy is called “Skimming”. T gives the name, definition, and steps of Skimming explicitly. “When you read an article for the first time, look for clues to help you understand the main idea of each paragraph. Look for keywords. These could be numbers, or the same words repeated. Look for words connected to the main topic. Look at the first sentence of each paragraph to help you understand. By doing so, you will have a general idea about the text without reading all of it” After skimming, T leads the Ss to provide the keywords and main idea of the text. T adds “By this way you don’t

have to read each and every single sentence in text to understand what the reading is about."

Then, T introduces the second strategy called: "Connecting new knowledge to what is already known". "You can think of your personal experience you've had with the topic or anything you learned on this topic before." "As you read the text, please try to connect what you already know to the new knowledge in the text." "This strategy will help you to connect your prior knowledge to the unknown information in reading text." Before reading the text, T explains that Ss will complete 2 tasks related to the text: Matching headings with the paragraphs in the text and 6 reading comprehension questions. T tells the Ss that they should follow the steps of each strategy while completing tasks.

4. Evaluation:

In the evaluation part, T asks Ss "Were you able to use the strategies or not?" "Did you find them effective? "Would you use them with other texts?" If you couldn't use them, what was the problem and how can you overcome it?"

5.Expansion:

To apply the strategies learned to a new task, T provides an extra reading and assigns it as an individual work in the classroom. "Now, we have an extra reading, and it is about family trees. We have two tasks: First, skim the text for keywords and main ideas and then respond to the predictions about the topic of the text. Then, read the statements about families in Turkey and discuss with your partner. As you read the text, connect the new knowledge you come across in the text to what you already know about the topic. After reading, you will determine if the statements in the previous activity are correct or not according to the text."

CALLA INSTRUCTIONAL PLAN-2

Task: Reading

Level: B1

Target strategies: Activating background knowledge & Scanning

Materials: Language Hub, Unit 9 & Extra Reading

Time allocated: 45 minutes

Procedures:

1.Preparation

T starts a small discussion about "Activating background knowledge" and "Scanning". She asks, "What do you know about these two strategies?" "How do you think we can use them in a reading task?" She elicits responses from the students.

2. Presentation & 3 Practice

T explains the strategies explicitly. "To activate your background knowledge, you can remember any information on the topic either from your personal experience or other reading." "You can also review the related vocabulary before reading to recall what you already know about the topic". Then T introduces the reading text called Bartering is back. T ensures that Ss know the meaning of "Bartering". To activate their background knowledge, she elicits relevant vocabulary from students. Then, Ss discuss their background knowledge about bartering as pair work to activate their information and concepts about it. T adds "To activate my background knowledge about the topic before reading, I can look at the title, vocabulary box and pictures of the text to help me understand the text better" to emphasize the Ss that they can use the previous strategies they learned, T says "You can also rapidly skim the text." After that, Ss read the text and then T explains the second strategy. "Our next strategy is called scanning." "To scan a text, you can follow these steps: Determine

what keywords to look for. Look quickly through the text for those words. When you find each word, read the sentences around it to see if they provide the information you looked for. If they do, do not read further; if they don't, continue scanning." "Now let's look at the task. You will fill in the gaps for the details of the text. While doing this don't attempt to read the whole text once again, just determine your keywords and scan them."

4. Evaluation

After Ss complete reading and tasks, T asks them if they could use the strategies learnt effectively or not. "If yes, do you think the strategies helped you to do the tasks easily?" "If not, how can you use these strategies better with other reading tasks?"

5. Expansion

To practice the strategies once again, T brings another reading text. "We have another text, and it is about tornadoes. Before reading, please read the fact file about tornadoes in the first activity. Then, check what you know about tornadoes with your partner so that you can activate your background knowledge." "We have another task, and you will work with your partner again. Student A will have passage 1 and student B will have passage 2. Student A will complete the first part of the table and Student B will complete the second part. While doing this task, first read the whole passage quickly. The second time you read, just scan the related keywords to complete the table."

CALLA INSTRUCTIONAL PLAN-3

Task: Reading

Level: B1

Target strategies: Paying attention to structure

Materials: Language Hub, Unit 11 & Extra Reading

Time allocated: 45 minutes

Procedures:

1.Preparation

T starts the lesson by reminding Ss of the strategies they learned in the previous class. Then she prepares the class to think about "text structure". She ensures that they understand what "structure" means. She elicits some responses from Ss about their awareness of text structure.

2. Presentation & 3 Practice

T briefly explains, "Paying attention to text structure is important to understand how a text is organized while reading. In addition to grammar and vocabulary knowledge, understanding the structural clues and organizational use of words is important to comprehend the text. To comprehend the structure of a text, we can pay attention to the way the text is divided such as introductions, conclusions, transitions etc. Paying attention to the text structure also helps us to determine the type of text whether it is a "problem-solution", "cause and effect", chronological" etc. To determine the type and organization of the text, another source of clues is signal words." After explaining the strategy, T leads the Ss to discuss the pre-reading questions about the text "The nightmare of Plastic Island". After that, T writes 7 sub-headings on the board and these are: Introduction, historical background, supporting detail 1, supporting detail 2, statement of the problem, solution to the problem and

conclusion. Students' first task is to match these subheadings with corresponding parts in the text specified. After completing the first task, T asks if they can find any signal words expressing cause and effect or problem and solution relationship in the text. Then, T writes the meanings of 8 signal words from the text on the board and Ss work in pairs to find signal words corresponding to their meaning in the text. For example, T writes effect/consequence on the board and ask Ss to find "as a result" as the signal word in the text. T, provides a highlighted version of signal words to increase the students' awareness.

Then, T introduces a graphic organizer to find the causes and effects in the text. Ss completes the organizer themselves and this will help them to answer the reading comprehension questions. Upon completing the tasks, Ss share their answers and check them as a whole class.

4. Evaluation

In the evaluation part, T asks Ss "Were able to use todays' strategy?" "Did you find it effective? "Do you think you can use this strategy while reading academic material to understand it better?

5. Expansion

To practice the strategy once again, T brings another reading text with the same organizational pattern -cause and effect-. For this text, they will complete similar tasks -matching subheadings with corresponding parts/paragraphs, finding signal words, completing the graphic organizer and answering reading comprehension questions. - If time doesn't allow, T assigns it as homework for the next class.

CALLA INSTRUCTIONAL PLAN-4

Task: Reading

Level: B1

Target strategies: Guessing meanings from headings and pictures & Making predictions while reading

Materials: Language Hub, Unit 12 & Extra Reading

Time allocated: 45 minutes

Procedures:

1.Preparation:

First, T reminds the last weeks' strategies and writes them on the board. Then, she directs the question "What do you do if a keyword is unfamiliar in the text? Do you directly look it up in the dictionary?" She asks if anybody knows what binge-watching-the title of the reading text- means.

2.Presentation & 3. Practice:

After getting their attention, she explains the first strategy of the day: "Guessing meanings from headings and pictures" "When we come across an unfamiliar word in a text, we can benefit from the visual materials and headings in the text to guess what it means. Even if you don't know its exact translation, this strategy will make it easier for you to have a general idea about the concept." T uses the relevant vocabulary to portray the pictures related to the text thereby modelling how to apply the strategy. "Also, pay attention to the heading." Then, T asks the students to share their guesses with their pairs.

Then, T introduces the second strategy. "Our next strategy is "Making Predictions while reading". During reading, we can try to make predictions about what to expect, what we will come across as we read. After making predictions, you can try

matching your predictions with what you have read in the text." Then, T directs Ss to look at the sentences and vocabulary box related to the text. Before Ss start reading, T reads only the last paragraph of the text to the class and asks 2 questions about the text and requires Ss to answer them based on their predictions so far: (1) What is the relation between people becoming more demanding and impatient and binge-watching? (2) Why is it a big business for media companies? T writes some exemplary sentences on the board about how to answer these questions:

"Based on the headings/pictures, I think the text will be about…"

"Because I know that ..., I predict that…."

"Based on what I know about …. my guess is…."

T explains what Ss will do in the tasks after reading. "After sharing your predictions with a pair, please read the whole text and match your predictions with what you read in the text." and complete the summary of the text with words in the box.

4. Evaluation:

In the evaluation part, T asks Ss "Were you able to use the strategies or not?" "Did you find them effective? "Would you use them with other texts?" If you couldn't use them, what was the problem and how can you overcome it?"

5.Expansion:

"Now, we have an extra reading, and it is about a journey which went wrong." T brings other pictures related to the topic and shares them. Also, she checks their prior knowledge about the topic. Then she asks "First, try to guess what happened using the pictures, the title, and the words from the text. Then keep making predictions and match them with what you read. You can also use the previous strategies we have already learned such After reading, Ss complete the following activities in which

they decide which way the couple in text planned to go and actually went. Also, they complete the summary of the story using the words from the previous exercise.

APPENDIX E

CHECKLIST FOR EVALUATING CALLA INSTRUCTION

Table 5.4

CHECKLIST FOR EVALUATING CALLA INSTRUCTION

1. _____ Objectives stated for content, language, and learning strategies.
2. _____ Content selected is essential for grade level(s) and is aligned with state framework/local curriculum.
3. _____ Activities develop vocabulary, listening, reading, speaking, and writing.
4. _____ One or two learning strategies directly taught and/or practiced.
5. _____ Teacher's language somewhat simplified, but not tightly controlled for grammatical structures or vocabulary.
6. _____ Students' prior knowledge elicited in Preparation phase.
7. _____ Context provided through visuals, graphic organizers, manipulatives, realia, hands-on, etc.
8. _____ Instruction includes cooperative learning activity and active practice with new information.
9. _____ Student self-evaluation activity included.
10. _____ Higher-level questions posed and discussed.
11. _____ Activity and/or discussion addresses real-life applications of content.
12. _____ Contributions of students' own culture(s) related to topic are identified and discussed.
13. _____ Student self-efficacy and motivation developed through learning strategy instruction and opportunities for success.

APPENDIX F

INFORMED CONSENT FORM (TURKISH)

Araştırmayı destekleyen kurum: Boğaziçi Üniversitesi
Araştırmanın adı: Strateji öğretiminin ve bireysel farklılıkların yabancı dilde okuduğunu anlamaya ve strateji kullanımına etkisi
Proje Yürütücüsü: Dr. Şebnem Yalçın
E-mail adresi:
Telefonu:
Araştırmacının adı: Hacer Kır
E-mail adresi:
Telefonu:

Değerli Öğrenci,

Boğaziçi Üniversitesi Yabancı Diller Bölümü öğretim üyesi Dr. Şebnem Yalçın danışmanlığında "Strateji öğretiminin ve bireysel farklılıkların yabancı dilde okuduğunu anlamaya ve strateji kullanımına etkisi" adı altında bir yüksek lisans tezi yürütülmektedir.

Proje konusu:

Strateji öğretiminin **y**abancı dilde okuduğunu anlama ve strateji kullanımında olumlu etkileri olduğunu ortaya koyan birçok çalışma yapılmıştır. Bu çalışma ile Bilişsel Akademik Dil Öğrenme Yaklaşımına (CALLA) dayalı okuma stratejilerinin öğretilmesinin ve bireysel farklılıkların İngilizce'de okuduğunu anlama ve strateji kullanımına olan etkisinin incelenmesi amaçlanmaktadır. Boğaziçi Üniversitesi'nde gerçekleştirilecek olan bir yüksek lisans tezi kapsamında gerçekleştirilecek bu çalışma ön test son test desenine sahiptir. Testler arasında katılımcılara okuma stratejilerinin tanıtıldığı ve bu stratejileri uygulayabilecekleri İngilizce okuma metinlerinin verildiği 45'er dakikadan oluşan dört saatlik bir strateji öğretimi dersi sunulacaktır.

Onam**:** İngilizce öğretiminde strateji eğitiminin etkisini incelemek üzere sizi bu araştırmaya katılmaya davet ediyoruz. Bu çalışma sonucunda verilecek olan strateji eğitiminin İngilizce okuduğunu anlama ve strateji kullanımına etkisini anlamayı umuyoruz. Araştırmaya katılmayı kabul ettiğiniz takdirde sizden öncelikle mevcut strateji farkındalığınızı ölçmek için "Okuma Stratejileri Anketini" ve ayrıca bireysel farklılıkların etkisini görebilmek için "İngilizce Okuma Motivasyonu" anketini tamamlamanızı istiyoruz. Bu anketleri tamamlamanız en fazla 30 dakikanızı alacaktır. Sonrasında sizlere okuma stratejilerinin tanıtıldığı ve bu stratejileri uygulayabileceğiniz İngilizce okuma metinlerinin verildiği 45'er dakikadan oluşan dört saatlik bir strateji eğitimi dersi sunulacaktır. Bu eğitimden sonra "Okuma Stratejileri Anketini" bir kez daha yapmanızı istiyoruz. Strateji eğitimi öncesi ve sonrasında sizlere İngilizce okuma testi verilecektir. Ayrıca, strateji eğitimi sonrasında belirlediğimiz öğrenciler ile eğitim hakkındaki görüşlerini paylaşmak için 15'er dakikalık bir görüşme yapacağız. Bu görüşmelerin daha detaylı incelenebilmesi için görüşmelerin sesli kaydı alınacaktır. Bu kayıtlarda katılımcıların isimleri gizli tutulacak ve her bir katılımcının ismi yerine bir numara kullanılacaktır. Kayıtlar araştırma projesi süresince gizli tutulacak ve araştırma sona erdiğinde silinecektir. Siz katılımcılardan istenen diğer bütün bilgiler tamamen gizli tutulacaktır.

Bu araştırma bilimsel bir amaçla yapılmaktadır ve çalışmaya katılmanız tamamen isteğe bağlıdır. Bu çalışmaya katılmanız karşılığında size herhangi bir ücret ya da ödül verilmeyecektir. Bu çalışma kapsamında yapmış olduğunuz anketler ve testlerin sonuçları herhangi bir şekilde ders notlarınıza yansıtılmayacaktır. İstediğiniz zaman çalışmanın herhangi bir aşamasında sebep göstermeden çalışmayı bırakabilirsiniz. Bu durumda sağladığınız veriler kullanılmayacak ve imha edilecektir. Yapmak istediğimiz araştırmanın size herhangi bir risk getirmesi beklenmemektedir. Bu

çalışma ile elde edilecek veriler birden fazla bilimsel makale yazımında kullanılabilir.

Bu formu imzalamadan önce, çalışmayla ilgili sorularınız varsa lütfen sorun. Daha sonra sorunuz olursa, şahsıma veya proje yürütücüsü Boğaziçi Üniversitesi Yabancı Diller Bölümü Öğretim Üyesi Dr. Şebnem Yalçın'a sorabilirsiniz. Araştırmayla ilgili haklarınız konusunda Boğaziçi Üniversitesi Sosyal ve Beşeri Bilimler Yüksek Lisans ve Doktora Tezleri Etik İnceleme Komisyonu'na (SOBETIK) danışabilirsiniz..

Bana anlatılanları ve yukarıda yazılanları anladım. Formun bir **örneğini aldım / almak istemiyorum** (bu durumda araştırmacı bu kopyayı saklar).

Çalışmaya katılmayı kabul ediyorum.

Katılımcı Adı-Soyadı:……..

İmzası:……

Tarih (gün/ay/yıl):……/...../.....

Ses kaydı alınmasını kabul ediyorum.

APPENDIX G

SEMISTRUCTURED INTERVIEW QUESTIONS

1.Do you think your English reading skills have improved, worsened, or remained the same during reading strategy instruction?

2.Were this 4-hour reading classes useful? Why? Why not?

3.Do you think the reading activities we did in classes were beneficial for your reading skills? So how/in what way was it useful?

4.How was reading skill taught in the English courses you had taken before?

5.Was the teaching of reading in this class the same or different from other English classes you have taken?

6.Some reading strategies were introduced and practiced in this class. Which strategies can you remember?

7.Which strategies do you think are the most useful? Why?

8.Which strategies do you think are the least useful? Why?

9.Do you continue to use the strategies you learned in class while reading English?

10.Did you find this strategy instruction you completed useful?

11.Have you received similar strategy instruction before?

12.Would you like to receive a similar strategy instruction for a longer period of time?

13.Do you think you can understand English reading texts better after this strategy training?

14.Do you think your strategy awareness increased after this strategy training?

15.Do you have any comments and suggestions for this strategy instrucion you have completed?

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*(6), 1063–1081. 10.1007/s11251-011-9202-5

Akkakosan, S. (2013). The relationship between strategic reading instruction, student learning of L2-based reading strategies and L2 reading achievement. *Journal of Research in Reading, 36*(4), 422-450. DOI:10.1111/jrir.12004

Allen, S. (2003). An analytic comparison of three models of reading strategy instruction. *IRAL, 41*, 319-338. https://doi.org/10.1515/iral.2003.015

Anderson, J.R. (1983). *The architecture of cognition*. Harvard University Press.

Anderson, J.R. (1985). *Cognitive psychology and its implications*. (2nd ed.). Freeman.

Anderson, N. (1999). *Exploring second language reading: Issues and strategies*. Heinle & Heinle Publishers.

Brantmeier, C. (2002). Second language reading strategy research at the secondary and the university levels: Variations, disparities, and generalizability. *Reading Matrix: An International Online Journal, (2)3.* https://www.semanticscholar.org/paper/Second-Language-Reading-Strategy-Research-at-the-Brantmeier/4ae8bf0a93ad73f5b130d1b1a446ce1a03af1ac8

Cabrera, I. (2021, December 21). World reading habits in 2021 [Infographic]. *Global English Editing. https://geediting.com/world-reading-habits-in-2021-infographic/*

Carrell, P. L. (1988). Introduction: Interactive approaches to second language reading. In P. L. Carrel, J. Devine, & D. E. Eskey (Eds.), *Interactive approaches to second language reading* (pp.1-7). Cambridge University Press. http://dx.doi.org/10.1017/CBO9781139524513

Carrell, P. L. (1988). SLA and classroom instruction: Reading. *Annual Review of Applied Linguistics.* 223-242. https://doi.org/10.1017/S026719050000091X

Carrell, P. L., Pharis, B. G., & Liberto, J. C. (1989). Metacognitive strategy training for ESL reading. *TESOL Quarterly, 23*, 647-678. https://doi.org/10.2307/3587536

Chamot, A. U. (2001). "Teaching learning strategies in immersion classrooms". *The Elementary Immersion Learning Strategies Resource Guide*. (2nd ed., pp.32-38). https://carla.umn.edu/immersion/documents/eils-guide.pdf

Chamot, A. U., & O'Malley, J. M. (1987). The cognitive academic language learning approach: A bridge to the mainstream. *TESOL Quarterly, 21*(2), 227-249. https://doi.org/10.2307/3586733

Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. Addison Wesley

Clementson, T. (2005). *Natural English: Reading & writing skills*. Oxford University Press.

Cohen, A. D., & Upton, T. A. (2006). *Strategies in responding to the new TOEFL reading tasks*. (TOEFL Monograph No. MS-33) Educational Testing Service. https://doi.org/10.1002/j.2333-8504.2006.tb02012.x

Cotterall, S. (1990). Developing reading strategies through small group interaction. *RELC Journal, 21*(2), 55-59. https://doi.org/10.1177/003368829002100205

Çubukçu, F. (2008). How to enhance reading comprehension through metacognitive strategies. *Uluslararası Sosyal Araştırmalar Dergisi 1*(2), 83-93. https://www.sosyalarastirmalar.com/articles/how-to-enhance-reading-comprehension-through-metacognitive-strategies.pdf

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer. https://doi.org/10.1007/978-1-4899-2271-7

Dhanapala, K. V., & Hirakawa, Y. (2015). L2 reading motivation among Sri Lankan university students. *Reading Psychology. 37*(2), 202–229. 10.1080/02702711.2015.1025163

Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *The Modern Language Journal, 78(3),* 273-284. https://doi.org/10.2307/330107

Dörnyei, Z. & Otto, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics, 4*, 43-69. https://nottingham-repository.worktribe.com/output/1024190

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Lawrence Erlbaum.

Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9-42). Multilingual Matters.

Dörnyei, Z., & Ryan, S. (2015). *The Psychology of the language learner revisited*. Routledge. https://doi.org/10.4324/9781315779553

Dörnyei, Z., & Skehan, Z. (2003). Individual differences in second language learning. In C. J. Doughty & M. H. Long (Eds.), *The Handbook of second language acquisition* (pp. 589-630). Blackwell. https://doi.org/10.1002/9780470756492.ch18

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Pearson.

Dreyer, C., & Nel, C. (2003). Teaching reading strategies and reading comprehension within a technology-enhanced learning environment. *System, 31*(3), 349-365. https://doi.org/10.1016/S0346-251X(03)00047-2

Duke, N. K., & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In A. E. Farstrup & S. J. Samuel (Eds.), *What research has to say about reading instruction* (3rd ed., 205-242). 10.1598/0872071774.10

Ellis, N. C., & Larsen-Freeman, D. (2006). Language emergence: Implications for applied linguistics. Introduction to the special issue. *Applied Linguistics, 27*(4), 558–589. https://doi.org/10.1093/applin/aml028

Ellis, R. (1994). *The study of second language acquisition*. Oxford University Press.

Erten, . H., Zehir Topkaya, E., & Karaka, M. (2010). Exploring motivational constructs in foreign language reading. *H. U. Journal of Education*, *39*, 185-196.

Gardner, R. C. (1985). *Social psychology and second language learning: The Role of attitudes and motivation*. Edward Arnold.

Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second-language acquisition. *Canadian Journal of Psychology, 13*(4), 266–272. https://doi.org/10.1037/h0083787

Gardner, R., & MacIntyre, P. (1993). A student's contributions to second-language learning. Part II: Affective variables. *Language Teaching, 26*(1), 1-11. doi:10.1017/S0261444800000045

Grabe, W. (1991). Current developments in second language reading research. *TESOL Quarterly*, *25*(3), 375-406. https://doi.org/10.2307/3586977

Grabe, W. (1998). Reassessing the term “interactive”. In P. L. Carrel, J. Devine, & D. E. Eskey (Eds.), *Interactive approaches to second language reading* (pp. 56-70). Cambridge University Press. http://dx.doi.org/10.1017/CBO9781139524513

Grabe, W. (2009). *Reading a second language: Moving from theory to practice*. Cambridge University Press. https://doi.org/10.1017/CBO9781139150484

Grabe, W., & Stoller, F. L. (2002). *Teaching and researching reading* (2nd ed.). Pearson Education. https://doi.org/10.4324/9781315833743

Grabe, W., & Stoller, F. L. (2011). Comparing L1 and L2 reading. In C. N. Candlin, & D. R. Hall (Eds.), *Teaching and researching reading* (2nd ed., pp. 34-57). Routledge. https://doi.org/10.4324/9781315833743

Guo, L. (2018). Modeling the relationship of metacognitive knowledge, L1 reading ability, L2 language proficiency and L2 reading. *Reading in a Foreign Language. 30*(2), 209–231. https://files.eric.ed.gov/fulltext/EJ1194492.pdf

Gürses, M. (2011). Fransızca yabancı dil dersinde bilişsel akademik dil öğrenme yaklaşımına dayalı okuma stratejileri öğretiminin okuduğunu anlamaya ve strateji kullanımına etkisi: Eskişehir Osmangazi Üniversitesi örneği. (Publication No. 296607) [Doctoral dissertation, Anadolu University].

Huang, H. (2014). Online versus paper-based instruction: Comparing two strategy training modules for improving reading comprehension. *RELC Journal*, *45*(2), 165–180. https://doi.org/10.1177/0033688214534797

Ikeda, M., & Takeuchi, O. (2003). Can strategy instruction help EFL learners to improve their reading ability? An empirical study. *JACET Bulletin*, *37*, 49–60. https://www.researchgate.net/publication/275153669_Can_strategy_instruction_help_EFL_learners_to_improve_reading_ability_An_empirical_study/citations#fullTextFileContent

Jafari, S. M., & Shokrpour, N. (2012). EAP students, reading motivation of English academic expository texts: A mixed methods design. *International Journal of Linguistics, 4*(4), 372–392. https://doi.org/10.5296/ijl.v4i4.2459

Koda, K. (2005). *Insights into second language reading: A cross-linguistic approach*. Cambridge University Press. https://doi.org/10.1017/CBO9781139524841

Kong, J. (2019). Theories of reading comprehension. In J. Kong (Ed.), *Investigating the role of test methods in testing reading comprehension: A process-focused perspective,* (9-29). Springer. https://doi.org/10.1007/978-981-13-7021-2_2

Li H and Gan Z (2022) Reading motivation, self-regulated reading strategies and English vocabulary knowledge: Which most predicted students' English reading comprehension? *Frontiers in Psycholgy, 13, 1-15.* 10.3389/fpsyg.2022.1041870

Lin, D., Wong, K. K., & McBridge-Chang, C. (2012). Reading motivation and reading comprehension in Chinese and English among bilingual students. *Reading and Writing, 25*(3), 717–737. 10.1007/s11145-011-9297-8

Macaro, E. (2001). *Learning strategies in second and foreign language classrooms*. Continuum.

Macaro, E., & Erler, L. (2008). Raising the achievement of young-beginner readers of French through strategy instruction. *Applied Linguistics 29*(1), 90–119. https://doi.org/10.1093/applin/amm023

Mikulecky, B.S., & Jeffries, L. (2004). *More reading power* (2nd ed.). Pearson Education.

Mojtaba Maghsoudi (2021): Contributions of motivation to read in L2, proficiency and L1 reading strategy awareness to L2 reading. *Reading & Writing Quarterly*, *38*(1), 1-18. DOI: 10.1080/10573569.2021.1931591

Naiman, N., Frohlich, M., Stern, H. H., & A. Todesco (1975). *The good language learner*. The Ontario Institute for Studies in Education.

Noels, K.A. (2001) Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communicative style. *Language Learning 51*(1*)*, 107– 44. 10.1111/1467-9922.53225

Noels, K.A. (2009) The internalisation of language learning into the self and social identity. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self*. Multilingual Matters. 10.21832/9781847691293-016

Noels, K.A., Clément, R. and Pelletier, L.G. (1999) Perceptions of teachers' communicative style and students' intrinsic and extrinsic motivation. *Modern Language Journal, 83*(1), 23–34. 10.1111/0026-7902.00003

Noels, K. A., Clément, R., & Pelletier, L. (2001). Intrinsic, extrinsic, and integrative orientations of French-Canadian learners of English. *The Canadian Modern Language Review, 57*(3), 424-442. https://doi.org/10.3138/cmlr.57.3.424

Noels, K.A., Pelletier, L.G., Clément, R. and Vallerand, R.J. (2000) Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning 50*, 57–85. 10.1111/0023-8333.00111

Noels, K. A., Pelletier, L., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning, 50*(1), 57-85. https://doi.org/10.1111/0023-8333.00111

OECD (2023). *PISA 2022 Results (Volume I): The state of learning and equity in education*, PISA, OECD Publishing. https://doi.org/10.1787/53f23881-en.

O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge University Press. https://doi.org/10.1017/CBO9781139524490

Ölmez, F. (2015). An investigation into the relationship between L2 reading motivation and reading achievement. *Procedia,* 199, 597–603. 10.1016/j.sbspro.2015.07.561

Park, J. (2015). Insights into Korean EFL students' reading motivation, proficiency and strategy use. *English Teaching, 70*(1), 57–74. 10.15858/engtea.70.1.201503.57

Razı, S. (2014). Metacognitive reading strategy training of advanced level EFL learners in Turkey. *The Reading Matrix 14*(2), 337-360. http://www.salimrazi.com/userfiles Article_Reading_Matrix_2014.pdf

Rubin, J. (1975). What "The Good Language Learner" can teach us. *TESOL Quarterly, 9*(1), 41-51. https://doi.org/10.2307/3586011

Ruiz de Zarobe, Y., & Zenotz, V. (2017). Learning strategies in CLIL classrooms: How does strategy instruction affect reading competence over time? *International Journal of Bilingual Education and Bilingualism 21*(1), 1-13. https://doi.org/10.1080/13670050.2017.1391745

Rumelhart, D. E. (1994). Toward an interactive model of reading. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (pp. 864–894). International Reading Association.

Salataci, R., & Akyel, A. (2002). Possible effects of strategy instruction on L1 and L2 reading. *Reading in a Foreign Language, 14*(1), 1-17. http://www2.hawaii.edu/~readfl/rfl/April2002/salataci/salataci.html

Segalowitz, N., Poulsen, C., & Komoda, M. (1991). Lower-level components of reading skill in higher-level bilinguals: Implications for reading instruction. *AILA 8*(1), 15–30.

Sheorey, R., & Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System*, 29, 431-449. https://doi.org/10.1016/S0346-251X(01)00039-2

Soleimani, H., & Hajghani, S. (2013). The effects of teaching reading comprehension strategies on Iranian EFL pre-university students' reading comprehension ability. *International Research Journal of Applied and Basic Sciences*, *5*(5), 594–600.

Song, M. (1998). Teaching reading strategies in an ongoing EFL university reading classroom. *Asian Journal of English Language Teaching, 8*, 41-54.

Stanovich, K. E. (1980). Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly, 16*(1), 32-71. https://doi.org/10.2307/747348

Steinagel, L. O. (2005). *The effects of reading and reading strategy training on lower proficiency level second language learners* [Unpublished doctoral dissertation]. Brigham Young University.

Suh, Y. M. (2012). Strategy-based reading instruction utilizing the CALLA model in an ESL/EFL context. *International Journal of Literacy Culture and Language Education,1,* 199-212. https://doi.org/10.14434/ijlcle.v1i0.26834

Tatar, S. (2017). An Overview of research on second/foreign language learner motivation and future directions. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi, 46*(2), 697-710. DOI: 10.14812/cuefd.282067

Taylor, A., Stevens, J.R., & Asher, J.W. (2006). The effects of explicit reading strategy training on L2 reading comprehension. In J. M. Norris & L. Ortega (Eds.), *Synthesizing research on language learning and teaching* (pp. 213-244). John Benjamins Publishing Company. https://doi.org/10.1075/lllt.13.11tay

TÜİK, (2023, November, 24). Yaşam kalitesi modülü, 2022 [Press release]. https://data.tuik.gov.tr/Bulten/Yasam-Kalitesi-Modulu-2022

Ushioda, E. (2009) A person-in-context relational view of emergent motivation, self and identity. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 215–228). Multilingual Matters.

Ushioda, E. (2015). Context and complex dynamic systems theory. In Z. Dörnyei, P. D. MacIntyre, & A. Henry (Eds.), *Motivational Dynamics in Language Learning* (pp. 47– 54). Multilingual Matters. https://doi.org/10.21832/9781783092574-008

Weinstein, C., & Mayer, R. (1986). The teaching of learning strategies. In: M. C. Wittrock (Ed), *Handbook of research on teaching* (3rd ed., pp. 315-327). Macmillan

Williams, E., & Moran, J. (1989). Reading in a foreign language at intermediate and advanced levels with particular reference to English. *Language Teaching, 22*(4), 217-228. https://doi.org/10.1017/S0261444800014713

Xu, H., & Durgunuoğlu, A. (2019). Motivational factors underlying different levels of reading comprehension of English language learners. *TESOL, 11*(1). https://doi.org/10.1002/tesj.448

Yapp, D., De Graff, R., & Van Den Bergh, H. (2021a). Effects of reading strategy instruction in English as a second language on students' academic reading comprehension. *Language Teaching Research,* 1-24. https://doi.org/10.1177/1362168820985236

Yapp, D., De Graff, R., & Van Den Bergh, H. (2021b). Improving second language reading comprehension through reading strategies: A meta-analysis of L2 reading strategy interventions. *Journal of Second Language Studies 4*(1), 154-192. https://doi.org/10.1075/jsls.19013.yap

Zenotz, V. (2012). Awareness development for online reading. *Language Awareness*, *21*, 85–100. 10.1080/09658416.2011.639893

Zhang, L. J. (2008). Constructivist pedagogy in strategic reading instruction: Exploring pathways to learner development in the English as a second language (ESL) classroom. *Instructional Science*, *36*(2), 89–116. 10.1007/s11251-007-9025-6