

T.C  
KAFKAS UNIVERSITY  
INSTITUTE OF SOCIAL SCIENCES  
THE DEPARTMENT OF ENGLISH LANGUAGE AND  
LITERATURE

METACOGNITIVE AWARENESS AND READING STRATEGY USE OF  
KAFKAS UNIVERSITY STUDENTS IN THE DEPARTMENT OF ENGLISH  
LANGUAGE AND LITERATURE

A THESIS FOR THE DEGREE OF MASTER OF ARTS

By Yasin KIZILAY

SUPERVISOR  
Assist. Prof. Dr. Gencer ELKILIÇ

KARS- 2011

T.C  
KAFKAS UNIVERSITY  
INSTITUTE OF SOCIAL SCIENCES  
THE DEPARTMENT OF ENGLISH LANGUAGE AND  
LITERATURE

METACOGNITIVE AWARENESS AND READING STRATEGY USE OF  
KAFKAS UNIVERSITY STUDENTS IN THE DEPARTMENT OF ENGLISH  
LANGUAGE AND LITERATURE

A THESIS FOR THE DEGREE OF MASTER OF ARTS

By Yasin KIZILAY

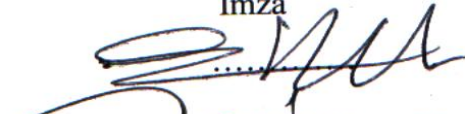


SUPERVISOR  
Assist. Prof. Dr. Gencer ELKILIÇ

KARS- 2011

**T.C**  
**KAFKAS ÜNİVERSİTESİ**  
**SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜ'NE**

Yasin KIZILAY'a ait " METACOGNITIVE AWARENESS AND READING STRATEGY USE OF KAFKAS UNIVERSITY STUDENTS IN THE DEPARTMENT OF ENGLISH LANGUAGE AND LITERATURE " konulu çalışma, jürimiz tarafından Batı Dilleri ve Edebiyatları Anabilim Dalı, Yüksek Lisans tezi olarak kabul edilmiştir.

Öğretim Üyesinin Ünvanı, Adı, Soyadı  
Yrd.Doç.Dr.Gencer ELKILIÇ (Danışman)  
Yrd.Doç.Dr.Erdinç PARLAK  
Yrd.Doç.Dr.Mustafa KOL

İmza  
  
  


Bu tezin kabulü Sosyal Bilimler Enstitüsü Yönetim Kurulunun ...../...../200 tarih ve ...../..... sayılı kararı ile onaylanmıştır.

UYGUNDUR

...../...../.....

Sosyal Bilimler Enstitüsü Müdürü

## ÖZET

|                     |  |
|---------------------|--|
| Tezin Çeşidi        | Yüksek Lisans Tezi   |
| Tezin Adı           | Kafkas Üniversitesi İngiliz Dili ve Edebiyatı Bölümü Öğrencilerinin Üstbilişsel Farkındalıkları ve Okuma Stratejisi Kullanımları |
| Tezi Hazırlayan     | Yasin KIZILAY  |
| Danışman            | Yrd. Doç. Dr. Gencer ELKILIÇ   |
| Tezin Sunulduğu Yıl | 2011   |
| Sayfa Sayısı        | X+56   |

Bu çalışmanın amacı Kafkas Üniversitesi İngiliz Dili ve Edebiyatı Bölümü'nde okuyan öğrencilerin üst bilişsel farkındalıklarını ve derslerle alakalı materyalleri okurken kullandıkları üstbilişsel okuma stratejilerini araştırmak ve okuma verimliliğini artırmanın yollarını bulmaktır.

Çalışmaya 54 ü kız 19 u erkek olmak üzere 73 örgün öğretim öğrencisi katılmıştır. Çalışmada veri toplamak için 30 maddelik bir anket kullanılmış ve elde edilen sonuçlara göre bütün öğrencilerin etkin olarak üstbilişsel okuma stratejilerini kullanmakta olduğu görülmüştür.

Kız ve erkek öğrencilerin üstbilişsel okuma stratejilerini kullanımları açısından bir farklılaşma elde edilmemiştir. Cinsiyetin strateji kullanımına etkisi olmadığı bulunmuştur.

Yabancı dil bilgisi seviyelerine göre orta ve orta üstü yabancı dil bilgisi seviyesine sahip öğrenciler arasında üstbilişsel okuma stratejilerinden biri olan evrensel okuma stratejilerini kullanmada istatistiksel olarak bir farklılaşma gözlemlenmiştir. Üstbilişsel okuma stratejilerinden olan problem çözme ve destek

stratejileri kullanımında ne cinsiyet ne de yabancı dil bilgisi seviyesi açısından fark vardır. Bütün bu sonuçlar grafik ve tablolarla da desteklenmiştir.

**ANAHTAR KELİMELER:** Üstbiliş, Okuma Stratejisi, Evrensel stratejiler, Problem çözme stratejileri, Destek Stratejileri

## **ABSTRACT**

|                 |  |
|-----------------|--|
| Type of Thesis  | Master Degree  |
| Title           | Metacognitive Awareness and Reading<br>Strategy Use of Kafkas University<br>Students in the Department of English<br>Language and Literature |
| Author          | Yasin KIZILAY  |
| Supervisor      | Assist. Prof. Dr. Gencer ELKILIÇ   |
| Year            | 2011   |
| Number of Pages | X+56   |

The aim of this study is to investigate the metacognitive awareness and reading strategy use of the students of Kafkas University English Language and Literature Department while reading school related texts and find ways to improve reading efficiency.

The participants of the study were 73 students from all day classes of the English Language and Literature Department. 54 of these students were female and 19 of them were male. A 30 item questionnaire was used in order to collect data and according to the results of the data the metacognitive awareness of students and their strategy usage was measured. The results of the study showed that all the students participated in this study reported using metacognitive reading strategies actively. There was no difference between female and male students in terms of using metacognitive reading strategies. Gender does not make any difference in terms of strategy usage.

Foreign language level differs statistically between intermediate and upper intermediate students in terms of Global Reading Strategies which is one of the sub categories of metacognitive reading strategies. Foreign Language level does not

create any difference in using either Problem Solving or Support Strategies. All these results were supported by tables and figures.

**KEY WORDS:** Metacognition, Reading Strategy, Global Reading Strategies, Problem Solving Strategies, Support Strategies

## **ACKNOWLEDGEMENTS**

I am thankful to my supervisor, Assist. Prof. Dr. Gencer ELKILIÇ, whose encouragement and support from the initial to the final level enabled me to complete this study.

I would also like to thank my family for their encouragement and support throughout this study.

KARS, 2011

Yasin KIZILAY



## CONTENTS

|                                     |     |
|-------------------------------------|-----|
| ÖZET.....                           | i   |
| ABSTRACT.....                       | iii |
| ACKNOWLEDGEMENTS .....              | v   |
| CONTENTS.....                       | vi  |
| CHAPTER 1 .....                     | 1   |
| INTRODUCTION .....                  | 1   |
| 1.1. Background of the Study .....  | 1   |
| 1.2. Statement of the Problem.....  | 1   |
| 1.3. Purpose of the Study .....     | 2   |
| 1.4. Limitations of the Study ..... | 2   |
| 1.5. Research Questions.....        | 2   |
| CHAPTER 2 .....                     | 3   |
| REVIEW OF LITERATURE .....          | 3   |
| 2.1. Reading .....                  | 3   |
| 2.2. Models of Reading.....         | 6   |
| 2.3. L1 and L2 Reading .....        | 6   |
| 2.4. Reading Strategies .....       | 8   |
| 2.5. Good and Poor Readers .....    | 11  |
| 2.6. Metacognition .....            | 14  |
| 2.7. Metacognition and Reading..... | 17  |
| 2.8. Previous Studies .....         | 18  |
| CHAPTER 3 .....                     | 25  |
| METHODOLOGY.....                    | 25  |
| 3.1. Subjects of the Study .....    | 25  |
| 3.2. Procedure of the Study.....    | 25  |
| 3.3. Instruments of the Study ..... | 25  |
| CHAPTER 4 .....                     | 28  |
| DATA ANALYSIS AND FINDINGS .....    | 28  |

|  |    |
|--|----|
| 4.1. Distribution of Statements According to Subcategories of Metacognitive Reading Strategies ..... | 28 |
| 4.2. The Distribution of Samples by Gender .....   | 31 |
| 4.3. The Mean Scores of Metacognitive Reading Strategies.....  | 32 |
| 4.4. Comparison of Gender in Terms of Metacognitive Reading Strategy Scores.....                     | 34 |
| 4.5. Distribution of Samples According to Their Foreign Language Level .....                         | 36 |
| 4.6. Comparison of Foreign Language Level in Terms of Metacognitive Reading Strategy Scores .....    | 37 |
| CHAPTER 5 .....  | 40 |
| DISCUSSION AND CONCLUSION.....   | 40 |
| REFERENCES.....  | 43 |
| APPENDIX A .....   | 50 |
| OKUMA STRATEJİLERİ ANKETİ.....   | 50 |
| APPENDIX B .....   | 53 |
| SURVEY OF READING STRATEGIES (SORS).....   | 53 |
| CURRICULUM VITAE .....   | 56 |

## LIST OF TABLES

|   |    |
|---|----|
| Table 1: Subcomponents of Metacognitive Knowledge .....   | 16 |
| Table 2: Categorization and Description of EFL Reading Strategies .....                                 | 26 |
| Table 3: Descriptive Statistics of Global Reading Strategies .....                                      | 28 |
| Table 4: Descriptive Statistics of Problem Solving Strategies.....                                      | 29 |
| Table 5: Descriptive Statistics of Support Strategies.....  | 30 |
| Table 6: Descriptive Distribution of Metacognitive Reading Strategies .....                             | 33 |
| Table 7: T-Test Results of Metacognitive Reading Strategies.....  | 34 |
| Table 8: Mean Scores of Metacognitive Reading Strategies by Gender .....                                | 35 |
| Table 9: T-Test Results of Gender According to Their Metacognitive Reading<br>Strategy Scores.....      | 35 |
| Table 10: Mean Scores of Foreign Language Level in Terms of Metacognitive<br>Reading Strategies.....    | 37 |
| Table 11: T-Test Results of Foreign Language Level in Terms of Metacognitive<br>Reading Strategies..... | 38 |

## LIST OF FIGURES

|  |    |
|--|----|
| Figure 1: The Distribution of Samples by Gender .....  | 32 |
| Figure 2: Percentage of Samples by Gender .....  | 32 |
| Figure 3: Mean Distribution of Metacognitive Reading Strategies .....  | 33 |
| Figure 4: Mean Distribution of Metacognitive Reading Strategies by Gender .....  | 35 |
| Figure 5: Distribution of Samples in Terms of Foreign Language Level .....   | 36 |
| Figure 6: Percentage Distribution of Samples in Terms of Foreign Language Level  | 36 |
| Figure 7: Mean Distribution of Foreign Language Level of Samples in Terms of<br>Metacognitive Reading Strategies ..... | 38 |

## **ABBREVIATIONS**

**EFL:** English as a Foreign Language.

**ESL:** English as a Second Language.

**EST:** English for Science and Technology.

**L1:** First Language.

**L2:** Second Language.

**MARSI:** Metacognitive Awareness of Reading Strategies Inventory.

**SORS:** Survey of Reading Strategies.

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1. Background of the Study**

In language learning the use of strategy is very important. Therefore there have been various studies on language learning strategies (Pask, 1976; O'Malley & Chamot 1990; Oxford, 1990; Nunan, 1992). Learners who employ strategies are more successful than those who do not employ any strategies. As for reading, strategies are also very important since reading is a part of learning. Readers who are aware of their cognitive processes in other words who are metacognitively aware readers are strategic readers and they are closer to success. There have been various studies on reading strategies and metacognition (Brown, 1980; Paris, Lipson & Wixson, 1983; Baker & Brown 1984; Garner and Alexander, 1989; Mokhtari & Sheorey, 2002). EFL students, throughout their academic life, encounter many texts either in their lessons or in their professions. They should read efficiently and understand whatever they encounter to reach their desired goals. From the previous studies it is understood that good readers or strategic readers are successful and can reach their goals with little effort on the other hand poor readers or metacognitively unaware readers exert much effort to understand what they read and mostly the reading process is terminated either because they don't understand or they are bored.

#### **1.2. Statement of the Problem**

In our daily life we read many things consciously or unconsciously. There are lots of written materials around us. These written materials either can be academic texts, newspapers, advertisements, traffic warnings or a recipe of a medicine. We almost read whatever our eyes see. Almost all of the texts we encounter in our daily life are written in our native language and we exert little effort to understand what is written. On the other hand second language learners encounter many unfamiliar texts in their school life that they need to exert much effort to understand what is written. They need to be skilled readers to learn from what they read. "Reading skills do not guarantee success for anyone, but success is much harder to come by without

being a skilled reader” (Grabe, 2009, p.5). Since we know that being a student in the department of English Language and Literature requires dealing with the texts written in English, students need to develop or use some reading strategies in order to be successful readers and get maximum benefit from the texts they read during their academic life.

### **1.3. Purpose of the Study**

The purpose of this study is to analyze the metacognitive awareness of Kafkas University EFL students while reading academic or school related text and make recommendations according to the results of the study.

### **1.4. Limitations of the Study**

This study is limited to the Kafkas University EFL Students. There are 73 participants in this study and the results of the study can not be generalized for all EFL students at various universities. The instrument of the study is a questionnaire and results are limited to the answers given by the students.

### **1.5. Research Questions**

1. Do the students use metacognitive reading strategies while reading?
2. Are there any significant differences between male and female students in using metacognitive reading strategies? Does gender have an impact on reading strategy use?
3. Does foreign language knowledge level of the students have an impact on using metacognitive strategies?

## CHAPTER 2

### REVIEW OF LITERATURE

#### 2.1. Reading

Reading is one of the most important elements of four language skills (writing, speaking, listening, and reading) in communication. It is also an essential skill for learners of English. For most of the learners it is the key to be successful in learning. Reading is defined in various sources.

Grabe and Stoller (2002) define reading as “... the ability to draw meaning from the printed page and interpret this information appropriately” (p.9). Likewise Demiröz (2010) defines reading as “extracting meaning from written texts through interaction of complex cognitive, metacognitive, motivational, and social processes” (P81). According to He (2008) reading is “a meaning-searching and meaning-constructing process that requires effort on the readers’ part if they want to understand written texts” (p. 224).

Alyousef (2005) defines reading “as an interactive process between a reader and a text which leads to automaticity or reading fluency. In this process the reader interacts dynamically with the text as he/she tries to elicit the meaning and where various kinds of knowledge are being used: linguistic or systemic knowledge (through bottom-up processing) as well as schematic knowledge (through top-down processing)”(p.144).

All the definitions above draw attention to the fact that reading is an interactive process between the reader and the text. Since reading is an interactive process Day and Park (2005) found six types of comprehension to be useful to the students to become interactive readers. These comprehension types are:

**Literal comprehension:** It refers to an understanding of the straightforward meaning of the text such as facts, vocabulary, dates, times, and locations.



**Reorganization:** In this type of comprehension students must use information from various parts of the text and combine them for additional understanding.

**Inference:** This type of comprehension involves students combining their literal understanding of the text with their own knowledge and intuitions when the meaning is not explicitly stated.

**Prediction:** In this type of comprehension Students use their knowledge of the topic and try to guess what might happen next or try to guess how the reading material ends.

**Evaluation:** It requires the learner to give a global or comprehensive judgement about some aspect of the text. For this judgement students must use both a literal understanding of the text and their knowledge of the topic and related issues.

**Personal response:** It involves the students' feelings about the text and the subject they read. Cultural factors may have some effects on students to express their feelings.

Reading is a combination of complex Processes and all fluent readers go through these processes somehow when they encounter a text. Grabe (2009) represents these reading processes as follows:

**Rapid and efficient process:** A fluent reader reads a text at about 250-300 wpm by coordinating rapid and automatic word recognition, syntactic parsing meaning formation, text comprehension building, inferencing, critical evaluation, prior knowledge in order to be efficient.

**Comprehending process:** A reader reads to understand what the writer wants to convey. Comprehension is the central goal for the reader.

**Interactive process:** While reading a reader activates many cognitive processes together in order to interact with the writer and understand what the writer intends to convey.

**Strategic process:** A reader uses a number of strategies to understand the text, select key information, organize and summarize information, monitor and repair comprehension.

**Flexible process:** A reader must be flexible in the reading process that he or she must adjust reading process to achieve the desired goal.

**Purposeful process:** A reader should have a purpose in mind for reading to reach goals.

**Evaluative process:** A reader should evaluate how he or she reads by monitoring the reading process. This evaluation may also occur when a reader decides how to respond to a text.

**Learning process:** Ongoing evaluations of the reader lead to learning. All reading activity is a kind of learning process that readers make decisions about how to respond to a text. While doing this, readers learn something useful.

**Linguistic process:** A reader should be aware of the linguistic rules such as morphology, syntax and semantics to comprehend what is written.

According to Goodman (1995, p.16) while reading our brain processes the information to decide what to handle or ignore, what strategies to choose, which input channels to use, where to seek information by employing five processes to maximize information and minimize effort and energy. These processes have an intrinsic sequence and occur as follows:

**1. Recognition-initiation:** The brain must recognize a graphic display in the visual field as written language and initiate reading.

**2. Prediction:** The brain is always anticipating and predicting as it seeks order and significance in sensory inputs.

**3. Confirmation:** If the brain predicts it needs verification. So it seeks to confirm the predictions.

**4. Correction:** The brain reprocesses when it finds inconsistencies or disconfirmations.

**5. Termination:** The brain terminates the reading when the reading task is completed. It can terminate the reading process when the task is non-productive, little meaning occurs, the meaning is already known, the text is uninteresting, and the text doesn't fit the reader's purpose.

## **2.2. Models of Reading**

Researchers have different opinions of what processes are involved in reading a text. They discussed these processes under three models. These models are Top-down, bottom-up and interactive models of reading.

In top-down model, reading depends on the prior knowledge and predictions of the reader while reading a text (Kantarci, 2006). In top down model readers bring their prior knowledge and experiences to the text and continues to read until comprehension is accomplished. A reader first takes a glance at the text and then guesses or predicts what the text is about after reading the topic. Then reader continues to read in accordance with his or her prior knowledge about the topic until the prior knowledge fits to the topic (Farrell, 2002). Sharkey (1986) claims that “in natural language understanding, a simple rule is followed. Analysis proceeds in a top-down predictive manner. Understanding is expectation based. It is only when the expectations are useless or wrong that bottom-up processing begins (cited in Kintsch, 1988, p.163).

In bottom-up model of reading the important things for the reader are knowledge of vocabulary and syntax. A reader reads without relating the text to prior knowledge or experiences. While top-down model works from meaning to text and readers focus is on the meaning, bottom- up model works from text to meaning and readers focus is on the words and sentences (Farrell, 2002).

The interactive model of reading consists of both top-down and bottom-up processes which occur at the same time or alternately during the reading process. A reader switches between top-down and bottom-up processes according to his or her prior knowledge about the subject, proficiency level, motivation, strategy use and socio-cultural beliefs (Aebersold & Field, 1997). According to Stanovich (1980) interactive model of reading provides a more accurate conceptualization of reading performance than top-down or bottom-up models.

## **2.3. L1 and L2 Reading**

There has been much research on L1 reading than L2 reading since the former one is an older subject. However there has been a growing interest on L2 reading

recently. According to Grabe (2009) there are many differences between L1 and L2 reading. These differences can be collected in three major headings:

**1. Linguistic and processing differences:** L1 readers differ from L2 readers in terms of lexical, grammatical, and discourse knowledge. Their vocabulary differs also. L1 linguistic sources sometimes facilitate but sometimes interfere with L2 reading comprehension. L1 and L2 differ in phonology, orthography, morphology, grammar. Idiomatic and metaphoric uses of language also differ in L1 and L2.

**2. Developmental and educational differences in L1 and L2 reading:** L2 readers have a very large store of L1 reading experiences but they have a limited exposure to L2 print. In terms of goals and purposes L1 and L2 readers may have different motivations. L2 readers often encounter different kinds of difficult texts. L2 readers need to use supportive resources such as dictionaries and grammar books while reading. L2 readers on the other hand if they are academically oriented, they have a high metacognitive awareness and this awareness makes them more efficient learners.

**3. Socio-cultural and institutional differences:** L1 readers take the advantage of their socio-cultural background in reading. There are various sources for L1 readers but L2 readers are quite limited in the use of socio-cultural background and the role of the texts in social life can be very different for them.

Grabe (1991) also states that although first language readers have some advantages in reading, L2 readers are generally older and they have a more well-developed conceptual sense of the world and they have more factual knowledge about the world than L1 readers and these qualities help L2 readers to make elaborate logical inferences from the text they read.

According to Singhal (2006) L2 reading is “a dynamic and interactive process in which learners make use of L1 related knowledge, and real-world knowledge as well as their own personal purposes and goals to arrive at an understanding of written material”(cited in Demiröz,2010,p.81).

Block (1992) analyzed the comprehension monitoring of 25 college freshmen by using think aloud protocols. She classified the participants as proficient L1 and L2 readers and non-proficient L1 and L2 readers. She found that proficient L2 readers

performed similarly to proficient L1 readers and less proficient L2 readers performed similarly to less proficient L1 readers.

#### **2.4. Reading Strategies**

Strategies are learning techniques, behaviours or actions employed by the learner to make learning more efficient and effective (Oxford and Crookall, 1989). They are most often conscious and goal-driven procedures that facilitate a learning task (Chamot, 2005).

Reading is a learning process in which readers use various mental activities in order to elicit meaning from the text they read. These mental activities are the reading strategies of the readers. Readers use these strategies either consciously or unconsciously. These strategies promote the comprehension and make the readers to gather maximum benefit from the text. From the beginning of the reading research educational psychologists and reading instruction specialists have made several studies on the use of reading strategies and impact of strategy use on effective comprehension.

According to Block (1986) “comprehension strategies indicate how readers conceive a task, what textual cues they attend to, how they make sense of what they read, what they do when they do not understand” (p.465)

According to Cohen (1990:83) reading strategies are “those mental processes that readers consciously choose to use in accomplishing reading tasks” (cited in Zang & Wu, 2009)

Anderson (1991) states that “ strategic reading is not only a matter of knowing what strategy to use but also the reader must know how to use a strategy successfully and orchestrate its use with other strategies. It is not enough to know about strategies; a reader must also be able to apply them strategically” (p468-469). A similar statement comes from Carrell, Gajdusek & Wise (1998) that “Reading strategies are of interest not only for what they reveal about the ways readers manage interactions with written text but also for how the use of strategies is related to effective reading comprehension” (p.97). Since reading is a purposeful activity it requires the orchestration of a wide variety of cognitive skills to decode, comprehend, and learn from text and also it requires the ongoing monitoring and

evaluation of one's comprehension so that the goals and purposes of reading are achieved (Cross & Paris, 1988).

In order to read better students use reading strategies either traditional ones such as skimming, scanning, contextual guessing, skipping unknown words, tolerating ambiguity, reading for meaning, critical reading and making inferences or recently recognized ones such as using background knowledge and recognizing text structure (Carrell, 1989).

Oxford and Crookall (1989) offers a useful and comprehensive classification scheme of the various strategies used by learners. These strategies are *Cognitive Strategies* used by readers includes note taking, summarizing, paraphrasing, predicting analyzing, and using context clues. *Memory Strategies* that help learners to remember the previous knowledge by creating mental images, semantic mapping, using keywords, employing word associations, and placing new words into a context. *Compensation Strategies* which include guessing while reading, or using reference materials such as dictionaries. *Metacognitive Strategies* (the subject of our study), in which a reader plans, arrange and evaluate his/her reading process. *Affective Strategies* used by the readers to lower their anxiety and encourage learning. And lastly *Social Strategies* which involve other individuals in the learning process for correction, questioning and feedback.

Duke and Pearson (2002) collect the effective individual comprehension strategies under six headings:

**a) Prediction:** Readers make predictions by using their prior knowledge about the subject. Prediction encourages the readers to use their existing knowledge to facilitate their understanding of new ideas that they encounter in a text. This strategy is generally used in narrative and expository text genres. If the students' prior knowledge is riddled with misconceptions then the prediction strategy may fail especially in reading expository texts.

**b) Think-aloud:** Think aloud strategy involves the audible expression of the thoughts and sharing of the reader with others. A reader may say what he or she is thinking while reading a text. It is thought that think-aloud has a positive effect in comprehension.

**c) Text structure:** Teaching children to use the structure of the texts, both narrative and expository, helps them to organize their understanding and recall of important ideas. This strategy eases the comprehension of narrative and expository texts.

**d) Visual representations of text:** A visual display helps readers to understand, organize, and remember thousands of words. A text is abstract and forgettable but a visual display is concrete and more memorable.

**e) Summarization:** Summarization is another strategy to improve comprehension. If a reader uses this strategy he or she will differentiate important from unimportant ideas, synthesize those ideas and create a new coherent text from the original text. This will help the reader to get rid of redundant information. By deleting unnecessary and redundant material, composing a word to replace a list of items and individual parts of an action, selecting or inventing a topic sentence a reader summarizes the text and improve comprehension.

**f) Questions/ Questioning:** If a reader asks questions to check his or her understanding this will help comprehension. The questions that a reader asks before, during or after the reading task have an important impact on comprehension.

According to Hardebeck (2006) effective reading strategies include:

**a) Vocabulary development:** A strong vocabulary helps the reader to understand an unfamiliar text. If a reader has a strong vocabulary it will be easy to make sense of the text. On the other hand if a reader doesn't know a word, he or she should know what to do. Especially a reader should know how to use context clues to figure out the meaning of an unfamiliar word.

**b) Re-reading:** Re-reading is a reading strategy used commonly by the readers to increase comprehension.

**c) Graphic organizers:** Graphic organizers are visual displays that help readers to understand, organize, and remember a lot of words.

Padron and Waxman (1988), according to the results of their study, offered seven reading strategies that make comprehension successful and seven strategies that affect comprehension negatively. Summarizing, underlining, self generated questions, checking through the story to see if you remember all of it, asking questions about the parts of the study you don't understand and taking notes or

picturing the story in your mind are the strategies that makes comprehension successful. Thinking about something else while reading, writing down every word, skipping the parts you don't understand, fast reading, repeating every word, looking up every word in the dictionary ,and saying main idea over and over again are the strategies that affect comprehension negatively.

In her study Barnett (1988) divides effective reading strategies into two general categories. These categories involve text level and word level reading strategies. Text level strategies include background knowledge, predicting, using titles and illustrations to understand, reading with a purpose, skimming, and scanning. Word level strategies include using context clues for unknown words, identifying the grammatical category of words, following reference words and recognizing meanings through word families and formation.

According to Janzen & Stoller (1998) if reading strategies are integrated to instruction, students will arrive at a richer understanding of text meaning by using a variety of reading strategies and their performances will improve on comprehension tests.

## **2.5. Good and Poor Readers**

Results of some studies about reading strategies categorize readers as “successful or unsuccessful”, “good or poor”, “proficient or less proficient” and “skilled or unskilled” readers according to their use of reading strategies. Good readers are the readers who use reading strategies consciously to maximize the comprehension and these readers employ various cognitive activities before reading, during reading and after reading.

Good readers associate the incoming information to their schemata and use them to comprehend the written material. When they encounter difficulties they compensate their deficits by making guesses or using context clues. They are able to monitor and evaluate their comprehension and also able to apply their L1 reading strategy knowledge to their L2 reading strategy knowledge (He, 2008).

Grabe (1991) called good reader as fluent reader and claimed that a fluent reader

- Needs to be rapid to make connections and inferences from the text.



- Needs to have a purpose to be more motivated.
- Needs to use his/ her background knowledge and associate it with the text.
- Expects to understand what s/ he is reading.
- Needs to employ a range of strategies to improve understanding.
- Should be aware of the fact that fluent reading or being a good reader is a long term effort.

Block (1986) asserts that good readers have an ability to monitor their comprehension than poor readers. They are metacognitively aware. They use strategies more flexibly and adjust these strategies to the type and for the purpose while they are reading. They can select the important and unimportant parts of the text. Context clues also help good readers to anticipate the information.

Duke and Pearson (2002) specify the characteristics of good readers as follows:

- They are active readers.
- They have clear goals in mind for their reading.
- They constantly evaluate their reading ,
- They look over the text before they read,
- They frequently make predictions about what is next
- They are selective. They know what to read and what to ignore
- They construct, revise, and question the meanings that they elicit from the text.
- They use context clues in order to determine the meaning of unfamiliar words.
- They use their prior knowledge
- They think about the authors of the text, their style, beliefs, intentions, historical milieu, and so on.
- They monitor their understanding of the text, make adjustments if necessary
- They evaluate the text's quality and value,
- They read different kinds of text differently.
- They use strategies before, during and after the reading.
- They see comprehension as satisfying and productive.

Since reading is a process and readers should use strategies before, during and after the reading process Pressley (2002) evaluates the features of a good reader in a broader way and collects these features under three phases.

**Before reading a good reader:**

- Is clear about his or her goal in reading a text
- Skims the text in advance of reading or at least looks through it
- Activates prior knowledge

**During reading a good reader:**

- Is selective ( skips information that is not relevant to his or her reading goal)
- Rereads the information that seems especially important or is difficult to understand.
- Takes notes during reading.
- Makes predictions about the text.
- Identifies important information in the text.
- Makes conscious inferences about the author, characters, while reading.
- Tries to figure out how information in a text relates to his/ her prior knowledge.
- Attempts to integrate the ideas in the text to get the main ideas out of the text.
- Is highly interpretive and evaluates the idea in the text.
- Metacognitively aware during reading and Monitors his/ her understanding.

**After reading a good reader:**

- Will attempt to recite the text, constructing a summary of it.
- Checks his/her understanding.

From these researches we can conclude that good readers have some features in common. They all have a goal in mind before reading and in order to reach their

goal they use their prior knowledge, select what to read or what to ignore, monitor the reading process, evaluate and make adjustments. They take notes, make predictions and inferences and they all use effective reading strategies throughout the reading process.

Poor readers on the other hand do not use the skills above and they are quite limited in their metacognitive knowledge about reading. They see reading as a means of decoding process rather than meaning-getting process. And because they have little monitoring of their own memory, comprehension and other cognitive tasks they can not realize that they do not understand (Mokhtari and Reichard, 2002). According to Çubukcu (2008) poor readers are “less aware of effective strategies and of the counterproductive effects of poor strategies, and are less effective in their monitoring activities during reading” (p.85-86).

## **2.6. Metacognition**

Researchers have been studying metacognition for many years and there has been much research on metacognition (Flavell, 1976; Paris& Myers, 1981; Kluwe, 1982; Borkowski & Muthukrishna, 1992; Schraw & Dennison, 1994).

In general the term metacognition refers to “knowledge about knowledge” or “thinking about thinking”. The most common definition we encounter comes from Flavell the originator of metacognition. Flavell (1976) defines metacognition as “one’s knowledge concerning one’s own cognitive processes or anything related to them” and gives an example “I am engaging in metacognition if I notice that I am having more trouble learning A than B; if it strikes me that I should double check C before accepting it as fact.” (p.232). Baird (1990) comes with a similar definition, supporting Flavell’s idea, that “metacognition refers to the knowledge, awareness and control of one’s own learning” (p.184).

According to Paris and Winograd (1990) metacognition refers to “knowledge about cognitive states and abilities that can be shared among individuals while at the same time expanding the construct to include affective and motivational characteristics of thinking” (p.15).

We can associate the term metacognition with several terms such as metacognitive beliefs, metacognitive awareness, metacognitive experiences,

metacognitive knowledge, feeling of knowing, judgement of learning, theory of mind, metamemory, metacognitive skills, executive skills, higher-order skills, metacomponents, comprehension monitoring, learning strategies, heuristic strategies, and self regulation (Veenman, Van Hout-Wolters, Afflerbach, 2006).

Although Flavell (1979) analyzed the metacognition in four categories which are: Metacognitive knowledge, metacognitive experiences, goals/ tasks, and actions/strategies, recent studies generally discuss metacognition in two categories: Knowledge of cognition (metacognitive knowledge) and regulation of cognition (metacognitive control). Knowledge of cognition includes the person's knowledge about his or her own cognitive resources. Regulation of cognition on the other hand includes planning, monitoring, testing, revising, and evaluating the knowledge (Carrell et al., 1998).

Metacognitive knowledge refers to the information that learners acquire about their learning, however metacognitive strategies are general skills through which learners manage, direct, regulate, and guide their learning, by using planning, monitoring and evaluating (Wenden, 1998). According to Pintrich (2002) "Metacognitive knowledge involves knowledge about cognition in general, as well as awareness of and knowledge about one's own cognition"(p.219).

Metacognitive knowledge (knowledge of cognition) has three sub-components. These are Declarative, procedural and conditional knowledge. Declarative knowledge includes what we know about our learning process and what affects our performance. Procedural knowledge is the knowledge about execution of procedural skills. Conditional knowledge refers to knowing when and why to apply various cognitive actions (Schraw & Moshman, 1995).

The sub-components of Metacognitive knowledge are simply shown in a table by Carrell et al. (1998, p.104):

**Table 1: Subcomponents of Metacognitive Knowledge**

| <b>Declarative knowledge</b>              | <b>Procedural Knowledge</b>    | <b>Conditional Knowledge</b>                |
|---|--------------------------------|---|
| What <b>the strategy is</b>               | <b>How to use</b> the strategy | <b>When &amp; where</b> to use the strategy |
| Why <b>the strategy should be learned</b> |                                | <b>How to evaluate</b> its effectiveness    |

According to Wenden (1998) three variables that affect metacognitive knowledge are *Person*, *Task* and *Strategy* variables. *Person knowledge* is a general knowledge about human factors such as age, language aptitude, motivation which affects learning positively or negatively. *Task knowledge* is the knowledge about the purpose of the task and includes information about a task's demands and nature. And finally *Strategy knowledge* refers to a general knowledge about what strategies are, why they are useful and when and how to use these strategies.

Metacognitive control also known as metacognitive strategies on the other hand consist of mental activities and can be defined as an ability to use, control and arrange the metacognitive knowledge strategically in order to convey the metacognitive knowledge to the cognitive goals (Özsoy, 2008).

Metacognitive control (regulation of cognition) includes a set of activities (*planning, monitoring, and evaluation*) that help students to control their learning and improve their performance in a number of ways (Schraw, 1998). *Planning* involves the selection of appropriate strategies and allocation of resources that affect performance. *Monitoring* involves the awareness of cognitive processes and task performance. *Evaluating* involves checking the understanding and determining whether the outcome is matching the learning goals or not (Schraw& Moshman, 1995).

In the context of reading, According to Paris and Jacobs (1984) these activities include an appraisal of the task and of one's cognitive abilities, selection of particular actions or strategies to reach goals that have been set or chosen and

monitoring and redirecting one's cognitive processes during the course of reading to reach the desired goals.

## **2.7. Metacognition and Reading**

Researchers have been investigating the reading comprehension monitoring among skilled and unskilled readers. They claim that metacognitive awareness in reading comprehension distinguishes between skilled and unskilled readers (Mokhtari and Reichard, 2002). Skilled readers plan their reading process, use flexible strategies and monitor their comprehension throughout the reading process but unskilled readers do not act as skilled readers. They are unaware of these strategies and their necessity (Paris and Jacobs, 1984).

According to O'Malley, Chamot, Stewner-Manzanares, Russo & Küpper (1985) "Students without metacognitive approaches are essentially learners without direction or opportunity to review their progress, accomplishments, and future learning directions" (p.561). We can also adapt this statement to the readers and say that readers without metacognitive approaches are readers without direction or opportunity to review their reading progress and their comprehension.

Brown, Armbruster, and Baker (1986) asserted that "Metacognition plays a vital role in reading" (p.49). To become successful readers, students should be aware of how they are reading and what they could do to improve comprehension. Readers also need to develop their level of metacognitive awareness (Aebersold and Field, 1997). According to Carrell et al. (1998):

"If a reader is aware of what is needed to perform efficiently, then it is possible to take steps to meet the demands of a reading situation more effectively. If, however, the reader is not aware of his or her own limitations as a reader or of the complexity of the task at hand, then the reader can hardly be expected to take preventative or corrective actions to anticipate or recover from problems" (p.100).

Mokhtari and Reichard (2002) claimed that students can enhance their learning by becoming metacognitively aware when they read, write, and solve problems at school. Metacognitively aware reader "plans the reading task, monitors

whether a coherent representation of the text is being maintained, and adopts different processing strategies related to the goals and outcomes of ongoing reading”(Taraban, Kerr & Rynearson, p.68).

## **2.8. Previous Studies**

Shmais (2002) made a case study on Arab University Students in order to identify the metacognitive reading strategies of the Palestinian students while reading texts in English. He used “think-aloud” protocols, interviews, tests and a questionnaire. The findings of his study indicated that the strategies employed by the subjects were helpful for their comprehension. The most frequent strategies that the subjects used were local and mechanical such as translation, repetition, paraphrasing and self questioning. He also stated that multiple data-collecting procedures were helpful for identifying reading strategies.

Zhang & Wu (2009) analyzed the metacognitive awareness and reading strategy use of 270 Chinese senior high school EFL students by using survey of reading strategies (SORS) designed by Mokhtari & Sheorey (2002). Although the questionnaire comprises 30 items they made some adaptations in order to increase feasibility. The results of the study showed that the students were using the 3 categories of strategies (global, problem solving, and support) in a high frequency level. The students were also active EFL reading strategy users and their strategy use had a positive effect on their EFL achievement. They also asserted that all of the students were using a wide range of strategies but good learners were better in selecting appropriate strategies because they could monitor their comprehension.

Dhanapala (2010) made a research on Sri-Lankan University students to examine the metacognitive awareness of L2 reading strategies. He conducted a Metacognitive Awareness of Reading Strategies Inventory (MARSII) developed by Mokhtari & Reichard (2002). He applied a reading comprehension test on students and grouped them into three proficiency levels according to the results of the comprehension test. He found a positive linear relationship between Sri Lankan students’ metacognitive awareness of reading strategies and their text comprehension. All of the students in all three proficiency levels reported using problem solving strategies most frequently followed by global and support strategies with higher use of strategies by higher level students.

In her Master's thesis Kayacan (2005) investigated the reading strategies of prep students by using think-aloud protocols. She analyzed 80 prep students in Burdur Anatolian Vocational High School in 2003-2004 academic year. First she divided the students into two categories according to their scores in a given reading comprehension exam. According to the scores the students were labelled as "successful" or "less successful" students. From these two groups, total 10 students, 5 successful and 5 less successful, were chosen as a sample group for think-aloud protocols and interviews. The results of the think-aloud protocols showed that there was a slight difference between the reading strategies of these two groups in terms of quality- types and nature of the strategies. However, she found that successful students were using more useful strategies in quantity than the less successful students. According to her research she saw strategy training as a necessity at least for less successful students.

Karbalaei (2010) investigated the differences between EFL and ESL readers' metacognitive reading strategies while reading academic texts in English. He made a comprehension test to 96 Iranian and 93 Indian undergraduate students and after the test the students completed a 30-item questionnaire (MARSI) developed by Mokhtari and Reichard (2002). The result of his study indicated that although the subjects were from different socio-cultural environments they reported a similar pattern of strategy awareness while reading academic texts. However Indian students reported using most of the strategies more often than did their Iranian counterparts. Indian students also reported using the "support reading strategies" such as summarizing, paraphrasing note taking etc. Both subjects on the other hand reported using "problem solving strategies" as the most used strategies such as reading slowly and carefully or re-reading for better understanding.

In her research Güngör (2005) analyzed the reading comprehension strategies of sixth, seventh, and eight grade students. She used Reading Comprehension Scale to collect data. She found that both students use reading comprehension strategies more often than other strategies and the students' level of reading comprehension strategy use were different with regard to gender in favour of females. She expressed that the exams for further education has a negative effect in the strategy use of the



students because students need to give importance to the exams more than reading. Especially senior students who will take an exam use less reading strategies.

Oluk and Başöncül (2009) made a study about the metacognitive reading strategy use level and its effect on science and Turkish courses of primary education 8<sup>th</sup> grade students. They used MARSİ developed by Mokhtari and Reichard (2002). They applied this questionnaire to 89 students who were going on their primary education in two different schools. From the results of the questionnaire they found that students were using strategies when they read a course material. Students were using Problem Solving Strategies in a high level. They were using Global Strategies in a middle level and they were using Support Reading Strategies in a low level. The students whose grades were 4-5 points in Turkish and Science Technology courses were using Problem Solving Strategies most. Researchers found that the reading strategies were not dependent on gender. Using reading strategies were not affecting the reading habits of the students but it affects the success of the students.

Anderson (2003) made a different study and analyzed the online reading strategies of 247 L2 readers. 131 of the learners were studying English as a foreign language at the Centro Cultural Costarricense Norteamericano (CCCN) in San José, Costa Rica. The remaining 116 learners were studying in an ESL environment at the English Language Centre (ELC) at Brigham Young University, in Provo, Utah. The Survey of Reading Strategies (SORS) developed by Sheorey and Mokhtari, (2002) was adapted for use in the study. The adapted online SORS (OSORS) included 38 items. 18 were Global Reading Strategies, 11 were Problem Solving Strategies, and 9 were Support Strategies. The results of the OSORS indicated that the learners were using a variety of strategies while reading academic materials online. The majority of the top 12 strategies used by the online readers were Problem Solving Strategies. The EFL readers reported using the Problem Solving Strategies more frequently than ESL readers. The study drew attention to the fact that there were great similarities between the readers in these two environments. There were no differences in the use of Global Reading Strategies and Support Reading Strategies between two groups. The only difference was in the use of Problem Solving Strategies that learners in EFL environment reported a higher use of these strategies than did the learners in the

ESL environment. The researcher also drew attention to the importance of metacognitive online reading strategies for second language learners.

A similar study was carried out by Hua and Lai (2009). They applied the same questionnaire (OSORS) to the 8 EST (English for Science and Technology) students. The results indicated that 7 of them were moderate strategy users and one student was a low strategy user. After strategy training, the student who used low reading strategies started to be more aware of selecting strategies. The results of the study showed that, students became better strategy users after the training. Students also expressed a positive and favourable view of using the Web to enhance their EST learning. According to the study strategy awareness training could help in highlighting pertinent strategies in online reading for EST learners to improve learning.

In their study “Student teachers’ perceived use of online reading strategies”, Amer, Barwani and Ibrahim (2010) used the SORS questionnaire to investigate the Online Reading Strategies of Omani EFL university first-year students and senior student teachers. They investigated 123 first-year student teachers and 97 fourth-year student teachers. 63 of them were male and 157 of them were female student teachers. According to the results of the data analysis they found that there was a statistically significant difference between fourth-year students and first-year students only in global strategies. High proficient readers used more global strategies than low-proficient readers. First year students reported using more support strategies than senior students did and statistically there was no difference in the strategy use in respect to gender.

Berkowitz and Cicchelli (2004) compared the metacognitive reading strategies of high achieving and underachieving gifted New York City adolescent middle school students. The researchers collected the data from three sources: (a) the Metacognitive Awareness of Reading Strategies Inventory (MARS; Mokhtari & Reichard, 2002), (b) think-aloud protocols, and (c) interviews. According to the results of the study gifted high achievers are more homogeneous and gifted under achievers are more heterogeneous in their metacognitive reading strategy use. Gifted high achievers are more skilled in strategy use than gifted underachievers are. Findings from the verbal protocols, the MARS (Mokhtari & Reichard, 2002), and the

interview indicated that as a group, the gifted high achievers used a wider variety of reading strategies and applied them more often than the gifted underachievers did. Monitoring emerged as the strategy that manifested the greatest difference between the gifted high achievers and the gifted underachievers. The results of the MARSI (Mokhtari & Reichard, 2002), indicated that all of the participants were aware of reading strategies and perceived themselves as medium level strategy users.

Kummin and Rahman (2010) investigated the relationship between the use of metacognitive strategies and achievement in English among students in Universiti Kebangsaan Malaysia using a set of questionnaire. The participants were 50 undergraduate students. The researchers aim was to identify if there were differences based on gender, ethnic and achievement in Malaysian University Entrance Test (MUET). They found that there were no differences in the use of metacognitive strategies based on gender and ethnic groups. There were differences in the use of metacognitive strategies among proficient and less proficient English language learners. According to the results of the study metacognitive strategies affect achievement of English language.

Uzunçakmak (2005) investigated the reading strategies of successful and unsuccessful readers at Middle East Technical University, Department of Basic English. She investigated the reading strategy use of 112 upper-intermediate level students. She collected the data through two questionnaires and two stimulated recall tasks. The first questionnaire was given to 112 students and the second questionnaire was given to 17 successful and 17 unsuccessful readers chosen from among the 112 students. The results of the study indicated that successful and unsuccessful readers did not differ significantly in their reported use of reading strategies. In the stimulated recall of reading task performance, however, successful and unsuccessful readers differed in their strategy use. Successful readers reported using more strategies, more top-down strategies and more instructed strategies than did unsuccessful readers.

In his study “The Reading Strategies Used by Male and Female Colombian University Students” Poole (2009) aimed to discover the differences between male and female students’ reading strategy use. . The participants of his study were 352 (male=117; female=235) low to intermediate Colombian university students. He

collected the data through Survey of Reading Strategies questionnaire (SORS) (Mokhtari & Sheorey, 2002). The results showed that males' overall strategy use was moderate, as was their use of nearly half of their individual strategies. Females' overall strategy use was high, as was their use of half of their strategies. Females' overall strategy use was significantly higher than males', as was their strategy use on two of the three SORS subscales and on eight strategies. Majority of the students' top strategies were the same; in other words, nine of the top 10 strategies were the same for females and males, although not in the same exact order. Males and females were using similar types of strategies. However, they were using many of them with significantly different frequencies. Females scored significantly higher than males on problem-solving, and support strategies. In addition, on eight individual strategies, females scored higher than males.

In their study "Possible Effects of Strategy Instruction on L1 and L2 Reading" Salatacı and Akyel (2002) investigated the reading strategies of Turkish EFL students in Turkish and English and they wanted to find out the effects of strategy instruction on L1 and L2 reading. The participants of their study were 8 Turkish students enrolled in a pre-intermediate level class of a one-year intensive English course offered at a Turkish-medium technical university. They used think-aloud protocols, observation, a background questionnaire, a semi-structured interview and the reading component of the PET (the Preliminary English Test). At the end of the study they found that that strategy instruction had a positive effect on both Turkish and English reading strategies and reading comprehension in English.

Sheorey and Mokhtari (2001) examined the differences in the reported use of reading strategies of native and non-native English speakers. 150 native and 152 ESL college students completed a survey of reading strategies. They found that both native and ESL students displayed awareness of the strategies and they reported using cognitive strategies followed by metacognitive strategies and support strategies in an order. ESL and native high-reading ability students reported a higher usage of cognitive and metacognitive reading strategies than low reading ability students. Native high-reading-ability students reported using support reading strategies more than low reading ability native students. In terms of gender, the native female

students reported higher frequency of strategy use but in ESL group the gender did not have an effect on strategy use.

Mokhtari and Reichard (2004) investigated the differences between 209 Moroccan and 141 US students in their metacognitive awareness and perceived use of specific reading strategies when reading in English. They used The MARSII instrument to collect data. Results of the data revealed that despite the fact that the two student groups had been schooled in significantly different socio-cultural environments, they reported remarkably similar patterns of strategy awareness and reported usage when reading academic materials in English. But Moroccan students reported using certain types of strategies more often than did their American counterparts since their proficiency level was high. This means that regardless of native language background good readers can solve reading comprehension problems by using effective reading strategies.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1. Subjects of the Study**

The participants of this study were 73 university students studying in the Department of English Language and Literature, Kafkas University, Kars. The subjects of the study were chosen from 4 grades. 4 students from 1<sup>st</sup> grade, 24 students from 2<sup>nd</sup> grade, 28 students from 3<sup>rd</sup> grade and 17 students from 4<sup>th</sup> grade were chosen. Then these students were divided into two groups in terms of their grades. 1<sup>st</sup> and 2<sup>nd</sup> graders were intermediate level, 3<sup>rd</sup> and 4<sup>th</sup> graders were upper-intermediate level. So 28 students were intermediate and remaining 45 students were upper intermediate level. All of the students had some learning experiences on English in their past education. The participants of the study were both females and males. 19 of them were male, 54 of them were female students.

#### **3.2. Procedure of the Study**

The aim of the study was to investigate the reading strategy use of the students while reading academic or school related texts and then associate these strategies with the metacognitive strategies. For this research the students were given a questionnaire under the supervision of their lecturers in the spring term of the 2010-2011 educational year. The participants were assured that the main objective of the researcher was to investigate their reading strategy use and their answers would not be used for any other purpose. For their confidentiality they were not required to write their names on the questionnaires.

#### **3.3. Instruments of the Study**

The data for this study was collected through a questionnaire ( see Appendix A) adapted from the survey of reading strategies (SORS) by Mokhtari and Sheorey (2002) that was developed to measure the metacognitive awareness and perceived use of reading strategies of adolescent and adult learners of English as a second language (ESL) while reading school related materials in English. It comprises 30

items. These items measure three broad categories of reading strategies: global reading strategies, problem solving strategies, and support strategies. A 5-point Likert scale following each item indicates the frequency of strategy use ranging from 1(never do) to 5 (always do).

Taking into consideration of the participants' EFL proficiency level the questionnaire was translated into Turkish, the native language, so that the students with different English proficiency levels could adequately understand the questions. This was to guarantee successful data collection and avoid comprehension difficulties that participants might encounter when given the English version. While translating the questionnaire it was decided to divide the statements into three metacognitive reading strategy categories. The first 13 items comprises the global reading strategy statements, following 8 items comprises problem solving strategy statements and the last 9 statements are measuring support strategies.

**Table 2:** Categorization and Description of EFL Reading Strategies

| <b>Category</b>                  | <b>Description</b>  | <b>Statements</b>   | <b>Item</b> |
|----------------------------------|---|---|-------------|
| <b>Global reading strategies</b> | Intentional, carefully planned techniques by which learners monitor or manage their reading | Setting purpose for reading - Using prior knowledge- Previewing text before reading - Checking how text content fits purpose - Noting text characteristics. (e.g., length, organization) - Determining what to read - Using text features. (e.g., tables) - Using context clues - Using typographical features (e.g., bold, italics) - Analyzing and evaluating what is read- Checking understanding - Confirming predictions - Predicting or guessing text meaning | 1-13        |

---

|                                   |  |   |
|-----------------------------------|--|---|
| <b>Problem-solving strategies</b> | The actions and procedures that readers use when problems develop in understanding textual information | Reading slowly and carefully - 14-21<br>Trying to stay focused on reading - Adjusting reading speed - Paying close attention to reading - Pausing and thinking about reading - Visualizing information read - Re-reading for better understanding - Guessing meaning of unknown words   |
| <b>Support strategies</b>         | Basic support mechanisms intended to aid the reader in comprehending the text                          | Taking notes while reading - 22-30<br>Reading aloud when text becomes hard - Underlining information in text - Using reference materials (e.g., dictionary) - Paraphrasing for better understanding - Going back and forth in text - Asking oneself questions - Thinking in both English & mother tongue - Translating into a native language |

---

Adapted from Mokhtari and Sheorey (2002)

Finally some arrangements were made in the personal information section. The name section in the original questionnaire was omitted for the confidentiality of the students. And the age section was omitted.



## CHAPTER 4

### DATA ANALYSIS AND FINDINGS

#### 4.1. Distribution of Statements According to Subcategories of Metacognitive Reading Strategies

30 statements in the Survey of Reading Strategies questionnaire are divided into three categories (Global Reading Strategies, Problem Solving Strategies and Support Strategies) and their descriptive statistics are given in Table 3, Table 4, and Table 5 according to the samples.

**Table 3: Descriptive Statistics of Global Reading Strategies**

| Statements  | Mean | SD   | Min | Max | Min Percent | Max Percent |
|---|------|------|-----|-----|-------------|-------------|
| 1. I have a purpose in mind when I read.  | 4.81 | 0.40 | 4   | 5   | 19.2        | 80.8        |
| 2. I think about what I know to help me understand what I read                          | 4.31 | 0.70 | 3   | 5   | 13.7        | 45.2        |
| 3. I take an overall view of the text to see what it is about before reading it.        | 4.14 | 0.85 | 2   | 5   | 4.1         | 39.7        |
| 4. I think about whether the content of the text fits my reading purpose.               | 4.14 | 0.89 | 2   | 5   | 5.5         | 41.1        |
| 5. I review the text first by noting its characteristics like length and organization.  | 4.20 | 0.91 | 1   | 5   | 1.4         | 45.2        |
| 6. When reading, I decide what to read closely and what to ignore.                      | 3.88 | 1.08 | 1   | 5   | 5.5         | 30.1        |
| 7. I use tables, figures, and pictures in text to increase my understanding.            | 4.27 | 0.84 | 2   | 5   | 5.5         | 46.6        |
| 8. I use context clues to help me better understand what I am reading.                  | 4.37 | 0.75 | 2   | 5   | 1.4         | 52.1        |
| 9. I use typographical features like bold face and italics to identify key information. | 3.73 | 0.99 | 1   | 5   | 1.4         | 23.3        |
| 10. I critically analyze and evaluate the information presented in the text.            | 3.90 | 0.94 | 1   | 5   | 1.4         | 24.7        |

|  |      |      |   |   |     |      |
|--|------|------|---|---|-----|------|
| 11. I check my understanding when I come across new information.     | 4.04 | 0.89 | 1 | 5 | 1.4 | 32.9 |
| 12. I try to guess what the content of the text is about when I read | 4.08 | 0.88 | 1 | 5 | 1.4 | 34.2 |
| 13. I check to see if my guesses about the text are right or wrong.  | 3.88 | 1.03 | 1 | 5 | 1.4 | 32.9 |
| Total  | 4.13 | 0.86 |   |   |     |      |

The mean score of “I have a purpose in mind when I read” statement is 4.81,  $SD= 0.40$ , “I use context clues to help me better understand what I am reading” is 4.37,  $SD= 0.75$ , and “I think about what I know to help me understand what I read” is 4.31,  $SD= 0.70$  (see, Table 3). The participants reported these strategies as the most preferred three strategies among Global Reading Strategies. Students have a purpose to read and while reading they use context clues in order to understand the meaning of an unfamiliar expression. They use their prior knowledge to help them understand the text. The mean score of ‘I use typographical features like bold face and italics to identify key information’ statement is 3.73,  $SD = 0.99$ , “I check to see if my guesses about the text are right or wrong” is 3.88,  $SD=1.03$ , “When reading, I decide what to read closely and what to ignore” is 3.88,  $SD= 1.08$  (see, Table 3). The participants reported these strategies as the least preferred 3 strategies among Global Reading Strategies.

**Table 4: Descriptive Statistics of Problem Solving Strategies**

| Statements  | Mean | SD   | Min | Max | Min Percent | Max Percent |
|---|------|------|-----|-----|-------------|-------------|
| 14. I read slowly and carefully to make sure I understand what I am reading.  | 4.14 | 0.89 | 2   | 5   | 5.5         | 41.1        |
| 15. I try to get back on track when I lose concentration.                     | 3.79 | 1.20 | 1   | 5   | 6.8         | 35.6        |
| 16. I adjust my reading speed according to what I am reading                  | 4.15 | 1.20 | 2   | 5   | 4.1         | 37.0        |
| 17. When text becomes difficult, I pay closer attention to what I am reading. | 4.42 | 0.76 | 2   | 5   | 2.7         | 56.2        |
| 18. I stop from time to time and think about what I am reading.               | 4.01 | 1.03 | 2   | 5   | 11.0        | 42.5        |
| 19. I try to picture or visualize information to help remember what           | 3.59 | 1.21 | 1   | 5   | 5.5         | 28.8        |

|   |             |             |   |   |     |      |
|---|-------------|-------------|---|---|-----|------|
| I read.   |             |             |   |   |     |      |
| 20. When text becomes difficult, I re-read it to increase my understanding. | 3.99        | 0.82        | 2 | 5 | 5.5 | 27.4 |
| 21. When I read, I guess the meaning of unknown words or phrases.           | 3.97        | 0.91        | 2 | 5 | 5.5 | 34.2 |
| <b>Total</b>  | <b>3.45</b> | <b>1.00</b> |   |   |     |      |

In Problem Solving Strategies the mean score of ‘When text becomes difficult, I pay closer attention to what I am reading’ statement is  $4.42$ ,  $SD = 0.76$ , ‘I adjust my reading speed according to what I am reading’ is  $4.15$ ,  $SD=1.20$  and ‘I read slowly and carefully to make sure I understand what I am reading’ is  $4.14$ ,  $SD=0.89$  (see, Table 4). The participants reported these strategies as the most preferred three strategies among Problem Solving Strategies. The mean score of ‘I try to picture or visualize information to help remember what I read’ is  $3.59$ ,  $SD = 1.21$ , ‘I try to get back on track when I lose concentration’ is  $3.79$ ,  $SD=1.20$  and ‘When I read, I guess the meaning of unknown words or phrases’ is  $3.97$ ,  $SD=0.91$  (see, Table 4). These strategies are reported as the least preferred three strategies among Problem Solving Strategies.

**Table 5: Descriptive Statistics of Support Strategies**

| Statements   | Mean | SD   | Min | Max | Min Percent | Max Percent |
|--|------|------|-----|-----|-------------|-------------|
| 22. I take notes while reading to help me understand what I read.                    | 3.97 | 1.04 | 1   | 5   | 2.7         | 35.6        |
| 23. When text becomes difficult, I read aloud to help me understand what I read.     | 3.55 | 0.19 | 1   | 5   | 8.2         | 21.9        |
| 24. I underline or circle information in the text to help me remember it.            | 4.30 | 0.79 | 3   | 5   | 20.5        | 50.7        |
| 25. I use reference materials (e.g. a dictionary) to help me understand what I read. | 3.94 | 0.93 | 2   | 5   | 5.5         | 34.2        |
| 26. I paraphrase (restate ideas in my own words) to better understand what I read.   | 3.79 | 0.93 | 1   | 5   | 1.4         | 24.7        |
| 27. I go back and forth in the text to find relationships among ideas in             | 3.56 | 1.00 | 1   | 5   | 4.1         | 16.4        |

|   |      |      |   |   |     |      |  |
|---|------|------|---|---|-----|------|--|
| it.   |      |      |   |   |     |      |  |
| 28. I ask myself questions I like to have answered in the text.                   | 3.67 | 1.01 | 1 | 5 | 2.7 | 21.9 |  |
| 29. When reading, I translate from English into my native language.               | 3.68 | 1.19 | 1 | 5 | 5.5 | 31.5 |  |
| 30. When reading, I think about information in both English and my mother tongue. | 3.78 | 1.12 | 1 | 5 | 2.7 | 31.5 |  |
| Total   | 3.80 | 0.91 |   |   |     |      |  |

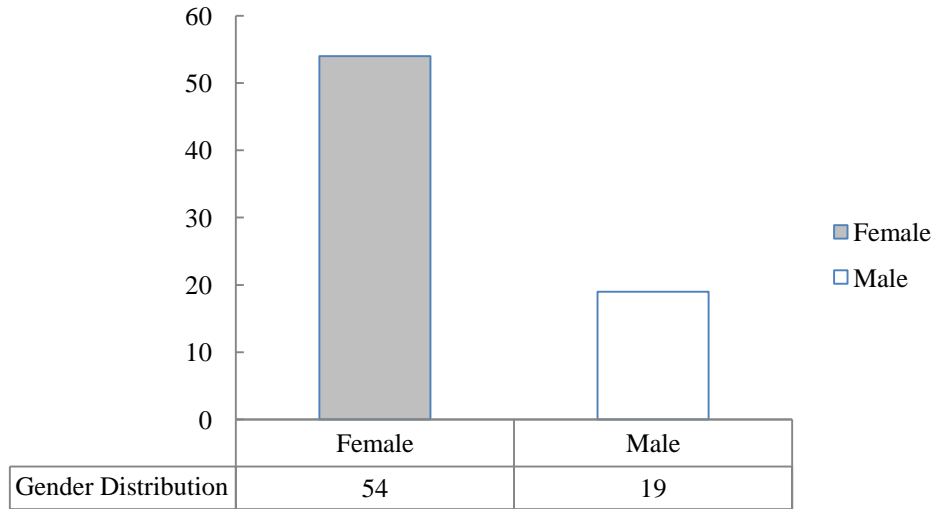
The mean score of the statement ‘I underline or circle information in the text to help me remember it’ is 4.30,  $SD = 0.79$ , ‘I take notes while reading to help me understand what I read’ is 3.97,  $SD=1.04$  and ‘I use reference materials (e.g. a dictionary) to help me understand what I read’ is 3.94,  $SD=0.93$  (see, Table 5). The participants reported these strategies as the most preferred three strategies among Support Strategies. The mean score of the statement ‘When text becomes difficult, I read aloud to help me understand what I read’ is 3.55,  $SD = 0.19$ , ‘I go back and forth in the text to find relationships among ideas in it’ is 3.56,  $SD=1.00$  and ‘I ask myself questions I like to have answered in the text’ is 3.67,  $SD=1.01$  (see, Table 5). In Support Strategies Category these three strategies are the least preferred strategies by the students.

The most preferred strategies among the sub categories of metacognitive reading strategies are Global Reading Strategies ( $\bar{X} = 4.13$ ,  $SD = 0.86$ ). The least preferred reading strategies are Problem Solving Strategies ( $\bar{X} = 3.45$ ,  $SD = 1.00$ ). Support Strategies are preferred in a medium level among these three sub-categories ( $\bar{X} = 3.80$ ,  $SD = 0.91$ ).

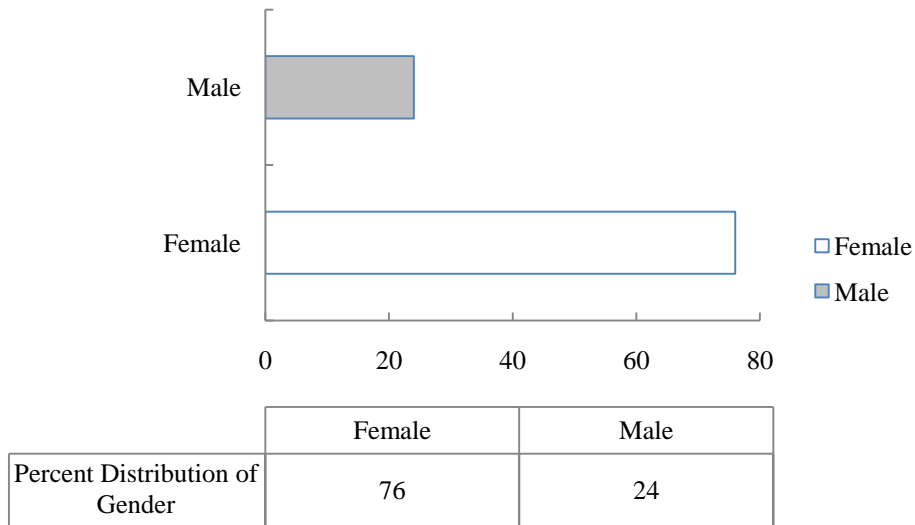
#### 4.2. The Distribution of Samples by Gender

According to the results of the descriptive statistics of gender, the frequency of the female participants was 54 and the frequency of the male participants was 19 (see, Figure 1 and Figure 2).

**Figure 1: The Distribution of Samples by Gender**



**Figure 2: Percentage of Samples by Gender**



### **4.3. The Mean Scores of Metacognitive Reading Strategies**

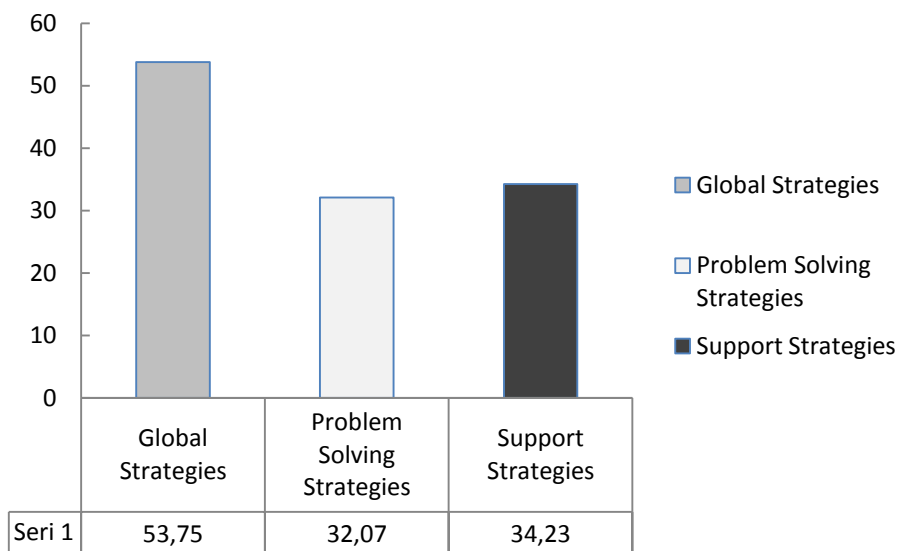
According to the results of descriptive distribution of the scores of the participants, the mean score of Global Reading Strategies is 53.75, the mean score of Problem solving strategies is 32.07, and the mean score of Support Strategies is 34.23'tür (see., Table 6; Figure 3).

**Table 6: Descriptive Distribution of Metacognitive Reading Strategies**

|                            | N  | $\bar{X}$ | SD   |
|----------------------------|----|-----------|------|
| Global Strategies          | 73 | 53.75     | 5.86 |
| Problem Solving Strategies | 73 | 32.07     | 4.40 |
| Support Strategies         | 73 | 34.23     | 4.98 |

It can be inferred from Table 6 that the most preferred group is Global Reading Strategies. Both male and female students in both levels intermediate and upper intermediate prefer global strategies most

**Figure 3: Mean Distribution of Metacognitive Reading Strategies**



Metacognitive reading strategy scores of participants were analyzed with *dependent samples t-test*. According to the findings statistically, metacognitive reading strategies of the participants differ significantly. The scores obtained from samples, Global Reading Strategies [ $t_{(72)} = 78.388$ ,  $p < .05$ ] Problem Solving Strategies [ $t_{(72)} = 62.299$ ,  $p < .05$ ] and Support Strategies [ $t_{(72)} = 58.742$ ,  $p < .05$ ] differ significantly (see, Table 7).

**Table 7: T-Test Results of Metacognitive Reading Strategies**

|                            | N  | $\bar{X}$ | df | t      | p      |
|----------------------------|----|-----------|----|--------|--------|
| Global Strategies          | 73 | 53.75     | 72 | 78.388 | 0.000* |
| Problem Solving Strategies | 73 | 32.07     | 72 | 62.299 | 0.000* |
| Support Strategies         | 73 | 34.23     | 72 | 58.742 | 0.000* |

\*p &lt; .05

#### 4.4. Comparison of Gender in Terms of Metacognitive Reading Strategy Scores

Metacognitive reading strategies of the participants were analyzed with *independent samples t-test* in order to find out whether the participants differ in terms of gender or not. According to the findings there was no statistically significant difference between female and male students' metacognitive reading strategy scores. Global, Problem Solving and Support Strategies do not create a differentiation in terms of gender.

There was no statistically significant difference between female and male students in terms of Global Reading Strategies as  $t_{(71)} = -0.620$ ,  $p > .05$  (see, Table 9). The mean score of female students in the use of global reading strategies is 53.50 and the mean score of male students in the use of global reading strategies is 54.47 (see, Table 8; Figure 4).

According to the findings there was no statistically significant difference between female and male students in terms of Problem Solving Strategies observed as  $t_{(71)} = 0.561$ ,  $p > .05$  (see., Table 9). The mean score of female students in the use of Problem Solving Strategies is 32.24 and the mean score of male students in the use of Problem Solving Strategies is 31.58 (see, Table 8; Figure 4).

Also There was no statistically significant difference between the female and male students in terms of Support Strategies as  $t_{(71)} = 0.609$ ,  $p > .05$  (see, Table 9). Both female and male students indicated almost the same scores in the use of Support Strategies as female students scored 34.44 and male students scored 33.63 (see, Table 8; Figure 4).

**Table 8: Mean Scores of Metacognitive Reading Strategies by Gender**

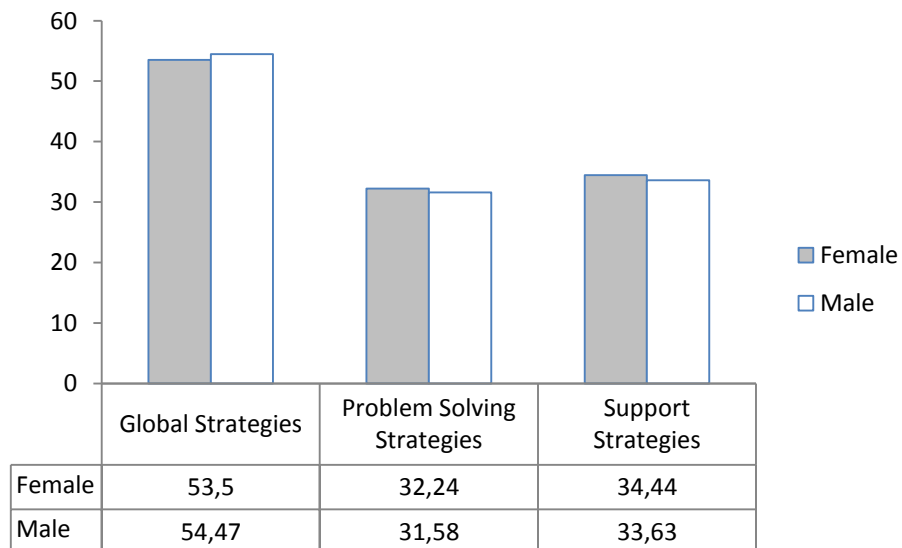
|                            | Female |           |      | Male |           |      |
|----------------------------|--------|-----------|------|------|-----------|------|
|                            | N      | $\bar{X}$ | SD   | N    | $\bar{X}$ | SD   |
| Global Strategies          | 54     | 53.50     | 5.52 | 19   | 54.47     | 6.85 |
| Problem Solving Strategies | 54     | 32.24     | 4.34 | 19   | 31.58     | 4.63 |
| Support Strategies         | 54     | 34.44     | 4.75 | 19   | 33.63     | 5.67 |

**Table 9: T-Test Results of Gender According to Their Metacognitive Reading Strategy Scores**

|                            | Levene F | Test p | df | t      | p      |
|----------------------------|----------|--------|----|--------|--------|
| Global Strategies          | 0.079    | 0.779  | 71 | -0.620 | 0.537* |
| Problem Solving Strategies | 0.005    | 0.946  | 71 | 0.561  | 0.576* |
| Support Strategies         | 0.924    | 0.340  | 71 | 0.609  | 0.544* |

\*p > .05

**Figure 4: Mean Distribution of Metacognitive Reading Strategies by Gender**



All the results above show that gender of the students does not create a significant difference in using metacognitive reading strategies. There is no

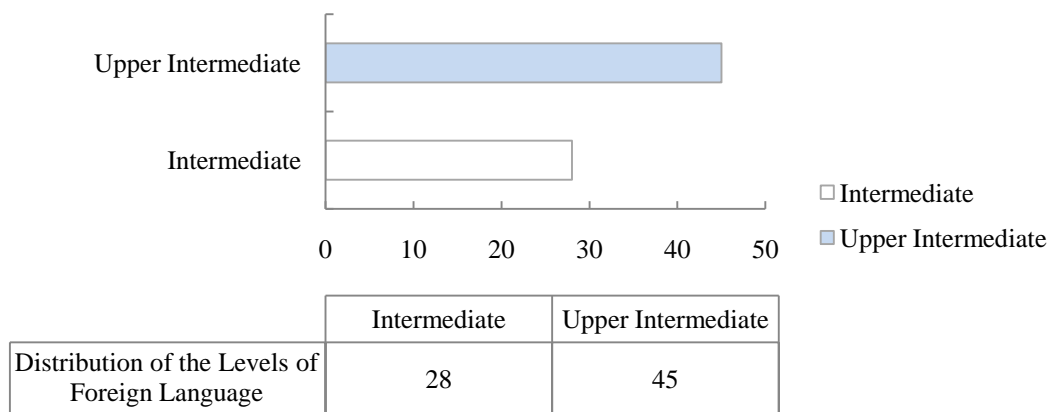


statistically significant difference between male and female students in using Global, Problem Solving and Support strategies.

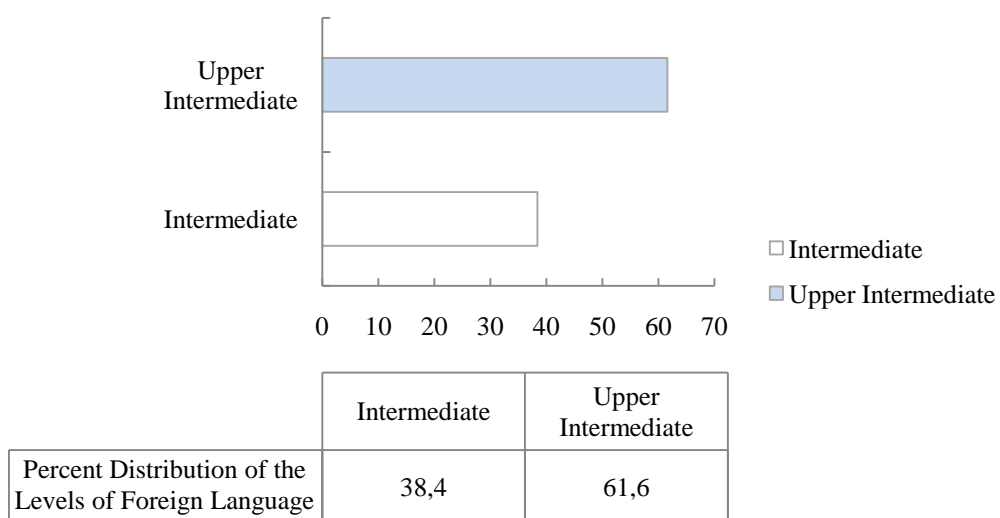
#### 4.5. Distribution of Samples According to Their Foreign Language Level

When the descriptive statistics of the samples were analyzed in terms of foreign language level, the frequency of intermediate students was 28 and the frequency of upper intermediate students was 45. Their percentage distribution was 38.4% intermediate and 61.6% upper intermediate (see Figure 5; Figure 6).

**Figure 5: Distribution of Samples in Terms of Foreign Language Level**



**Figure 6: Percentage Distribution of Samples in Terms of Foreign Language Level**



#### 4.6. Comparison of Foreign Language Level in Terms of Metacognitive Reading Strategy Scores

Metacognitive reading strategies of the participants were analyzed with *independent samples t-test* in order to find out whether they differ in terms of foreign language level or not. According to the findings there was a statistically significant difference between the intermediate and upper intermediate students in terms of metacognitive reading strategy scores.

There was a statistically significant difference between the intermediate and upper intermediate students in terms of Global Reading Strategy usage as  $t(71) = -2.062$ ,  $p < .05$  (see, Table 11). While the mean score of intermediate students in using Global Strategies was 52.00 the mean score of upper intermediate students was 54.84 (see, Table 10; Figure 7).

According to the findings there was no statistically significant difference between the intermediate and upper intermediate students in terms of Problem Solving Strategy usage as  $t(71) = -0.925$ ,  $p > .05$  (see, Table 11). While the mean score of intermediate students was 31.46 the mean score of upper intermediate students was 32.44 (see, Table 10; Figure 7).

Also when the Support Strategy usage was analyzed there existed no statistically significant difference between the intermediate and upper intermediate students as  $t(71) = -0.506$ ,  $p > .05$  (see, Table 11). While the mean score of intermediate students was 33.86 the mean score of upper intermediate students was 34.47 in using Problem Solving Strategies (see, Table 10; Figure 7).

**Table 10: Mean Scores of Foreign Language Level in Terms of Metacognitive Reading Strategies**

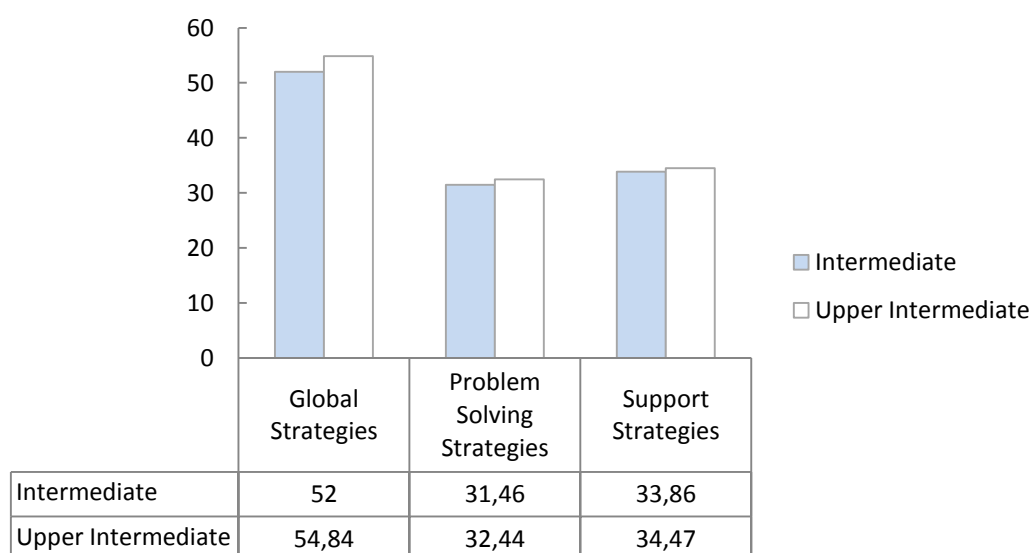
|                            | Intermediate |           |      | Upper-Intermediate |           |      |
|----------------------------|--------------|-----------|------|--------------------|-----------|------|
|                            | N            | $\bar{X}$ | SD   | N                  | $\bar{X}$ | SD   |
| Global Strategies          | 28           | 52.00     | 7.30 | 45                 | 54.84     | 4.50 |
| Problem Solving Strategies | 28           | 31.46     | 4.99 | 45                 | 32.44     | 4.00 |
| Support Strategies         | 28           | 33.86     | 5.46 | 45                 | 34.47     | 4.70 |

**Table 11: T-Test Results of Foreign Language Level in Terms of Metacognitive Reading Strategies**

|                            | Levene F | Test p | df | t      | p       |
|----------------------------|----------|--------|----|--------|---------|
| Global Strategies          | 5.699    | 0.020  | 71 | -2.062 | 0.043** |
| Problem Solving Strategies | 2.883    | 0.094  | 71 | -0.925 | 0.358*  |
| Support Strategies         | 1.049    | 0.309  | 71 | -0.506 | 0.614*  |

\*p > .05, \*\*p < .05

**Figure 7: Mean Distribution of Foreign Language Level of Samples in Terms of Metacognitive Reading Strategies**



According to findings foreign language level creates a difference in terms of Global Reading Strategies. A differentiation was observed between the intermediate and upper-intermediate level students. Upper-intermediate level students use Global Reading Strategies more often than intermediate level students. Other Metacognitive reading strategies Problem Solving and Support Strategies do not differ in terms of foreign language level.

Findings of the study reveal that gender does not have a main impact on the use of metacognitive reading strategies. Female and male students do not create a difference in terms of choosing metacognitive reading strategies. This result indicates that metacognitive reading strategies do not create a difference in terms of gender.

Being a female or a male student does not affect metacognitive reading strategy usage.

There was a statistically significant difference on metacognitive reading strategies in terms of foreign language level. Being an intermediate or an upper-intermediate level student statistically create a difference in terms of Global Reading Strategy usage. Upper-intermediate level students use Global Reading strategies more often than intermediate level students. There was not a statistically significant difference on Problem Solving and Support Strategies in terms of foreign language level. Upper-intermediate level students reported that they use Global Reading strategies more than intermediate students.

## CHAPTER 5

### DISCUSSION AND CONCLUSION

Answers to the research questions

1. Do the students use metacognitive strategies while reading?

The results obtained within the frame of the study indicate that all the students studying in the department of English Language and Literature at Kafkas University are active reading strategy users. They are all aware of metacognitive reading strategies more or less.

2. Are there any significant differences between male and female students in using metacognitive reading strategies? Does gender have an impact on reading strategy use?

There is no difference in terms of employing metacognitive reading strategies between female and male students. Both genders use metacognitive reading strategies approximately at the same level.

3. Does foreign language knowledge level of the students have an impact on using metacognitive strategies?

There is a difference in terms of employing global reading strategies between the intermediate and upper intermediate level students. Upper intermediate level students use global reading strategies more often than intermediate level students.

There is no difference in terms of employing problem solving strategies between the intermediate and upper intermediate level students. Both intermediate and upper intermediate level students use problem solving strategies approximately at the same level.

There is no difference in terms of employing support strategies. Both intermediate and upper intermediate level students use support strategies approximately at the same level.

Although the number of the female students is higher than the male students there is no difference in terms of findings. Since the frequency of upper intermediate level students is higher in the sample, it can be seen as an effect that makes Global reading strategy usage most preferred.

The EFL students of Kafkas University reported using three categories of metacognitive reading strategies in a high frequency level but higher level students reported using Global Reading Strategies more frequent. Similarly Amer, Barwani and Ibrahim (2010) found that high proficient readers reported using Global Reading Strategies more than low proficient readers.

Results of some recent research on metacognitive reading strategies of EFL and ESL students indicate that students reported using Problem Solving Strategies more often than Global Reading Strategies and Support Strategies (Anderson,2003; Oluk and Başöncül, 2009; Zhang and Wu, 2009; Dhanapala, 2010; Karbalaei, 2010;)

In terms of gender there was no significant difference between male and female EFL students of Kafkas University. Both female and male students use strategies in a high frequency. Results of some recent research support that There were no differences in the use of metacognitive reading strategies based on gender (Oluk and Başöncül, 2009; Amer, Barwani and Ibrahim, 2010; Kummin and Rahman, 2010).

On the other hand results of some research on metacognitive reading strategies of EFL and ESL students indicate that there was a difference between male and female students in terms of using metacognitive reading strategies. Poole (2009) used SORS questionnaire (Mokhtari and Sheorey, 2002) and found that females overall strategy use was higher than males. Although males and females were using similar types of strategies, they use them with significantly different frequencies. Females scored higher than males on Problem Solving Strategies and Support Strategies. Güngör (2005) found that reading strategy use were different with regard to gender in favour of females. Sheorey and Mokhtari (2001) found that native female students reported a higher frequency of strategy use but in ESL group gender did not have an effect on strategy use. However the results of our study indicated that there was no statistically significant difference between female and male EFL students.

Researches on metacognition and its effects on reading strategies of students point out that using reading strategies affects success of ESL and EFL students positively in terms of comprehension and learning and their achievement of English language. Also the studies draw attention to strategy training (Oluk and Başöncül, 2009, Anderson, 2003; Hua and Lai, 2009; Kummin and Rahman, 2010; Salatacı and Akyel, 2002)

As for Kafkas University EFL students' use of metacognitive reading strategies, strategy training would be beneficial for their current and further academic life. Since they are all aware of metacognitive reading strategies they reported using Global Strategies more. If they are taught in terms of Problem Solving and Support Strategies they will be more successful in comprehending and learning.

## REFERENCES

- Aebersold, J. A., & Field, M. L. (1997). *From reader to reading teacher: Issues and strategies for second language classroom*. Cambridge: Cambridge University Press.
- Alyousef, H. S. (2005). Teaching Reading Comprehension to ESL/EFL Learners. *The Reading Matrix: Vol.5, No.2* , 143-154.
- Amer, A., Barwani, T. A., & Ibrahim M.(2010). Student Teachers' Perceived Use of Online Reading Strategies, *IJEDICT*, 6 (4), 102-113
- Anderson, N. J. (1991). Individual Differences in Strategy Use in Second Language Reading and Testing. *The Modern Language Journal*,75(4) , 460-472.
- Anderson, N. J. (2003). Scrolling, Clicking, and Reading English: Online Reading Strategies in a Second/ Foreign Language. *The Reading Matrix* , 3 (3), 1-32.
- Baird, J. (1990). Metacognition, Purposeful Inquiry and Conceptual Change. In E.Hegarty-Hazel, *The Student Laboratory and The Science Curriculum* (pp. 183-200). London: Routledge.
- Baker, L., & Brown, A.L.(1984)Metacognitive Skills and Reading. In P. David Pearson (Ed.), *Handbook of Reading Research* (pp. 353-394), New York: Longman.
- Barnett, M. A. (1988). Reading through context: How real and perceived strategy use affects L2 comprehension. *The Modern Language Journal*, 72(2), 150-162.
- Berkowitz, E., & Cicchelli, T. (2004). Metacognitive Strategy Use in Reading of Gifted High Achieving and Gifted Underachieving Middle School Students in New York City. *Education and Urban Society* , 37 (1), 37-57.
- Block, E. L. (1992). See How They Read: Comprehension Monitoring of L1 and L2 Readers. *Tesol Quarterly* , 26 (2), 319-343.
- Block, E. (1986). The Comprehension Strategies of Second Language Readers. *Tesol Quarterly* , 20 (3), 463-494.
- Borkowski, J. G. & Muthukrishna, N. (1992). Moving metacognition into the classroom: "Working models" and effective strategy teaching. In M. Pressley, K. R. Harris, & J.



- T. Guthrie (Eds.), Promoting academic competence and literacy in school (pp. 477-501). San Diego, CA: Academic.
- Brown A.L.(1980) Metacognitive Development and Reading. In R.J. Spiro, B. Bruce, W. Brewer (Eds.) *Theoretical Issues in Reading Comprehension*. Hillsdale, NJ: Lawrence Erlbaum
- Brown, A.,Armbruster, B., & Baker, L.(1986). The role of metacognition in reading and studying. In J.Orsanau (Ed.), *Reading comprehension: From research to practice* (pp. 49-75). Hillsdale, NJ: L.Erlbaum
- Carrell, P. L. (1989). Metacognitive Awareness and Second Language Reading. *The Modern Language Journal* , 73 (2), 121-134.
- Carrell, P. L., Gajdusek, L., & Wise, T. (1998). Metacognition and EFL/ESL reading. *Instructional Science* (26), 97-112.
- Chamot, A. U. (2005). Language Learning Strategy Instruction: Current Issues and Research. *Annual Review of Applied Linguistics* (25), 112-130.
- Cohen, A. D. (1990). *Language Learning: Insights for Learners, Teachers, and Researchers*. Newyork: Newbury House.
- Cross, D. R., & Paris, S.G. (1988) Developmental and Instructional Analyses of Children's Metacognition and Reading Comprehension, *Journal of Educational Psychology*, 80 (2), 131-142
- Çubukçu, F. (2008). How to Enhance Reading Comprehension Through Metacognitive Strategies. *The Journal of International Social Research* , 1/2, 83-93.
- Day, R. R., & Park, J.-s. (2005). Developing Reading Comprehension Questions. *Reading in a Foreign Language* , 17 (1), 60-73.
- Demiröz, H. (2010). Reading Strategies Employed By ESL/ EFL Students. *C.Ü.Sosyal Bilimler Dergisi* , 34 (2), 81-86.
- Dhanapala, K. V. (2010). Sri Lankan University Students' Metacognitive Awareness of L2 Reading Strategies. *Journal of International Development and Cooperation* , 16 (1), 65-82.

- Duke, N. K., & Pearson, P. D. (2002). Effective Practices for Developing Reading Comprehension. In A. E. Farstrup, & S. J. Samuels, *What Research Has to Say About Reading Instruction* (pp. 205-242). Newark, DE: International Reading Association.
- Farrell, T. S. (2002). A Strategic Approach to Teaching Reading. *REACT*, 21 (2), 133-140.
- Flavell, J.H., (1976). Metacognitive Aspects of Problem Solving In Resnick, L.B, (Ed.) *The Nature of Intelligence*, 12, 231-235 Oxford, England: Lawrence Erlbaum
- Flavell, J. H. (1979). Metacognition and Cognitive Monitoring: A New Area of Cognitive-Developmental Inquiry. *American Psychologist*, 34 (10), 906-911.
- Garner, R. & Alexander, P.A.(1989) Metacognition: Answered and Unanswered Questions. *Educational Psychologist*, 24 (2), 143-158.
- Grabe, W. (1991). Current Developments in Second Language Reading Research. *Tesol Quarterly*, 375-406.
- Grabe, W. (2009). *Reading in A Second Language*. New York: Cambridge University Press.
- Grabe, W., & Stoller, F. L. (2002). *Teaching and Researching Reading*. HARLOW: Pearson Education.
- Goodman, K.S. (1995). The reading process. In P. L. Carrell, J Devine, & D. E. Eskey (Eds.), *Interactive approaches to second language reading* (pp. 11-21). New York: Cambridge University Press.
- Güngör, A. (2005). Sixth, Seventh and Eighth Graders' Level of Reading Comprehension Strategy Use. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi* (28), 101-108.
- Hardebeck, M. M. (2006). *Effectiveness and usage of reading comprehension strategies for second grade title 1 students*. Unpublished master's thesis, Southwest Minnesota State University Education Department, Minnesota.
- He, T.-H. (2008). Reading for Different Goals: The Interplay of EFL College Students' Multiple Goals, Reading Strategy Use and Reading Comprehension. *Journal of Research in Reading*, 31 (2), 224-242.
- Hua, T. K., & Lai, L. M. (2009). Empowering Malaysian Readers to Read Online. *European Journal of Social Sciences*, 8 (2), 360-379.

- Janzen, J., & Stoller, F. L. (1998). Integrating Strategic Reading in L2 Instruction. *Reading in A Foreign Language* , 12 (1), 251-269.
- Kantarıcı F. (2006). *Students' Awareness of Reading Strategies*. Unpublished master's thesis, Bilkent University the Department of Teaching English as a Foreign Language, Ankara.
- Karbalaei, A. (2010). Iranian EFL and Indian ESL College Students' Beliefs about Reading Strategies in L2. *Profile* , 12 (2), 51-68.
- Kayacan, N. (2005). *Identification and Definition of English Reading Strategies Used by Prep Students in High School by Think-Aloud Method*. Unpublished master's thesis. Isparta: Süleyman Demirel University, Department of Curriculum Development and Instruction.
- Kintsch, W. (1988). The Role of Knowledge in Discourse Comprehension: A Construction-Integration Model. *Psychological Review* , 95 (2), 163-182.
- Kluwe, R. H. (1982). Cognitive knowledge and executive control: Metacognition. In D. R. Griffin (Ed.), *Animal mind--human mind*. (201-224). New York: Springer-Verlag
- Kummin, S., & Rahman, S. (2010). The Relationship between the Use of Metacognitive Strategies and Achievement in English. *Procedia Social and Behavioral Sciences* , 7(C), 145–150.
- Mokhtari, K., & Reichard, C. A. (2002). Assessing Students' Metacognitive Awareness of Reading Strategies. *Journal of Educational Psychology* , 94 (2), 249-259.
- Mokhtari, K., & Reichard, C. (2004). Investigating the Strategic Reading Processes of First and Second Language Readers in Two Different Cultural Contexts. *System* , 32 (3), 379–394.
- Mokhtari, K., & Sheorey, R. (2002). Measuring ESL Students' Awareness of Reading Strategies. *Journal of Developmental Education* , 25 (3), 2-10.
- Nunan, D., (1992) *Second Language Teaching and Learning*, London, Prentice Hall.
- Oluk, S., & Başöncül, N. (2009). The Metacognitive Reading Strategy Usage Level and Its Effect on Science Technologies and Turkish Course Success of Primary Education 8th Grade Students. *Kastamonu Education Journal* , 17 (1), 183-194.

- O'Malley, J.M.& Chamot, A.U.(1990) *Learning Strategies in Second Language Acquisition*, New York, Cambridge University Press.
- O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Russo, R. P., & Küpper, L. (1985). Learning Strategy Applications with Students of English as a Second Language. *TESOL Quarterly* , 19 (3), 557-584.
- Oxford, R.(1990) *Language Learning Strategies: What Every Teacher Should Know*. Boston: Heinle &Heinle.
- Oxford, R., & Crookall, D. (1989). Research on Language Learning Strategies: Methods, Findings, and Instructional Issues. *The Modern Language Journal* , 73 (4), 404-419.
- Özsoy, G. (2008). Üstbiliş. *Türk Eğitim Bilimleri Dergisi* , 6 (4), 713-740.
- Padron, Y. N., & Waxman, H. C. (1988). The Effect of ESL Students' Perceptions of Their Cognitive Strategies on Reading Achievement. *Tesol Quarterly* , 22 (1), 146-150.
- Paris, S. G., & Jacobs, J. E. (1984). The Benefits of Informed Instruction for Children's Reading Awareness and Comprehension Skills. *Child Development* , 55 (6), 2083-2093.
- Paris, S.G., Lipson, M.Y.,& Wixson, K. K.(1983) *Becoming a Strategic Reader*. Contemporary Educational Psychology, 8(3), 293-316.
- Paris, S. G. & Myers, M. (1981). Comprehension monitoring, memory, and study strategies of good and poor readers, *Journal of Reading Behaviour*, 13 (1), 5-22
- Paris, S. G., & Winograd, P. (1990). How Metacognition Can Promote Academic Learning and Instruction. In B. F. Jones, & L. Idol, *Dimensions of Thinking and Cognitive Instruction* (pp. 15-52). Hillsdale: NJ: Erlbaum.
- Pask, G.(1976) *Styles and Strategies of Learning*. *British Journal of Educational Psychology*, 46(2), 128-148
- Pintrich, P. R. (2002). The Role of Metacognitive Knowledge in Learning, Teaching, and Assessing. *Theory into Practice* , 41 (4), 219-225.
- Poole, A. (2009). The Reading Strategies Used by Male and Female Colombian University Students. *PROFILE* , 11 (1), 29-40.

- Pressley, M. (2002). Metacognition and Self-Regulated Comprehension. In A. E. Farstrup, & S. J. Samuels, *What Research Has to Say About Reading Instruction* (pp. 291-309). Newark, DE: 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.
- Schraw, G. (1998). Promoting General Metacognitive Awareness. *Instructional Science* , 26, 113-125.
- Schraw, G., & Dennison, R. S. (1994). Assessing Metacognitive Awareness. *Contemporary Educational Psychology* , 19, 460-475.
- Schraw, G., & Moshman, D. (1995). Metacognitive Theories. *Educational Psychology Review* , 7 (4), 351–371.
- Sheorey, R., & Mokhtari, K. (2001). Differences in the Metacognitive Awareness of Reading Strategies Among Native and Non-native Readers. *System* , 29 (4), 431–449.
- Shmais, W. A. (2002). Identifying the Metacognitive Reading Strategies of Arab University Students: A Case Study. *An-Najah Univ. J. Res. (H. Sc.)* , 16 (2), 633-661.
- 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.
- Taraban, R., Kerr, M., & Rynearson, K. (2004). Analytic and Pragmatic Factors in College Students' Metacognitive Reading Strategies. *Reading Psychology* , 25 (2), 67-81.
- Uzunçakmak, P. (2005). Successful and Unsuccessful Readers' Use of Reading Strategies. . *Unpublished master's thesis*. The Department of Teaching English as a Foreign Language. Bilkent University.
- Veenman, M.V.J., Van Hout-Wolters, B., & Afflerbach, P., (2006) Metacognition and Learning: Conceptual and Methodological Considerations. *Metacognition Learning*, 1(1), 3–14, Retrieved 15<sup>th</sup> March, 2011. <http://www.springerlink.com/content/82281263105x1212/> (PDF format)
- Wenden, A. L. (1998). Metacognitive Knowledge and Language Learning. *Applied Linguistics* , 19 (4), 515-537.

Zhang, L. J., & Wu, A. (2009). Chinese Senior High School EFL Students' Metacognitive Awareness and Reading-Strategy Use. *Reading in a Foreign Language*, 21 , 37-59.

**APPENDIX A**  
**OKUMA STRATEJİLERİ ANKETİ**

Aşağıdaki bilgileri doğru şekilde doldurmanız, sizin hangi okuma stratejilerini kullandığınızı belirlememiz bakımından yararlı olacaktır. Vereceğiniz bilgiler kesinlikle bu çalışma dışında kullanılmayacak ve kimlikleriniz gizli tutulacaktır.

**I. Bölüm                      Kişisel Bilgiler**

**1. Cinsiyetiniz:**

1. ( ) KIZ                                      2. ( ) ERKEK

**2. Okuduğunuz Sınıf:**

1. ( ) Hazırlık    2. ( ) 1. Sınıf    3. ( ) 2. Sınıf    4. ( ) 3. Sınıf    5. ( ) 4. Sınıf

- Aşağıdaki ifadeler sizin akademik veya okulla alakalı materyalleri okumanız ile alakalı ifadelerdir.
- Her ifadeden sonra 1.2.3.4.5 şeklinde numaralandırma bulunmaktadır ve anlamları aşağıdaki gibidir:

**1= Hiçbir zaman    2= Nadiren    3= Bazen (%50)    4= Genellikle    5= Her zaman**

## II. Bölüm      Okuma Stratejileriniz

|           |   | 1. Hiçbir zaman | 2. Nadiren | 3. Bazen (%50) | 4. Genellikle | 5. Her zaman |
|-----------|---|-----------------|------------|----------------|---------------|--------------|
| <b>1</b>  | <b>Okurken bir amacım vardır.</b>   | <b>1</b>        | <b>2</b>   | <b>3</b>       | <b>4</b>      | <b>5</b>     |
| 2         | Okuduğumu anlamama yardımcı olması için konu ile ilgili bildiklerimi düşünürüm.                         | 1               | 2          | 3              | 4             | 5            |
| <b>3</b>  | <b>Metni okumadan önce ne ile alakalı olduğunu görmek için genel olarak gözden geçiririm.</b>           | <b>1</b>        | <b>2</b>   | <b>3</b>       | <b>4</b>      | <b>5</b>     |
| 4         | Metin içeriğinin okuma amacıma uyup uymadığını göz önünde bulundururum.                                 | 1               | 2          | 3              | 4             | 5            |
| <b>5</b>  | <b>Okuduğum parçanın uzunluğunu ve organizasyonunu görebilmek için ilk önce bir göz gezdiririm.</b>     | <b>1</b>        | <b>2</b>   | <b>3</b>       | <b>4</b>      | <b>5</b>     |
| 6         | Dikkatlice okuyacağım veya göz ardı edeceğim yerlere karar veririm.                                     | 1               | 2          | 3              | 4             | 5            |
| <b>7</b>  | <b>Anlamamı artırmak için metnin içindeki tablolar, figürler ve resimlerden faydalanırım.</b>           | <b>1</b>        | <b>2</b>   | <b>3</b>       | <b>4</b>      | <b>5</b>     |
| 8         | Okuduğumu daha iyi anlamama yardımcı olması için metindeki ipuçlarını kullanırım.                       | 1               | 2          | 3              | 4             | 5            |
| <b>9</b>  | <b>Anahtar bilgileri belirlemek için italik harf ya da kalın harf gibi yazımsal araçlar kullanırım.</b> | <b>1</b>        | <b>2</b>   | <b>3</b>       | <b>4</b>      | <b>5</b>     |
| 10        | Metinde bahsedilen bilgi hakkında analiz ve yorum yaparım.  | 1               | 2          | 3              | 4             | 5            |
| <b>11</b> | <b>Yeni bir bilgiyle karşılaştığım zaman ne anladığımı kontrol ederim.</b>                              | <b>1</b>        | <b>2</b>   | <b>3</b>       | <b>4</b>      | <b>5</b>     |
| 12        | Okuma esnasında okuduğum parçanın ne ile alakalı olduğu konusunda tahminde bulunurum.                   | 1               | 2          | 3              | 4             | 5            |
| <b>13</b> | <b>Okuduğum parça ile ilgili tahminlerimin doğru olup olmadığını kontrol ederim.</b>                    | <b>1</b>        | <b>2</b>   | <b>3</b>       | <b>4</b>      | <b>5</b>     |
| 14        | Okuduğumu anladığımdan emin olabilmek için yavaşça ve dikkatlice okurum.                                | 1               | 2          | 3              | 4             | 5            |
| <b>15</b> | <b>Konsantrasyonumu kaybettiğimde en başa geri dönerim.</b>   | <b>1</b>        | <b>2</b>   | <b>3</b>       | <b>4</b>      | <b>5</b>     |



|    |   |   |   |   |   |   |
|----|---|---|---|---|---|---|
| 16 | Okuduğum şeye göre okuma hızımı ayarlarım.  | 1 | 2 | 3 | 4 | 5 |
| 17 | <b>Metin zorlaşınca okuduğum şeye daha çok dikkatimi veririm.</b>                                     | 1 | 2 | 3 | 4 | 5 |
| 18 | Zaman zaman durur ve okuduğum şey hakkında düşünürüm.   | 1 | 2 | 3 | 4 | 5 |
| 19 | <b>Okuduğumu hatırlamama yardımcı olması için bilgileri resmetmeye çalışırım.</b>                     | 1 | 2 | 3 | 4 | 5 |
| 20 | Metin zorlaştığında anlamamı artırabilmek için tekrardan okurum.                                      | 1 | 2 | 3 | 4 | 5 |
| 21 | <b>Okurken bilinmeyen kelimeler veya deyimleri tahmin etmeye çalışırım.</b>                           | 1 | 2 | 3 | 4 | 5 |
| 22 | Ne okuduğumu anlamama yardımcı olması için okurken notlar alırım.                                     | 1 | 2 | 3 | 4 | 5 |
| 23 | <b>Metin zorlaştığında okuduğumu anlamama yardımcı olması için yüksek sesle okurum.</b>               | 1 | 2 | 3 | 4 | 5 |
| 24 | Hatırlayabilmek için metin içindeki bazı bilgilerin altını çizerim ya da yuvarlak içine alırım.       | 1 | 2 | 3 | 4 | 5 |
| 25 | <b>Okuduğumu anlamama yardımcı olması için referans kaynaklardan(Örn. sözlük) faydalanırım.</b>       | 1 | 2 | 3 | 4 | 5 |
| 26 | Okuduğumu daha iyi anlamama yardımcı olması için cümleleri kendi cümlelerime dönüştürürüm.            | 1 | 2 | 3 | 4 | 5 |
| 27 | <b>Metnin içindeki fikirler arasında bağlantı kurabilmek için metinde bir ileri bir geri giderim.</b> | 1 | 2 | 3 | 4 | 5 |
| 28 | Metinde cevabının olabileceği muhtemel soruları kendime sorarım.                                      | 1 | 2 | 3 | 4 | 5 |
| 29 | <b>Okurken İngilizceden kendi anadilime çeviri yaparım.</b>   | 1 | 2 | 3 | 4 | 5 |
| 30 | Okurken parçada verilen bilgiyi hem İngilizce hem de kendi ana dilimde düşünürüm.                     | 1 | 2 | 3 | 4 | 5 |

## APPENDIX B

### SURVEY OF READING STRATEGIES (SORS)

(Kouider Mokhtari and Ravi Sheorey, 2002)

The purpose of this survey is to collect information about the various strategies you use when you read **school-related academic materials in ENGLISH** (e.g., reading textbooks for homework or examinations; reading journal articles, etc.). Each statement is followed by five numbers, 1, 2, 3, 4, and 5, and each number means the following:

‘1’ means that ‘I **never or almost never** do this’.

‘2’ means that ‘I do this **only occasionally**’.

‘3’ means that ‘I **sometimes** do this’ (About **50%** of the time.)

‘4’ means that ‘I **usually** do this’.

‘5’ means that ‘I **always or almost always** do this’.

After reading each statement, *circle the number* (1, 2, 3, 4, or 5) which applies to you. Note that there are **no right or wrong responses** to any of the items on this survey.

| Statement   | Never | Always  |
|---|-------|---------|
| 1 I have a purpose in mind when I read  | 1     | 2 3 4 5 |
| 2 I take notes while reading to help me understand what I read                  | 1     | 2 3 4 5 |
| 3 I think about what I know to help me understand what I read.                  | 1     | 2 3 4 5 |
| 4 I take an overall view of the text to see what it is about before reading it. | 1     | 2 3 4 5 |
| 5 When text becomes difficult, I read aloud to help me understand what I read.  | 1     | 2 3 4 5 |
| 6 I think about whether the content of the text fits my reading purpose.        | 1     | 2 3 4 5 |

|    |  |   |   |   |   |   |
|----|--|---|---|---|---|---|
| 7  | I read slowly and carefully to make sure I understand what I am reading.             | 1 | 2 | 3 | 4 | 5 |
| 8  | I review the text first by noting its characteristics like length and organization.  | 1 | 2 | 3 | 4 | 5 |
| 9  | I try to get back on track when I lose concentration.                                | 1 | 2 | 3 | 4 | 5 |
| 10 | I underline or circle information in the text to help me remember it.                | 1 | 2 | 3 | 4 | 5 |
| 11 | I adjust my reading speed according to what I am reading.                            | 1 | 2 | 3 | 4 | 5 |
| 12 | When reading, I decide what to read closely and what to ignore.                      | 1 | 2 | 3 | 4 | 5 |
| 13 | I use reference materials (e.g. a dictionary) to help me understand what I read.     | 1 | 2 | 3 | 4 | 5 |
| 14 | When text becomes difficult, I pay closer attention to what I am reading.            | 1 | 2 | 3 | 4 | 5 |
| 15 | I use tables, figures, and pictures in text to increase my understanding.            | 1 | 2 | 3 | 4 | 5 |
| 16 | I stop from time to time and think about what I am reading.                          | 1 | 2 | 3 | 4 | 5 |
| 17 | I use context clues to help me better understand what I am reading                   | 1 | 2 | 3 | 4 | 5 |
| 18 | I paraphrase (restate ideas in my own words) to better understand what I read.       | 1 | 2 | 3 | 4 | 5 |
| 19 | I try to picture or visualize information to help remember what I read.              | 1 | 2 | 3 | 4 | 5 |
| 20 | I use typographical features like bold face and italics to identify key information. | 1 | 2 | 3 | 4 | 5 |
| 21 | I critically analyze and evaluate the information presented in the text.             | 1 | 2 | 3 | 4 | 5 |
| 22 | I go back and forth in the text to find relationships among ideas in it.             | 1 | 2 | 3 | 4 | 5 |
| 23 | I check my understanding when I come across new information.                         | 1 | 2 | 3 | 4 | 5 |
| 24 | I try to guess what the content of the text is about when I read.                    | 1 | 2 | 3 | 4 | 5 |

|    |  |   |   |   |   |   |
|----|--|---|---|---|---|---|
| 25 | When text becomes difficult, I re-read it to increase my understanding.      | 1 | 2 | 3 | 4 | 5 |
| 26 | I ask myself questions I like to have answered in the text.                  | 1 | 2 | 3 | 4 | 5 |
| 27 | I check to see if my guesses about the text are right or wrong.              | 1 | 2 | 3 | 4 | 5 |
| 28 | When I read, I guess the meaning of unknown words or phrases                 | 1 | 2 | 3 | 4 | 5 |
| 29 | When reading, I translate from English into my native language.              | 1 | 2 | 3 | 4 | 5 |
| 30 | When reading, I think about information in both English and my mother tongue | 1 | 2 | 3 | 4 | 5 |

## **CURRICULUM VITAE**

Yasin KIZILAY was born in Kayseri in 1981. He completed his primary, secondary and high school education in Kayseri. He started his BA education in the department of English Language and Literature at Atatürk University in 2000. He was graduated from university in 2005. He has been working as an instructor of English at Atatürk University since 2006.