

# Metacognitive Awareness of Reading Strategy Use by English Language Teaching Students in Turkish Context: Sakarya University Sample

Orhan KOCAMAN\*

Semih BEŞKARDEŞLER\*\*

## Abstract

Reading is a complex cognitive activity that is not an inherently natural process unlike speaking and listening. A child can learn how to speak and listen without any formal instruction whereas reading needs to be taught to be learned. Therefore, a number of studies have been conducted on the use of reading strategies by English language learners (ELLs) in both English as a foreign language (EFL) context and English as a second language (ESL) context. Hence, with the purpose of looking at the issue from a different perspective, the current study aimed to investigate on students' metacognitive awareness of reading strategy use and to determine what types of reading strategies are used by the students of English Language Teaching (ELT) Department at a state university. 122 students ranging from 1st grade to 4th grade at ELT department of Sakarya University participated in the study. The Metacognitive Awareness of Reading Strategies Inventory (MARSİ) was used to collect data regarding the reading strategies that ELT students use. Based on the findings, 4th grade students were reported to use reading strategies more than the other grades. Also, it was determined that the participants irrespective of their grade showed tendency towards global reading strategy use more than problem-solving and support reading strategies. Furthermore, there was a significant difference in global and support reading strategy use between male and female participants of the study.

**Keywords:** Reading strategies, second language literacy, Turkish ELT students, EFL.

# Türk Bağlamındaki İngiliz Dili Eğitimi Öğrencilerinin Okuma Stratejileri Kullanımındaki Bilişötesi Farkındalığı: Sakarya Üniversitesi Örneği

## Öz

Konuşma ve dinlemenin aksine, okuma doğuştan edinilmeyen bir süreç olmakla birlikte kompleks bir bilişsel aktivitedir. Bir çocuk nasıl konuşacağını ve dinleyeceğini örgün ve bilinçli bir eğitim almadan öğrenebilirken, okumanın öğrenilmesi bilinçli bir eğitim sürecini gerektirir. Bu nedenle, hem İngilizce'nin yabancı dil olarak, hem de ikinci dil olarak öğrenilmesi bağlamlarında İngilizce

\* Sakarya University, Assist. Prof. Dr., Faculty of Education, ELT Department, okocaman@sakarya.edu.tr.

\*\* Sakarya University, MA, semihbeskardes@gmail.com.

öğrenenlerdeki okuma stratejileri kullanımı üzerine bir takım çalışmalar yapılmıştır. Konuya farklı bir bakış açısı ile yaklaşmak amacıyla, bu çalışma okuma stratejileri kullanımında öğrencilerin bilişötesi farkındalığını incelemeyi ve bir devlet üniversitesinin İngilizce Dili Eğitimi bölümündeki öğrenciler tarafından hangi tür okuma stratejilerinin kullanıldığını belirlemeyi amaçladı. Sakarya Üniversitesi'nin İngiliz Dili Eğitimi bölümünden birinci yıldan dördüncü yıla kadar 122 öğrenci çalışmaya katıldı. Okuma Stratejilerinde Bilişötesi Farkındalık envanteri (The Metacognitive Awareness of Reading Strategies Inventory - MARSİ) adındaki anket söz konusu öğrencilerin okuma stratejileri kullanımına dair veri toplanması amacıyla kullanıldı. Elde edilen bulgulara göre, dördüncü yıl öğrencilerinin diğer öğrencilere kıyasla okuma stratejilerini daha fazla kullandığı rapor edildi. Ayrıca, araştırmaya katılan öğrencilerin kaçınıcı yılda olmaları gözetilmeksizin Bütünsel (global) okuma stratejileri kullanımına olan eğilimleri "Problem çözme" (problem-solving) ve "Destekleyici" (support) okuma stratejileri kullanımına kıyasla daha fazla olduğu saptanmıştır. Buna ek olarak, erkek ve kız öğrencilerin arasında "bütünsel" ve "destekleyici" okuma stratejileri kullanımında istatistiksel açıdan anlamlı bir fark olduğu gözlemlenmiştir.

**Anahtar Kelimeler:** Okuma stratejileri, ikinci dilde okur-yazarlık, Türk İngiliz Dili Eğitimi öğrencileri, yabancı dil olarak İngilizce.

## 1. INTRODUCTION

Since the English language came into prominence as an international language, the body of research on language learning strategies in English has become immense. Mainly, strategies have been identified and developed for four language skills (Listening, reading, writing and speaking). Of the four skills; it is thought that reading is the most important skill to attain academic success and it leads independent language learning (Carrell & Grabe 2002, as cited in Usó-Juan & Martínez-Flor, 2006). Moreover, Krashen (1982) viewed reading as comprehensible input and further added that it contributes to writing and speaking competence. Therefore, a number of studies have been conducted on the use of reading strategies by English language learners (ELLs) in both English as a foreign language (EFL) context and English as a second language (ESL) context. The current research focuses on metacognitive awareness which is the use of conscious and deliberate reading strategies (Carrell, 1985, 1991; Martinez, 2008; as cited in Shikano, 2013).

## 2. LITERATURE REVIEW

### 2.1 Conceptual Framework

Reading is a complex cognitive activity that is not an inherently natural process unlike speak-

ing and listening. A child can learn how to speak and listen without any formal instruction whereas reading needs to be taught to be learned (Grabe & Stoller, 2002, as cited in Usó-Juan & Martínez-Flor, 2006). Apart from this distinctive definition, reading is defined as "a conversation between the writer and the reader" (Ransom, 1978, as quoted in Solak & Altay, 2014, p. 79).

Reading is described as a complicated process of drawing meaning from a text for different purposes in various contexts (Allen & Bruton, 1998, as cited in Solak & Altay, 2014.). Furthermore, according to Peregoy and Boyle (2001, as cited in Solak and Altay, 2014) reading requires learners make use of their background and linguistic knowledge regarding what they read. Reiss (1983) contends that "the more our students read, the more they become familiar with the vocabulary, idioms, sentence patterns, organization flow, and cultural assumptions of native speakers of the language" (p. 50).

As far as reading strategy use is concerned; first of all, the term *strategy* is often interchangeably used with the term *skill*. However, there is a distinction between these terms. Strategy refers to actions that are purposefully chosen by readers to help them with what they read. It is consciously used, and non-automatic. Skill, on

the other hand, refers to “information processing techniques that are automatic” and “they are applied to a text unconsciously” (Paris, Wasik & Turner, 1991, as quoted in Shikano, 2013, p.12). However, it is argued that strategies can become skills when they are used automatically, and skills can become strategies when they are used intentionally to achieve a particular goal (Paris, Wasik & Turner, 1991, as cited Shikano, 2013).

Within the last few decades, many different reading strategies have been identified and developed. They can be categorised into three types (Ediger, 2014):

- 1) Metacognitive: It refers to purpose-oriented (defining one’s purpose and deciding whether the text in question fits one’s purpose), comprehension monitoring (making sure that what is read is comprehended) and strategies that focus on learning from text (taking notes, paraphrasing). In other words, “metacognitive strategies are self-monitoring and self-regulating activities, focusing on both the process and the product of reading” (Tavakoli, 2014). Metacognitive reading strategies help learners individualise their reading process.
- 2) Cognitive: It refers to strategies for interaction with author and text, different types of reading (scanning, skimming, re-reading), along with strategies for unknown words (using information from text to define the word, translation etc.) and including prior knowledge (making connections between one’s prior knowledge with text).
- 3) Affective and Social: They mostly refer to choosing what to read, reading what one likes, and talking with others about what has been read.

## 2.2 Reading Strategy Use and Metacognitive Awareness

Oxford (1990) provides one of the most comprehensive definitions of language learning strategy use in general which can be easily applied to reading strategy use as well: “Language learning strategies are: operations employed by the learner to aid the acquisition, storage, retrieval, and use of information, specific actions taken by the learners to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations” (p. 8).

However, a distinction should be made when reading strategy use is concerned. There is a certain difference between reading strategy use in L1 and L2 context. To exemplify, in L1 reading, metacognitive strategies and processes used by readers are automatic and unconsciously executed whereas in L2 reading, readers do not tend to use these automatically. This results in readers being overwhelmed with barriers such as lack of vocabulary and grammar knowledge, unfamiliarity with the text, lack of background knowledge, text difficulty and so forth (Yoshida, 2012).

Garner (1987, as quoted in Solak and Altay, 2014, p. 79) defines L2 reading strategies “as an action or series of actions employed in order to construct meaning”. In other words, L2 readers deliberately make use of strategies to help them with comprehension of what they read. In doing this, they may face comprehension issues and reading barriers such as unfamiliar vocabulary and context, structural complexity, lack of background knowledge, text difficulty, and level of readers, L1 interference and so forth. Using strategies as mentioned above leads to comprehension in a faster and clearer way (Tercanlıoğlu, 2004). Sheorey and Mokhtari (2001) further described reading strategies as the reflective mindful practices used by readers to enhance reading comprehension.

During the past decade, researchers have placed an emphasis on the role of metacognitive awareness in reading comprehension. Metacognitive awareness is regarded the same as reading awareness (Paris & Jacobs, 1984). In L2 reading context, metacognitive awareness refers to the acquisition of L2 reading strategies (Li & Wang, 2010). L2 readers use their metacognitive awareness to manage the strategies they should use in order to achieve comprehension in L2 reading text.

“Metacognition refers to the knowledge and control that we have over our cognitive processes. As far as it is concerned with reading, it is common to talk about metacognitive awareness (what we know) and metacognitive regulation or control (knowing when, where, and how to use strategies, that is, what we can do). As a whole, metacognitive involves awareness and control of planning, monitoring, repairing, revising, summarizing, and evaluating. Essentially, we learn strategies that support our comprehension (our awareness of strategies) and we learn how to carry out these strategies effectively (our control of strategies)” (Karbalaee, 2010, p.166).

### **2.3 Previous Research on Metacognitive Awareness of Reading Strategy Use**

Meng (2004, as cited in Ismail and Tawalbeh, 2014) conducted a study on training EFL college students in using reading strategies in target language reading. Then she reported the effects of using reading strategies on students' reading ability. She concluded that strategy training had a significant effect on improving students' reading proficiency and rate. Students were able to grasp main ideas of reading texts better and they could make connections between reading passages and the world knowledge more effectively.

Moustfa (2004, as cited in Ismail and Tawalbeh, 2014) also carried out a study with 208 secondary school students on the effects of using metacognitive reading strategies on motivation and academic success. His findings showed that there was a positive relationship between academic achievement and metacognitive awareness of reading strategies.

Additionally, Karbalaee (2012) conducted a study with 114 Iranian EFL high school students on the relationship between using reading strategies and reading proficiency. In his findings, he reported that reading strategy use was effective in enhancing students' reading proficiency and comprehension.

Madhumathi and Ghosh (2012), in their research, concluded that the most preferred reading strategy type was problem-solving strategies by Indian students whereas the least used reading strategy was global reading strategies.

Moreover, Hong-Nam (2014) explored 96 high school students' metacognitive awareness and reading strategy use when reading academic materials. As results, he argued that using reading strategies such as re-reading, underlining and circling of information helped students understand reading texts better.

Ismail and Tawalbeh (2014) carried out a study with 41 EFL preparatory non-English major students on metacognitive reading strategies. They concluded that: “The use of a reading strategy can help readers deal with the problems which arise while reading in a foreign language, and consequently, individuals' reading comprehension can be improved” (p. 80).

Furthermore, the results of a number of other experimental studies (e.g. Wenden, 2001; Cubukcu, 2008; Huang and Newbern, 2012, as cited in Ismail and Tawalbeh, 2014) have reported significant gains in reading proficiency

of adult ESL learners following metacognitive strategy training.

Apart from all the research above, Solak and Altay (2014), in their research, focused on the most commonly used reading strategies by prospective ELT students. The participants were 130 English Language Teaching major students at a state university, and they had similar characteristics with respect to age and educational background. In their research, Mokhtari and Reichard's (2002) Metacognitive Awareness of Reading Strategies Inventory (MARSİ) Questionnaire was used to collect data about the readers' awareness and use of reading strategies while reading academic materials. In the end, Solak and Altay concluded that even though there is a balance of choosing strategies among ELT students, they tend to use problem-solving strategies more than global reading strategies and support reading. Following this, as mostly used global reading strategies; students have a purpose in mind when they read and they use typographical aids like boldface and italics to identify key information. As from the support reading strategies, students mostly underline and circle information in the text to help them remember better.

Li's (2010) findings are similar to Solak and Altay's (2014) results. Based on MARSİ, he conducted a study on the Chinese middle school students' awareness of reading strategies and concluded that participants favoured problem-solving strategies to global reading and support reading strategies. Tipamas (2012), in his study found that Thai EFL students tended to use problem-solving reading strategies more than the other strategy types. Hong-Nam and Page's (2014) findings were similar to Tipamas' and Li's.

Additionally, Hong-Nam (2014) also carried out a study on metacognitive awareness of

reading strategy use by 96 ELLs. As results, he reported that participants tend to use all of the strategies on MARSİ questionnaire, but they favour problem-solving strategies such as '*when text becomes difficult, I pay closer attention to what I'm reading.*' and '*I try to get back on track when I lose concentration.*' rather than global reading or support reading strategies. Lastly, Shikano (2013) reported similar results to Solak and Altay's (2014) findings, concluding Japanese preparatory school students prefer using problem-solving strategies more than global reading and supporting reading strategies.

In contrast to the findings of the studies mentioned above, Tavakoli (2014) also conducted a study based on Survey of Reading Strategies or SORS (Mokhtari & Sheorey, 2002). He reported that support reading strategies were used the most by Iranian university EFL students while global reading strategies came second and problem-solving strategies were used the least.

The purpose of this study is to report what types of reading strategies are used by the ELT students of Sakarya University. This study will answer the following research questions

- 1) Is there a statistically significant difference in the use of group of reading strategies at different grades?
- 2) What are the most and the least reading strategies used by the four different grades of students?
- 3) Is there a statistically significant difference between male and female participants in reading strategy use?

### 3. METHOD

#### 3.1 Participants

This study was conducted at a state university, ELT Department in Turkey. The participants

were 122 ELT students. Of 122 students; 39 students were 1<sup>st</sup> graders, 30 students were 2<sup>nd</sup> graders, 34 students were 3<sup>rd</sup> graders and 19 of them were last year students. The participants had similar characteristics with regard to age and educational background. Gender distribution was 84 females and 38 males.

### 3.2 Instruments

In this study, Mokhtari and Reichard's (2002) Metacognitive Awareness of Reading Strategies Inventory (MARSI) questionnaire was used to collect data about awareness of readers and strategies they use while reading. The 30-item questionnaire was validated by Mokhtari and Reichard (2002) and the internal consistency reliability coefficient ranged from 0.80 to 0.83. High reliability coefficients were observed to be 0.83 for Global Reading; 0.81 for Problem Solving; 0.80 for Support Reading. The MARSI measures three categories of reading strategies as follows: Global Reading Strategies: They consist of 13 items and refer to "intentional reading strategies such as monitoring comprehension and planning for reading" (Hong-Nam, 2014). These strategies mostly include trying to understand what the text is about in general, deciding what to read and what to ignore, having a purpose determined before reading and so on.

1) Problem-Solving Strategies: These strategies included eight items and they are concerned with what readers tend to do when the text becomes difficult or they face problems in understanding the text. They are also called repair strategies as readers use them to overcome reading related problems (e.g. paying closer attention, adjusting one's speed, pausing and thinking about reading). This group of strategies is related to "information in the text" (Hong-Nam, 2014).

2) Support Reading Strategies: There are nine items in this group of strategies which refer to basic aids to improve reading comprehension such as underlining or circling key terms, taking notes, paraphrasing, and discussion with peers (Hong-Nam, 2014).

A five-point Likert scale system was used for each item ranging from 5 to 1. The MARSI. 5 = *always or almost always*, 4 = *usually*, 3 = *sometimes*, 2 = *only occasionally*, 1 = *never or almost never*.

### 3.3 Analysis

The questionnaire was statistically analysed to answer the research questions listed above. A Statistical Program was used for the statistical analysis of the data and the significance level of  $p < 0.05$  was set. As the data gathered in this study showed homogeneity and normal distribution the analysis of variance (ANOVA) was conducted in order to determine whether there was any significant difference in the use of the groups of reading strategies in general (Global, Problem-Solving and Support) among 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> grades ELT students. Mean value of each questionnaire item was computed in order to find out which strategies are used the most and the least at different grades. Mean scores of reading strategy use by male and female participants were also calculated in order to determine whether there was a significant difference in reading strategy use between male and female subjects.

## 4. RESULTS

The data should indicate normal distribution to conduct ANOVA analysis. Therefore, the normality scores of total scores were shown in table 1 and table 2.

**Table 1.** The normality results of total scores by grade.

Grade	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
1	,070	39	,200*	,980	39	,713
2	,116	30	,200*	,985	30	,944
3	,132	34	,138	,947	34	,101
4	,143	19	,200*	,966	19	,704

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

**Table 2.** The normality results of total scores by gender.

Gender	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Male	,075	38	,200*	,979	38	,686
Female	,074	84	,200*	,980	84	,203

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

Since the number of participants of each grade and gender except gender 2 is lower than 50, the Shapiro-Wilk analysis results were used to normality analysis. For gender 2 the Kolmogorov-Smirnov analysis was used to normality analysis. It is shown in table 1 and table 2 that the total scores of both grade and gender show normal distribution (The all sig. values >0,05).

Hence, the results indicated normal distribution.

After the normality analysis, the descriptive data of the three main categories of reading strategies among 1st, 2nd, 3rd and 4th grades ELT students were given below.

**Table 3.** The use of three main categories of reading strategies among 1st, 2nd, 3rd and 4th grades ELT students based on descriptive statistics.

	Grade	N	Mean	Std. Deviation
GLOBAL	1	39	46,5641	5,90181
	2	30	47,8333	7,12491
	3	34	52,5588	7,52044
	4	19	52,7368	5,83897
	Total	122	49,5082	7,1654
PROBLEM	1	39	33,2308	3,50535
	2	30	32,2333	4,07417

	3	34	33,5882	4,20042
	4	19	34,5789	3,25433
Total		122	33,2951	3,84555
SUPPORT	1	39	28,2051	5,62971
	2	30	30,1333	5,5754
	3	34	31,7353	6,9688
	4	19	35,3684	4,95772
	Total		122	30,7787

Judging by the descriptive statistics displayed in Table 3, it is sufficing to say that 4th grade ELT students are more aware of strategy use while reading than the other grades. The statistics show that 4th grade students use global (mean: 52.73), problem-solving (mean: 34,57), and support reading strategies (mean: 35.36) more than the rest of the participants.

This was an estimated result as the last year students are likely to be academically more developed owing to the years of instruction and experience in the acquisition of language skills.

In global reading strategy use, there is no statistically significant difference between 1st and 2nd grade, neither between 3rd and 4th grade. This means, 1st and 2nd graders use global reading strategies at almost equal frequencies; 3rd and 4th graders also have similar frequencies of global reading strategies use.

However, it is safe to say there is a statistically significant difference in the use of global reading strategies between 1st and 3rd grades, 1st and 4th grades, as well as between 2nd and 3th grades. This supports the claim that senior students tend to be more aware of reading strategy use as ANOVA results on Table 4

supports these findings. The significant difference between the grades was found after the scheffe tests of post hoc analysis.

As far as support reading strategy use is concerned, the descriptive statistics show that there is no major difference among 1st, 2nd and 3rd graders which means support reading strategies are used at almost equally in those grades.

However, it is also displayed on Table 3 and Table 4 that 4th year students revealed substantial difference in the use of support reading strategies in comparison to the other grades. Therefore, it can be said that the last year students tend to use the strategies in question more than the rest of the other grades. As for problem-solving strategy use, as Table 3 and Table 4 show, no statistically significant difference could be found among all the grades.

Overall, judging by the findings showed both in Table 3 and Table 4, among all the students, global reading strategies are used the most with an average of 49.52 while problem-solving strategies come second that has a rate of 33.29 mean and support reading strategies are used the least with a mean score of 30.77.

**Table 4.** ANOVA Statistics of the values between groups and within groups.

		Sum of Squares	df	Mean Square	F	Sig.	Mean	Sig. (2- tailed)
GLOBAL	Between Groups	936,669	3	312,223	6,983	0*		1-3, 1-4,

	Within						
	Groups	5275,823	118	44,71			
	Total	6212,492	121			49,5082	
PROBLEM	Between						
	Groups	68,22	3	22,74	1,559	0,203	
	Within						
	Groups	1721,157	118	14,586			
	Total	1789,377	121			33,2951	
SUPPORT	Between						
	Groups	702,16	3	234,053	6,654	0*	1-4, ,2-4,
	Within						
	Groups	4150,864	118	35,177			
	Total	4853,025	121			30,7787	

p. < 0.05

**Table 5.1** The strategies used the most and the least by 1st grade students.

	N	Mean	Std. Devia- tion
<b>Global</b>			
I try to guess what the content of the text is about when I read.	39	3,94	0,75
I use tables, figures, and pictures in text to increase my understanding.	39	2,84	1,18
<b>Problem-Solving</b>			
When text becomes difficult, I re-read to increase my understanding.	39	4,51	0,64
I stop from time to time and think about what I am reading.	39	3,69	0,86
<b>Support</b>			
I underline or circle information in the text to help me remember it.	39	3,97	1,06
When text becomes difficult, I read aloud to help me understand what I read.	39	2,69	1,19

Table 5.1 shows the most and the least used type of reading strategies by 1st graders. In global reading strategies, with an average of 3.94 “guessing what the content of the text is about while reading” is the most used reading strategy. The least used reading strategy in this group is “using tables, figures and pictures in text to increase one’s understanding” with an average of 2.84.

In problem-solving strategies, 1st graders use the strategy of “re-reading the text to increase

their understanding when it becomes difficult” the most. This item has a rate of 4.51 mean. As for the least preferred problem-solving strategy, it is “stopping from time to time to think about what they are reading” with an average of 3.69. As far as support reading strategies are concerned, 1st year ELT students prefer “using underlining or circling information in the text to help them remember” the most with an average of 3.97. The least used reading strategy, however, is “reading aloud when the text becomes difficult” which has a rate of 2.69 mean.

**Table 5.2** The strategies are used the most and the least by 2nd grade students.

Global	N	Mean	Std. Deviation
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I think about what I know to help me understand what I read.	30	3,86	0,81
I skim the text first by noting characteristics like length and organization.	30	3,26	1,14
<b>Problem-Solving</b>			
I try to guess the meaning of unknown words or phrases.	30	4,23	0,72
When text becomes difficult, I re-read to increase my understanding.	30	4,23	0,72
I stop from time to time and think about what I am reading.	30	3,53	1,19
<b>Support</b>			
I underline or circle information in the text to help me remember it.	30	4	0,94
When text becomes difficult, I read aloud to help me understand what I read.	30	2,83	1,34

Table 5.2 shows which strategies are used the most and the least in global, problem-solving and support reading strategy categories by 2nd year students.

Among global reading strategies, the most used strategy by 2nd graders is “thinking about what they know to help them understand what they read that” has a rate of 3.86 while the least used strategy is “skimming the text first by noting characteristics like length and organization” with an average of 3.26.

In problem-solving strategy use, there are two different reading strategies that are used the most: the first is “guessing the meaning of unknown words or phrases” and the second is

“re-reading to increase understanding when the text becomes difficult”. Both of these strategies have a rate of 4.23 mean. The least used reading strategy by 2nd year students, on the other hand, is “stopping from time to time to think about what they are reading” with a mean score of 3.53.

With regard to support reading strategy use, the most used one is “underlining or circling information in the text to help remembering” with an average of 4.00. The least preferred reading strategy, however, is “reading aloud to help understanding what is being read when the text becomes difficult” with an average of 2.83.

**Table 5.3** The strategies are used the most and the least by 3rd grade students.

Global	N	Mean	Std. Dev.
I try to guess what the content of the text is about when I read.	34	4,44	0,66
I use tables, figures, and pictures in text to increase my understanding	34	3,02	1,24
<b>Problem-Solving</b>			
When text becomes difficult, I pay closer attention to what I'm reading.	34	4,41	0,7
I stop from time to time and think about what I am reading.	34	3,64	1,06
<b>Support</b>			
I underline or circle information in the text to help me remember it.	34	4	1,1
I take notes while reading to help me understand what I read	34	3,02	1,16

Table 5.3 here shows the most and least used strategies by 3rd year students in different groups of reading strategies. In global reading

strategy group, the strategy which has the highest mean, 4.44, is that the subjects “try to guess what the content of the text is about

while reading". As for the strategy with the lowest mean, it is "using tables, figures and pictures to increase understanding" that has a rate of 3.02 mean.

Among problem-solving strategies, the most used reading strategy is that the subjects (3rd grade students) "pay closer attention to what they read when text becomes difficult". This item has a rate of 4.41. The least preferred reading strategy in this group is "stopping from

time to time to think about what is being read" with an average of 3.64 which is not very low in comparison to the mean scores of the other least used strategies mentioned above.

In support reading strategy group, the item that has the highest mean, 4.00, is "underlining or circling information in the text to help remembering" whereas the item that has the lowest mean, 3.02, is "taking notes while reading to help understanding what is being read".

**Table 5.4** The strategies are used the most and the least by 4th grade students.

Global	N	Mean	Std. Dev.
I have a purpose in mind when I read.	19	4,31	0,67
I use context clues to help me better understand what I am reading.	19	4,31	0,74
I critically analyze and evaluate the information presented in the text.	19	3,57	0,69
<b>Problem-Solving</b>			
When text becomes difficult, I pay closer attention to what I'm reading.	19	4,57	0,6
I try to picture or visualize information to help remember what I read.	19	4	1,29
<b>Support</b>			
I underline or circle information in the text to help me remember it.	19	4,78	0,41
When text becomes difficult, I read aloud to help me understand what I read.	19	3,31	1,24

Table 5.4 shows which reading strategies are used the most and the least by the 4th year students in different groups of reading strategies.

In global reading strategy group, 4th year students prefer using two different strategies the most. They both have a rate of 4.31. The first one is the subjects "have a purpose in mind when they read" and the second one is the subjects "use context clues to help them better understand what they reading". The least used strategy, on the other hand, is the subjects "critically analyse and evaluate the information presented in the text" with an average of 3.57.

As regards to problem-solving strategy use, 4th year students use the strategy of "paying closer

attention to what they read when the text becomes difficult" which has a rate of 4.57 mean. On the other hand, the strategy that has the lowest mean, 4.00, is that the subjects "try to picture or visualise information to help them remember what they read".

In support reading strategy group, "underlining or circling information in the text to help remembering it" is the most used reading strategy with an average of 4.78. As for the least preferred reading strategy in this group, it is that "when the text becomes difficult the subjects read aloud to help them understand what they read" which has a rate of 3.31 mean.

**Table 6.** The mean scores of the groups of reading strategies used by male and female participants

Gender	N	Mean	Std. Deviation
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Global	Male	38	47,0789	6,35602
	Female	84	50,6071	7,27434
Problem	Male	38	32,7368	3,97753
	Female	84	33,5476	3,78139
Support	Male	38	28,3947	6,48716
	Female	84	31,8571	5,99426

Table 6 shows that it can be interpreted that, there is a statistically significant difference between male and female students in both global and support reading strategy use. However, no statistically significant difference could be found in problem-solving strategy use.

## 5. DISCUSSION AND CONCLUSION

The current study explored ELT students' metacognitive awareness and reading strategy use while reading for academic purposes. The study also examined the relationship between the reading strategy use and the grades of the participants as well as the relationship between gender and the use of the groups of reading strategies. Since the participants of this study were ELT students, they were exposed to reading in L2 in a good range of ways. In other words, these participants in question have taken courses on language skills development, literature, teaching language skills and were exposed to reading in such ways along with being exposed to it while reading for academic research. Thus, in order to achieve reading goals, Turkish ELT students were reported to use a wide array of reading strategies. The participants showed reasonably high metacognitive awareness of reading strategies while they read academic texts in English. These findings are also supported by the studies conducted by Sheorey and Mokhtari (2001) and, Tercanlioglu (2004) who reported that readers tend to consciously use reading strategies while reading.

Based on the findings, among all the participants global reading strategies were the most preferred whereas support reading strategies were the least used. However, the results of the present study were not consistent with the findings of Li (2010), Tipamas (2012), Kudeir, Magableh, Nsser and, Alkawaldehy (2012), Shikano (2013), Magogwe (2013) and, Solak and Altay (2014) in which they found problem-solving strategies were the most used whereas in the present study those strategies came second. But, the findings of the current study are similar to Li's (2010), Tipamas' (2012), Kudeir, Magableh, Nsser and Alkawaldehy (2012), Solak and Altay's (2014) and, Hong-Nam and Page (2014) with respect to the fact that support reading strategies are the least preferred strategies. In contrast to all these findings, however, in Iranian context, Jafari and Shokrpour (2012), as well as Tavakoli (2014), reported that support reading strategies were the most preferred ones whereas on the previous research they were often the least used.

The reason why the most preferred type of strategy was different in the present study may be due to the fact that it was conducted in a different context with different sampling. The participants of this study were Turkish ELT students whereas the participants of the previous studies were mostly English language learners from different backgrounds. Thus, it is suffice to say that, ELT students are likely to be more aware of what they read and how to be in control of it. In the current study, they chose global reading strategies as the most used because they tended to have a specific purpose

for reading; they make use of what the text has given them in order to determine whether it fits their purpose. Global reading strategies are mostly used by high proficient readers (Sarıçoban, 2002), and in comparison to regular English language learners, ELT students tend to be more skillful readers given the fact that they have more practice and experience with reading at academic and professional level for purposes such as research, and naturally teaching language skills.

In terms of the least used type of strategy, on the other hand, the present study's findings were consistent with the previous studies mentioned above (Li 2010; Tipamas 2012; Kudeir, Magableh, Nsser & Alkawaldeh 2012; Solak & Altay 2014; Hong-Nam & Page 2014) because in those studies support-reading strategies were the least used reading strategies.

Moreover, fourth year students were more aware of using reading strategies overall, while reading academic materials in comparison to rest of the participants at different grades. This was expected result as fourth graders have been exposed to reading at academic level more than the other grades. In the light of this result, one can claim that high proficient readers, which are the fourth grade students in this case, tend to use global reading strategies more than low proficient readers, which are the other graders in this study, do. This result and interpretation is also consistent with Sarıçoban's (2002) in which he reports that successful readers tend to use strategies including determining the purpose of reading and understanding the message that the author of the texts has given. Carrell's (1989) findings are also consistent with the current study as in her study, high proficient readers preferred using global reading strategies more than the other types of strategies. Thus, successful readers attempt to understand the text as a whole for a more ex-

tensive interpretation, whereas less successful readers mostly focus on some words in the text which may not help the understanding the gist of the text.

In global reading strategy use, the most preferred strategies were "I try to guess what the content of the text is about when I read.", "I have a purpose in mind when I read" and "I think about what I know to help me understand what I read." The use of these strategies indicates that the readers have a purpose for reading which will facilitate reading as they know what they need to know in a reading text. Similarly, the readers tend to make use of their background knowledge to understand the text better by making associations. Moreover, the participants tend to have a general understanding of what they read.

In problem-solving reading strategies, the most preferred items were "When text becomes difficult, I re-read to increase my understanding." and "When text becomes difficult, I pay closer attention to what I'm reading." These preferences may imply the subjects know how to cope with difficult texts and their main strategies are simply focusing more and re-reading.

As for the most preferred support reading strategies, "I underline or circle information in the text to help me remember it" was the most favoured strategy by all the grades. The reason why these strategies were most used may be that they are some of the most basic strategies that can be used and they may not require high awareness of reading strategy use.

As far as the least used strategies are concerned, the item in support reading strategies "When text becomes difficult, I read aloud to help me understand what I read." was the least preferred strategy by almost all of the participants irrespective of their grades. This can be interpreted as the participants simply do not

find this strategy as helpful. Moreover, the strategy “I stop from time to time and think about what I am reading.” was the least used strategy by most of the subjects/participants regardless of their subjects. Apart from that, the global reading strategy “I use tables, figures, and pictures in text to increase my understanding” was one of the least used strategies in that group which also indicates that readers in this study tend not to rely on additional information or sources in the text while reading.

Differences in strategy use by gender have been long discussed. Many researchers (e.g. Green and Oxford, 1995; Sheorey, 1999) reported female students use more strategies in general than male students, while others (e.g. Sheorey and Mokhtari, 2001) revealed no significant differences in strategies used by males and females. The current study, on the other hand, found out that there was statistically significant difference in both global and support reading strategy use whereas no difference could be found in problem-solving strategy use. This means, female students prefer to use global and support reading strategies more than male students do. This result can be due to the fact that male students perform better at spatial and mathematical areas while female students are better than males at verbal tasks such as writing out sentences, right spelling, reading and pronunciation (Maccoby and Jackin, 1974; as cited in Bilgin, Karakuyu and Tüysüz, 2008). These findings are consistent with Alıcı and Serdaroğlu’s (2015) results which were in favour of females in terms of reading strategy use. In their study, it was concluded that female participants use global and support read-

ing strategies more than male participants do. Madhumathi and Ghosh (2012), additionally, found statistically significant difference only in problem solving strategy use and support reading strategy use.

However, Hong-Nam and Page (2014) concluded in their study that there was no statistically significant difference in reading strategy use between male and female students. Zare’s (2013) findings are similar to Hong-Nam and Page’s since he did not find any significant difference in the use of reading strategies between male and female Iranian EFL learners.

To conclude, the current study reported on the metacognitive awareness of reading strategy use by ELT students at different grades. Based on the findings, the participants showed tendency towards global reading strategies more than other groups of strategies. This means the participants of this study prefer using metacognitive reading strategies more than cognitive and affective/social reading strategies. Moreover, senior students were reported to use reading strategies in a more balanced way in comparison to other students in the study. However, further research may be needed on why certain strategies are used or not used in EFL context, and whether there is a relationship between individual differences in learning styles and reading strategy preferences. Furthermore, more research needs to be conducted on teaching reading strategies and then evaluating students’ reading comprehension to see the actual effects of reading strategy use.

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