# REPORTED READING STRATEGIES OF IRAQI GRADUATE STUDENTS STUDYING IN US UNIVERSITIES

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## **DEDICTAION**

# I Miss You Mom

A thousand words could not bring you back... I know because I tried...

A thousand tears could not bring you back... I know because I cried...

# I Really Miss You Mom...

Although your soul is at rest, and your body is free from pain, the world would be like heaven if I had you back again.

You're always in my thoughts no matter where I go, you are always in my heart, because I loved you so.

# I Really Miss You Mom

However long my life might last, whatever land I view, whatever joy or grief is mine, I still remember you.

I love you, Mom, and I miss you always.

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Abstract:

Reading is an important academic skill that college students need to master if they want to succeed in their academic programs. Traditionally, reading is the process whereby readers look at a written text and try to understand its content. Currently, researchers define reading as a cognitive process in which readers use their prior knowledge and reading strategies to grasp a written text (Sheorey & Mokhtari, 2001). Current studies in second/foreign language reading research have focused on reading strategies that learners use to comprehend English-language academic texts while reading (Mokhtari & Reichard, 2004; Al-Nujudi, 2003; Alsheikh, 2002; Malcolm, 2009). Reading strategies or individuals' comprehension techniques are now recognized as vital to successful reading comprehension and make the distinction between skilled and unskilled reading. The purpose of this study was to report Iraqi graduate students' (studying in the US) perceived reading strategy use when reading English-language academic texts and to determine if gender differences affect the research subjects' reading strategies use. The researcher used a modified version of the Survey of Reading Strategies (SORS) (Mokhtari & Sheorey, 2002) to research 115 Iraqi participants' perceived reading strategies use. The study results revealed that Iraqi participants reported using global strategies more frequently than problem-solving and support strategies. Also, a T-test revealed no statistically significant differences between the overall mean use of using strategies male and female participants reported. The results suggest that Iraq graduate students (studying in US universities) are aware of arsenal of reading strategies and they are "skilled readers" who know how to use various reading strategies "effectively" for successful comprehension. Moreover, although gender did not have an impact on the perceived general reading strategies used by Iraqi participants, the females sample number was small (N=32) and thus cannot be used for making accurate calculations and conclusions about whether gender affected strategy use.

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## **CHAPTER I**

#### **INTROUDCTION**

Few people would deny neither that one's "real world" and academic successes depend upon one's reading skills nor that people in the 21st century need to be masterful readers, for without being a skillful reader, one has difficulty functioning in contemporary life, difficulty accessing resources for their jobs, home lives, travels, and even safety. Traditionally, reading is the process whereby readers look at a written text and try to comprehend its content. For others, for example, Karbalaei (2010b), reading is "a dynamic and interactive process by which learners makes use of background knowledge, text schema, lexical and grammatical awareness, L1-related knowledge [first language-related knowledge], real-world knowledge, and their own personal purposes and goals, to arrive at an understanding of written material" (p.52). Moreover, reading is a cognitive process in which readers use their prior knowledge and reading strategies to grasp a written text (Sheorey &Mokhtari, 2001).

In a review of developments in second/language reading research, Grabe (1991) pointed out that reading skills have become important in academic contexts. University

students certainly need to be skillful readers to access resources needed to increase their knowledge bases without having to rely on teacher's expertise and guidance (Cooper, 1984). Grabe's (1991) conclusion about reading skills' importance in academe led to considerable research in second language reading. Gaining good reading skills in English in particular have become beneficial for university students even in non-English-speaking nations since many professional and academic materials are published in English and not their native languages (Alderson, 1984). According to Carrell (1988), many non-native language learners rank reading at the top of their necessary skills list ranking it above writing, listening, and speaking. Good readers in both first/native languages (L1) and second/foreign languages (L2) develop their academic skills quickly (Anderson, 1999). Reading strategies or individuals' comprehension tactics are now recognized as vital to successful reading comprehension. Skillful reading happens when readers employ various reading strategies to comprehend texts. Thus, current studies in second/foreign language research have focused specifically on reading strategies that learners use when they read academic English texts (Sheorey & Mokhtari, 2001; Mokhtari & Reichard, 2004; Alnujudi, 2003; Alsheikh, 2002; Karbalaei, 2010a; Malcolm, 2009). In this chapter, I begin by stating and explaining the three problems that lead to the study and the rationale for this study that emerges from these three problems before stating my purpose and research questions. I then describe the current study, explain its significance, outline the study's organization, and end by providing a list of terms and their definitions, terms key to understanding the study.

# **Problem Statement and Rational for the Study**

This researcher's desire to study Iraqi graduate students' (studying in the US) reading strategy use when reading English-language academic texts originated from what he assessed to be three problems: Iraqi graduate students' poor pass rate on the TOEFL

(especially the reading subarea); the lack of research on Iraqi college students' reading strategy use—graduate students in particular; and questions concerning English language learners understanding of the survey given to identify these learners' reading strategy use when reading English-language academic texts. I briefly explain each problem below.

As an English-language learner, English teacher, and Iraqi-Arabic to English and English to Iraqi-Arabic translator for over 15 years and as a TOEFL tutor to Iraqi-Arabic speakers and other international college students in the US, this researcher has seen many international students struggle to prepare to take the Test of English as a Foreign Language (TOEFL)<sup>1</sup> often only to fail the test and then fail again. Although the TOEFL is challenging, its reading section presents the biggest challenge. As a student in the English Language Institute, an English tutor, and on-line social networker at the large (~23,000 students; 4,875 graduate students in 2011) the mid-western university I attend, I learned that most Iraqi graduate students who have spent at least 1-2 semesters in the University's English Language Institute (ELI) fail to earn the minimum TOEFL score required for admission to graduate programs. I know from my conversations and observations that Iraqi students at my university have difficulty reading well enough to pass the TOEFL. Given the extensive English-language training most Iraqi graduate students have had before coming to the US and the continued training at the ELI while living in the US, I found it curious and problematic that these academically successful graduate students, were/are unable to earn the required minimum TOEFL score. Would research into their perceived use of 3 types of reading strategies illuminate why Iraqi graduate students have difficulty on the TOEFL, especially on the reading section?

Based upon my experience with and knowledge of the TOEFL, I wanted further to understand how Iraqi graduate students read academic texts. My investigation led to

<sup>&</sup>lt;sup>1</sup> All non-native English speakers including Iraqi students need between 500 and 550 overall score in *Paper-Based TOEFL* to be admitted to a graduate program at Oklahoma State University, for example.

the second problem I identified that spurred me to research Iraqi graduate students' (studying in the US) reading strategy use when reading academic texts. During my initial investigation, I looked for research on Arab college students' reading. Mokhtari and Reichard (2004) studied Moroccan undergraduates' (studying in Morocco) reading strategy use; Malcolm (2009 and 2012) surveyed Arab—but no Iraqi—undergraduate pre-medical students' (studying in Bahrain) reading strategy use when reading school textbooks. Alsheikh and Mokhtari (2011) examined Arab graduate students' (studying in US universities) reading strategy use. I also found two valuable dissertations, Al-Nujaidi (2003) and Alsheikh (2002). Al-Nujaidi (2003) adopted and translated the original Survey of Reading Strategies (SORS) (Mokhtari & Sheorey, 2002) to examine the reading strategies of Saudi undergraduate students (studying in Saudi Arabia) when they read academic text in English. Alsheikh (2002), on the other hand, translated and used the original SORS (Mokhtari &Sheorey,2002) to examine the reading strategies use of 24 undergraduate and 66 graduate Arab students (studying in US universities) when they read one in text in Arabic and one in English in US universities. Although Alsheikh's study included Arab college students, only one Iraqi graduate student was in the research sample.

In addition to what I learned from the studies mentioned above, I learned that, in the US, I did not have access to Iraqi studies. Thus, I asked friends in Iraq to locate and send me theses, dissertations, and/or published articles that focus on Iraqi college students' reading comprehension and reading strategy use. These studies include those by Iraqi scholars Al- Kubaisi (1993), Al-Halawachy (2007), Jasim (2007), Ali (2012), and Saed (2012). Four of these Iraqi scholars used only undergraduates as research subjects while one, Al Halawachy (2007), included a small number of graduate students. These 5 Iraqi scholars neither used the SORS (Sheorey& Mokhtari 2001) nor studied their subjects' reading strategy use when reading academic texts. Instead they had subjects

read texts, answer multiple-choice questions on the text, draw inferences, participate in reading intervention experiments, and, for Al-Kubaisi's (1993) study, participate in a mixed-methods study involving a cloze test, questionnaire, and interview. Because these researchers' purpose were to improve Iraqi students' reading comprehension rather than identify their reading strategy use and the reading strategy use of skilled readers, their research design was necessarily different and included experimental and control groups.

Finally, I had to question the accuracy of the data collected and analyzed in previous studies using Mokhtari and Sheorey's (2002) survey,<sup>2</sup> for the test was only in English, given to undergraduate English language learners—not to test their English but to determine their perceived reading strategy use. Thus, I could only wonder if the results accurately reflected survey participants' reading strategy use, for if they failed accurately to understand what each survey item meant, their responses would not accurately reveal their reading strategy use.

My personal experience with Iraqi graduate students' struggles with the TOEFL, the lack of research in and outside Iraq concerning Iraqi graduate students' reading strategy use when reading English-language academic texts, and my questions concerning previous English-language SORS participants' understanding of the survey items and therefore the accuracy of their data has incited me to research Iraqi graduate students' (studying in the US) perceived reading strategy use.

#### The Purpose of the Study

The purpose of this study is to analyze and report Iraqi graduate students' (studying in the US) perceived reading strategy use when reading English-language

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<sup>&</sup>lt;sup>2</sup> Mokhtari & Sheorey (2002) developed the *Survey of Reading Strategies* abbreviated as *SORS*. You can find the description of the *SORS* in the *Literature Review and Methodology* chapters of this study.

academic texts and to determine if gender differences affect the research subjects' reading strategies use.

#### **Research Questions**

The research questions emerging from the three problems this researcher identified follow:

- 1. Which reading-comprehension strategies do Iraqi graduate students (studying at US universities) perceive themselves to use when reading English-language academic texts?
- 2. Do the participants' genders affect their perceived reading strategies use?

# **Description of the Study**

The participants of this study included 115 Iraqi master and Ph.D. students studying at different US universities. The participants were students in three academic areas: engineering, the sciences, and medical and veterinary schools. The researcher developed and administered a modified English-Arabic, illustrated version of Mokhtari and Sheorey's (2002) original English-only *Survey of Reading Strategies (SORS)* to investigate how Iraqi graduate students perceive themselves using reading strategies when reading English-language academic texts. The researcher's modified SORS was emailed to the study participants either directly (referral portion of the sample) or through the Iraqi Embassy in the US (completely anonymous, Embassy portion of the sample). Next, the data were collected and analyzed using the Statistical Package for the Social Sciences (SPSS, version 9.0) as explained in *Chapter III: Methodology*.

### **Significance of the Study**

1. Iraqi researchers can use this research study as a guide to study bigger populations with different college levels inside or outside Iraq. If they read the *Methodology* 

Chapter of this study, they can use that chapter as a guide to learn how to design the survey research using the (SORS) to examine their populations' reading strategies use. Also, this study provides useful information for developing other ELL/EFL reading research studies that have similar situations to this Iraqi study.

- 2. Iraqi college teachers can use the study research design to survey their students' reading strategies use. This can help these teachers identify "poor and good" reading strategies their students use and, next, they can improve poor reading strategies and reinforce skillful ones. This also applies to TOEFL reading instructors.
- 3. Based on Mokhtari and Sheorey's suggestions (2002), Iraqi college students can use the information they derive from the SORSs' statements to increase their reading strategies awareness and feel more confident while they are reading a text in English.

## **Organization of the Study**

In *Chapter II*, this researcher reviews the English-language research literature on reading comprehension, reading models, and reading strategies explaining variables that affect reading comprehension and reading strategy use, listing SORS studies, and reviewing reading research on English as a foreign language readers Iraqi scholars have conducted in Iraq. The methodology follows in *Chapter III* and includes the research subjects, the research instrument, the research questions (repeated from the Introduction), data collection, and data analysis. The researcher presents and explains the findings in *Chapter IV* before identifying the study's limitations and implications for ELL and EFL teachers and students, drawing conclusions, and recommending areas for further research in *Chapter V*.

# **Definition of Key Terms**

Key Term	<u>Explanation</u>
ELL	English Language Learner. In this research study, ELL has the same
	meaning of ESL (English as a Second Language). As educational
	labels, they are the same, but the philosophies behind the words
	differ. ESL assumes, after all, that English is a SECOND language,
	whereas ELL only assumes that English is not the learner's first
	language (could be second, third, etc.)
EFL	English as a Foreign Language: English learned in a country where
	it is not the primary language (for example, Iraq, Japan).
Metacognitive	Metacognitive reading strategies are "intentional, carefully planned
reading	techniques by which learners monitor or manage their reading.
strategies	Examples include having a purpose in mind, previewing the text as
	to its length and organization, or using typographical aids and tables
	and figures" (Sheorey & Mokhtari, 2001, p.436).
Cognitive	Cognitive reading strategies are "actions and procedures readers
reading	use while working directly with the text. They are localized,
strategies	focused techniques used when problems develop in understanding
	textual information. Examples include adjusting one's speed of
	reading when the material becomes difficult or easy, guessing the
	meaning of unknown words, and re-reading the text for improved
	comprehension" (Sheorey & Mokhtari, 2001, p.436).
SORS	The Survey of Reading Strategies developed by Mokhtari and
	Sheorey (2002)

OSORS	The Online Survey of Reading Strategies developed by Anderson
	(2003). <sup>3</sup>
Reading	Reading strategies are cognitive plans, techniques, and action s that
strategies	readers use when they a read academic or school- related materials
	(Mokhtari & Sheorey,2002)
L1	First/native language: A speaker's mother tongue.
L2	Second /foreign language.

(Anderson, 2003,p.15).

<sup>&</sup>lt;sup>3</sup> Anderson (2003) adopted the *SORS* (Mokhtari &Sheorey, 2002) for his research study. "The adoption was named *Online Survey of Reading Strategies (OSORS)* to distinguish it from Mokhtari and Sheorey *SORS* (2002). The *OSORS* includes global (18 items from original SORS plus 2 new items), problem-solving (11 items from original SORS plus 3 new items) , and support reading strategies (9 original items were maintained). Each item was modified to include the phrase "online" each time a reading task was referred to"

#### **CHAPTER II**

#### **REVIEW OF LITERATURE**

In this chapter, I review the reading research literature: research on first and second/foreign language reading, second/foreign language reading strategies, research topics in second/foreign language reading strategies, good and poor readers, the *Survey of Reading Strategies (SORS)*, studies that used the SORS to assess the reading strategies use at university level, and Iraqi college-level reading strategies and reading comprehension.

# First and Second/Foreign Language Reading

Why is Reading Important?

According to Anderson (2003), reading is an important academic skill if learners want to succeed in ELL school environments. In fact, in academia, reading is an essential skill all learners need to master, a fundamental skill to language learners' success in all school tasks and assignments (Cheng, 1995); and a critical skill for language learners especially if they want to study outside their native countries.

#### What is Reading?

Karbalaei (2010b) defines reading as "a dynamic and interactive process." While reading, "learners make use of background knowledge, text schema, lexical and grammatical awareness, L1-related knowledge, and real-world knowledge, as well as their personal purposes and goals, to arrive at an understanding of written material" (p.52). Since the goal is to understand the text which takes place when readers relate prior knowledge to the text they read (Meissner &Yun, 2008; Sweet & Snow, 2003), reading is a meaning-construction process through which readers making meaning before, during, and after reading the written text.

# Reading Models

Reading researchers have identified three models for learning to read reading in English. Gough (1972) introduced the bottom-up, or the "linear," model. While reading, readers start first with decoding letters, next with decoding words, and finally arrive at sentence comprehension. In this model, reading is an automatic process where readers make use of textual elements found in the text to create meaning. Fluent readers sometimes use this automatic decoding process unconsciously. Under this model, recognizing words in isolation and rapidly is critical (Van Duzer, 1999; Cited in Alsamadani, 2008).

Unlike the bottom-up, the top-down reading model, or the psycholinguistic guessing game was introduced by Goodman (1967). Readers use their prior knowledge and expectations to construct meaning for the text they are reading. Readers rely on their prior knowledge to imitate certain expectations about that text and make use of their vocabulary knowledge for word-decoding so they can confirm, disconfirm, or change previously built expectations (Aebersold & Field, 1997). While researchers such as Eskey

(1988) and Stanovich (1980) maintain that top-down model can explain how fluent readers read, they are also content that this model fails to explain how poor readers read.

Finally, Rumelhart (1977) and Stanovich (1980) introduce the interactive model of reading. In this model, Rumelhart (1977) and Stanovich (1980) combine the bottom-up and top-down reading processes contending the interaction of the two results in reading comprehension: both reading processes work together to rebuild and encode the text's message (Eskey, 1988). The interactive model also incorporates several major findings from research on schema theory. Carrell (1983) suggests readers use the text to guide and activate specific background knowledge so they can comprehend the text. Without appropriate schema for the text, many readers will use bottom-up processes because they lack necessary background knowledge.

## Second/Foreign Language Reading Strategies

In the past decade, research into second and foreign language reading (Sheorey & Mokhtari, 2001) has shifted from focusing on reading as a comprehension product to focusing on comprehension strategies readers use to understand reading texts. To understand texts, readers utilize different reading comprehension strategies or, when comprehension breaks down, repair strategies.

Skills and Strategies

In reading research, researchers often use "skill" and "strategy" synonymously. Skills refer to readers' competencies or abilities that are either passive or inactive (Carrell, 1998). Strategies are deliberate actions that readers choose and control to achieve certain goals and objectives (Paris, Lipson &Wixson, 1983).

What are Reading Strategies?

The literature on reading research provided several definitions for the term "reading strategy." Cohen (1986) defines reading strategies as mental processes that

readers select and use on purpose to grasp a text. Garner (1987) refers to reading strategies as "generally deliberate, planned activities undertaken by active learners, many times to remedy perceived cognitive failure" (p. 50). Afflerbach, Pearson, and Paris (2008), define reading strategies as "deliberate, goal-directed attempts to control and modify the reader's efforts to decode text, understand word, and construct meanings out of text" (p. 15).

Investigation into learners' use of reading strategies is important for reading researchers because from the results of such research they can reveal and explain how readers interact with texts they read and how readers use reading strategies to comprehend texts (Carrell, 1989). Research into English language learners' reading strategies also helps researchers understand how these learners cope with the demands to read and study materials in their academic majors, within university contexts in particular (Malcolm, 2012), and how learners monitor their own reading which helps these learners decide whether comprehension is taking place, and, as a result, if they need to take further action for lack of comprehension (Alsheikh, 2011).

In this study, I use a modified version of Mokhtari and Sheorey's (2002) *Survey of Reading Strategies (SORS)*, to report Iraqi graduate students' use of reading comprehension strategies. Accordingly, for this study, I use their definition of reading strategies. *Reading strategies* are intentional and carefully planned actions, procedures, and techniques that readers use to assist them in understanding the text and monitoring, and managing their reading comprehension (Mokhtari & Sheorey, 2002).

### Research Topics in Second/Foreign Language Reading Strategies

Researchers investigate how numerous variables affect reading comprehension and reading strategies readers select. These variables include those related to learners'

native/first language and to reading in a second/foreign language. Below I highlight few studies that looked into these variables and how they relate to or influence reading strategies English language learners use:

# 1. L1 Reading Ability and L2 language Proficiency Affect L2 Reading

Carrell (1991) confirmed that both first language reading ability and second language proficiency significantly affects foreign language reading ability. She studied the reading strategies of native Spanish speakers studying English and native English speakers studying Spanish. Both the participating groups have different proficiency levels. Although the proficiency level in the foreign language was more critical for students with slightly lower level of proficiency (English students in first year, second semester; and second year, first semester Spanish courses), the results indicate that reading ability in the first language and language proficiency in the foreign language significantly influenced the participants' reading abilities in the foreign language.

#### 2. Transfer of Reading Skills and Strategies

Block (1986) hypothesized that foreign language learners' strategy use is not linked to specific language features. In other words, readers who learn and use reading strategies in their native language can utilize these same strategies in a different language. To test his hypothesis, Block used think-aloud protocols to investigate how native and non-native English speaking college students who were enrolled in remedial reading classes use comprehension strategies while reading English texts. The reading teachers attributed the non-native college students in reading as fairly fluent as native English speaking college students because they spent similar amounts of time in the US. The results of the study showed that both non-proficient native and non-native readers used similar patterns of reading strategies. In essence, non-native second language learners

made use of their general knowledge, knowledge of reading and how to approach reading tasks from their native language and then applied them to reading texts in the foreign language: they used and invested their cognitive resources from their native languages into solving comprehension tasks in a non-native language.

#### 3. Bilingualism and L2 Reading

Jimenez et al. (1996) looked into how sixth and seventh grade bilingual-Latino students in the US use reading strategies when reading in English: how and under which conditions they use particular reading strategies. The study revealed that 1) successful bilingual readers share similar views on reading, for they recognized "many similarities between reading in Spanish and English" (Garcia et al, 1998, p.202); 2) although nearly all the bilingual readers were aware of several strategies, they used few of them (cognates, code-switching, and translation); 3) successful bilingual readers know how to transfer and use their knowledge of reading strategies to read and comprehend a text in Spanish into reading and comprehending a text in English (Garcia et al, 1998, p.204). From these studies, one concludes that bilingual readers can transfer their ability to use reading strategies from L1 to L2 only if they first become skillful readers in their native languages.

### 4. Background Knowledge and L2 Reading

Readers' background knowledge can effectively aid readers to understand texts.

Research showed that readers can improve their reading comprehension if they properly activate their content, cultural, and rhetorical backgrounds and provide necessary background information while they are reading (Barnett, 1988). Horiba (1990) tried to understand how native and non-native readers of Japanese comprehend a text in English. He found the expert Japanese readers succeed in guessing the meaning of unfamiliar

words and sentences when they make use of cues within the text. These readers make use of familiar schemas to activate relevant information in their minds in order successfully to guess new words and understand new syntax.

# 5. Different Types of Texts Require Different Types of Reading Strategies Use

Feng and Mokhtari (1998) conducted a study to examine the reading strategies of 20 Chinese skillful college students (15 males and 5 females) to read easy to difficult texts in English and Chinese. These researchers discovered that Chinese readers use more reading strategies when reading English texts than when reading Chinese texts and more strategies to understand difficult texts than easy texts. This study implies Researchers concluded that foreign language readers use metacognitive reading strategies when they read a text in native and foreign languages. And use specific reading strategies for specific texts, namely difficult ones.

# 6. Efficient Reading Strategies Use is Learned through Formal Instruction

Carrell (1989) emphasizes the importance of training or guiding foreign language readers on using reading strategies for satisfactory and maximized comprehension. She explains that although readers in a foreign language learn how to use reading skills and strategies through their reading instruction courses, they fail to correctly use that knowledge because they do not understand for what purposes they should use these strategies and where and when they should use them. Thus, Carrell contends that adding instruction in "awareness or knowledge about a strategy's evaluation, rationale, and utility should greatly increase the positive outcomes of instruction" (p. 129).

# 7. Major Area of Study and Use of Reading Strategies

Researchers tried to confirm if a relation among background knowledge, content area expertise, and foreign language reading proficiency exists. Although learners with high language proficiency and extensive background knowledge in an academic field read more effectively in their specialized academic area of study than they do in other academic areas, Grabe's study (2009) explains that professional knowledge has a weak affect on readers' comprehension of foreign language texts. Also, Uso-Joan (2006) found that readers whose linguistic ability is low can still read effectively if they have greater knowledge in their specialized disciplines. As a result, students who study in English for Special Purposes (ESP) programs are at advantage. They use their specialized knowledge in their disciplines to read academic materials in English (Alderson & Urquhart, 1988).

#### 8. Gender and Reading Strategies Use

A widely held myth among teachers and researchers is that females, unlike males, are skillful at learning languages (Oxford, Ehrman, and Nyikos, 1988). Research exploring the relation between learners' gender and their use of learning strategies divides into three groups: those who believe that females are better than males in strategies use, that few differences exist between females and males in strategies use, and that males are better than females in using strategies.

Most of studies (using SILL<sup>4</sup>/Oxford inventory) that deal with foreign language learning strategies at the university level show females are better than males at strategies use. In their study, Goh and Foong (1977) focus on 175 Chinese English language learners with beginning-, intermediate-, and high-level proficiencies who are studying at

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<sup>&</sup>lt;sup>4</sup> SILL stands for Strategy Inventory for Language Learning (See Oxford, 1990, and Oxford & Burry- Stock, 1995, for a thorough description of the SILL).

a Singaporean university. Goh and Foong (1977) surveyed the frequency of strategy use and discovered that participants' proficiency levels in English and gender affect strategy use. The results revealed significant differences between male and female participants' using cognitive and compensation learning strategies at three levels. Females use more compensation and affective strategies than male participants.

On the other hand, in their SILL study, Szoke and Sheorey (2002) found few differences between males' and females' strategy use. When performing a comparative study of Hungarian and Russian English language learners, they did not find significant differences among female and male Hungarian and Russian learners overall, in strategy use (different in only one strategy), or in the six SILL categories

Finally, in one non-SILL study (Baily 1996), males outperformed females:

[The study] sought to discover gender differences in the use of compensation strategies by native speakers of English studying conversational French at the university level. The participants consist of 15 females and six males. Their strategy use was measured using Systeme-D, a computer program that is able to follow students' use of compensatory strategies such as looking up words in the dictionary, using a thesaurus, and checking one's grammar. . . The results showed that men used more strategies than women on all four compositions. (Cited in Poole, 2005, p.10).

#### **Good and Poor Readers**

#### Good Readers

Good readers are strategic readers. They know how to use reading strategies to approach reading tasks. They know how to utilize various techniques to perform specific

goals or purposes, carry out a sequence of planned actions, and monitor how they employ those reading strategies (Adams & Hamm, 1994; Gettinger & Seibert, 2002; Weinstein & Mayer, 1985; Weinstein & Underwood, 1985; as cited in Karbalaei, 2010b). When expert readers approach a reading task, they have specific and strategic purposes in mind. They know how to connect the text they are reading to their prior knowledge, to guess what comes next in the text, and summarize information they are reading. Successful readers are also effective strategy users. According to Hyland (1990), they know how to read the text for general knowledge, to find specific information, and to locate the main idea or theme, to enjoy reading, to research, and summarize what they have already read. Different from poor readers, skilled readers they use their "general world knowledge" to understand the literal meaning of the text and to infer correctly from the text they read while they are understanding words, watching their comprehension, and fixing comprehension breakdowns (p.62). Lastly, unlike poor comprehenders, good comprehenders are "constructively responsive," when reading a text, as Pressley and Afflerbach (1995) explains, they use specific and intentional actions as well as "orchestrate their cognitive and affective resources" for definite and unlimited comprehension (Cited in Mokhtari & Sheorey, 2002, p.3).

Metacognition is important for readers when they read in a second/foreign language. Metacognition makes the distinction between good and poor readers. Sheorey and Mokhtari (2001) maintained that skilled readers are recognized by their use of "strategic awareness and monitor of the comprehension process" while they are reading (p.432). Skilled readers use their strategic or metacognitive awareness to work with and focus on the text while they read. For example, they think of the characteristics of the text they read (e.g. if the text is relevant to their reading goals and how related the parts of the text are) (Pressley, 2002); they consciously plan and carry out suitable actions to achieve

particular comprehension goals (Auerbach & Paxton, 1997; Carrell et al, 1989). Strategic readers use comprehension monitoring to achieve three purposes; 1) to improve their understanding of the text they are reading (Sheorey &Mokhtari, 2001); 2) to recognize if comprehension breaks down (Nist &Mealey, 1991); 3) to address comprehension problems if they arise while they are reading and to shift or adjust their use of reading strategies accordingly (Temur & Bahar, 2011). For example, they may read quickly, slowly, or stop to read a different text so to obtain background information to help them understand the text they are working on (Temur &Bahar, 2011). In addressing comprehension problems, self-monitoring helps readers know if they need to use comprehension repairs. Such readers are deliberate readers because they engage in reading activities that "require planful thinking, flexible strategies, and periodic self-monitoring...Novice readers often seem oblivious to these strategies and the need to use them" (Paris & Jacobs, 1984, p. 2083).

#### Poor Readers

Poor readers are typically young, less experienced adolescents and adult readers with limited metacognitive knowledge when they read (Paris & Winograd, 1990). These readers neither approach nor try to comprehend texts the same way as good readers do. One difference is how they deal with and understand the text. According Auerbach and Paxton (1997), beginning foreign language readers think they must know the meaning of every word to understand a text; therefore, they use the dictionary a lot. Failing to transfer the productive, positive feelings about reading they have in their native language, they spend hours translating sentence by sentence. Finally, they blame their lack of English proficiency for their poor reading skills. Obviously, these poor readers are decoders rather than meaning-getters (Baker & Brown, 1984).

As early said, metacognition is a critical aspect of skilled and strategic reading. Poor readers are not as metacognitively aware as good readers. They rarely monitor their own comprehension (Flavell, 1979 and Markman, 1979; Cited in Mokhtari & Reichard, 2002). Also, they do not know when comprehension fails (Otero & Campanario, 1990) and how to fix comprehension difficulties (Rinehart & Platt, 2003). However, with good reading instruction training, these unskilled readers can learn and use proficient reading strategies and become skilled readers (Temur and Bahar, 2011).

# The Survey of Reading Strategies (SORS)

Why and How the SORS was Developed?

Several first-language reading researchers developed inventories to measure metacognitive awareness and use of reading strategies for native English learners when they read texts in English (Mokhtari & Reichard 2002). These include "Index of Reading Awareness" (Jacob & Paris, 1987), "Reading Strategy Use "(Pereira-Laird & Deane, 1997), "12-Item Multiple- Choice Questionnaire" (Schmitt, 1990), "10-Item Multiple-Choice Inventory" (Miholic, 1994), and Metacognitive Awareness of Reading Strategies Inventory (see Mokhtari & Reichard (2002) for details on MARSI). Mokhtari and Sheorey (2002) explain why these instruments may not be suitable for assessing reading strategies of ELL students and why they developed the SORS. Mokhtari and Sheorey (2002) pointed out that none of published instruments assess the metacognitive and perceived use of reading strategies of English language learners while they are reading academic materials. Also, they pointed out that although previous research, for example, Alderson (1984) and Carrell (1991) suggested that readers can transfer their reading strategies from one language into another language, the current reading assessment instruments do not look into how bilingual readers translate a text from English into their native language and/or using their native and second/foreign language to increase their

comprehension while they are reading a text in English. Consequently, Mokhtari and Sheorey were content the SORS can address such important variables to suitably assess the reading strategies English language learners use.

Furthermore, research confirmed "a positive relation between students' metacognitive awareness of reading processes and their ability to read and excel academically" (Alderson, 1984; Carrell, 1991; Clarke, 1979; and Cziko) (Cited in Mokhtari &Sheorey 2002, p.2). As a result, they suggest using the SORS as a useful reading assessment tool to "raise learners' awareness of reading strategies which has been proved to help students improve their reading comprehension skills" (p.2). Finally, Mokhtari and Sheorey (2002) state that university instructors can use the SORS as an adequate tool for assessing ESL students' readings skills and use that information to teach students effective and efficient academic reading.

Based on the MARSI (see Mokhtari & Reichard (2002) for details on *MARSI*), Mokhtari and Sheorey (2002) developed the *Survey of Reading Strategies* (*SORS*) to measure non-native English speakers' metacognitive awareness and perceived use of reading strategies. For the SORS, Mokhtari and Sheorey (2002) revise the MARSI in 3 ways. They change the wording of several statements so English language learners can comprehend them easily. They also added two key reading strategies that L1 readers do not use but L2 readers often do ("translating from one language into another" and "thinking in the native and target language while reading") and removed two reading strategies ("summarizing information read" and discussing what one reads with others"). After the revisions were made, they field-tested the SORS with English language learning college students and then obtained internal reliability (Cronbach's Alpha = .89 or better) which "indicate a reasonable degree of consistency in measuring awareness and perceived use of reading strategies among non-native students of English" (Mokhtari &Sheorey, 2002, p.4).

The SORS consists of 30 items, each of which uses a five-point Likert scale ranging from 1 ("I never or almost never do this") to 5 ("I always or almost always do this"). In the survey, the respondents read each statement and circle the number that applies to them indicating the frequency with which they use the reading strategy identified in the statement. Thus, the higher the number, the more frequent the perceived use of the strategy concerned. One may administer a background questionnaire along with the SORS statements through which one asks respondents to provide information about their age, gender, and self-rated ability in reading in English and native language. The SORS measures three broad categories of reading strategies: global strategies, problem solving strategies, and support strategies. These categories (or subscales) were based on MARSI's factor analysis and theoretical considerations (Mokhtari & Sheorey, 2002). A brief description of each SORS category and the number of items within each category (as defined by Mokhtari & Sheorey, 2002, p. 436) is given below:

- 1. *Global Strategies (GLOB)* are those intentional, carefully planned techniques by which learners monitor or manage their reading. Such strategies include skimming the text prior to reading, using illustrations/graphs to help understand the text, and reading with a specific purpose in mind (13 items).
- 2. Problem Solving Strategies (PROB) are actions and procedures readers use while working directly with the text. They are localized, focused techniques used when problems develop in understanding textual information (9 items).
- 3. Support Strategies (SUP) are support mechanisms intended to aid the reader in comprehending the text. Such strategies include using a dictionary, heightening information within the text, and taking notes (8 items).

#### Studies that Used the SORS to Assess the Reading Strategies Use at University Level

The SORS studies that examined the reading strategies of ELL/EFL readers fall into four main categories: 1) reporting the perceived reading strategies of Native English speaking college students and students who are studying in ELL or EFL college environments, 2) reporting the perceived reading strategies use of EFL Arab college students,3) reporting the perceived reading strategies use of non-Arab college students, and 4) finding out if gender affects the choice and use of reading strategies. Below are a few selected published studies and their results.

#### 1. Reporting Reading Strategies Use of Native English Speakers with ELL/EFL Students

Studies that fall under this group were in response to the limited number of studies that targeted such populations (Sheorey &Mokhtari, 2001). The purposes of these studies were to confirm whether students who studied in two different school environments will report using similar reading strategies.

Sheorey and Mokhtari (2001) used the SORS to examine 302 university students' metacognitive awareness and perceived reading strategy use when they read academic texts in English—150 American and 152 English language learners—in one large, midwestern state university. The study's results revealed that both groups: are highly aware of various reading strategies: rank the categories of reading strategies in the same order of importance; and with high reading abilities, report using more cognitive and metacognitive reading strategies than readers with low reading abilities. Although more US native English language readers in the high reading abilities group consider using support strategies as valuable for reading comprehension than did readers in the lower group, both groups considered support strategies valuable. Also, unlike the English

language learners, the female, native-English speakers reported significantly higher frequency of strategy usage.

Mokhtari and Reichard (2004), on the other hand, used a different research sample population. They used the SORS to research the reading strategies of 141 American students studying in American University and 209 Moroccan students studying in Moroccan university. The purpose of the study was to examine whether significant differences exist between the American and Moroccan students in their metacognitive awareness and perceived use of specific strategies when they read academic texts in English. Although both groups studied in two different school environments, they reported similar patterns of reading strategies when they read academic texts in English. One difference the study revealed is that Moroccan students reported using certain types of strategies more often than American students.

Similar to Sheorey and Mokhtari (2001) and Mokhtari and Reichard (2004) studies, Karbalaei (2010a) tried to find out if Iranian and Indian college students who attended schools in two different educational settings report similar or different reading strategies awareness. Karbalaei (2010a) used the SORS to examine the reading strategies use of 96 EFL Iranian and 93 ELL Indian undergraduate students. The purpose of the study was to assess if both groups use different reading strategies when they read academic texts in English. The results showed that although the two groups studied in significantly two different socio-cultural environments, they reported similar patterns of strategy awareness. Also, Indian students reported more awareness and use of global, support and total metacognitive reading strategies whereas the Iranian students did not. Besides, Iranian students, unlike Indian students, reported no significant differences in using problem-solving reading strategies.

#### 2. Reporting Reading Strategies Use of EFL Arab College Students

Malcolm (2009) examined the reading strategies of 160 Arab medical students in Bahrain. The study aimed at comparing the reported academic reading strategies of students at varying English proficiency levels and year of study. The results of the study showed that students of low English proficiency and those in their first year reported translating more reading strategies, while upper year students translated less and used more metacognitive strategies. Compared to findings in previous studies using the same self-report questionnaire, the reported reading strategies used by the survey participants were generally higher and more similar to other results reported by academic readers in an EFL setting. However, these results are different from results reported by academic readers in L1 and L2 in a US college.

Using a follow -up a questionnaire -based study; Malcolm (2012) researched reading strategy awareness of 160 Arab medical students in their first and third years of their study (Malcolm, 2009). In this study, the researcher re-administered the SORS to a small group of third year students who had participated as first year students in the first original study by the same researcher (Malcolm, 2009). The researcher also interviewed a few participants and asked them about their opinions of the changes in their reading strategies awareness and reading practices over the intervening years. Thus, the purpose of the present study was to provide some longitudinal data for researching reported differences in reading strategy use. The study results showed that students in the higher years of their study reported using less translation and thinking in Arabic strategies. They also reported that they use more metacognitive readings strategies such as skimming for information and predicting text content. Finally, the interview data also showed the growing influence of students' envisaged futures as physicians in focusing their academic reading.

In another study, Amer, Barwani, and Ibrahim (2010) explored "online" reading strategies of EFL Omani Arab college students. His population sample consisted of 123 first-year student teachers (male n=22 and female n= 101) and 97 fourth-year student teachers (male n=41 and female n= 56). The study results revealed statistically significant differences in using global reading strategies between the fourth and first year student teachers. Also, the first year university students, unlike senior student teachers, reported using more support reading strategies. However, the study did not reveal any statistically significant differences between the male and the female student teachers.

In a different study, Alsheikh and Mokhtari (2011) examined the reading strategies awareness and reading comprehension strategies of 90 ELL Arabic college students studying in US colleges. The researchers used the SORS and think-aloud protocols to look at the perceived and actual use of reading strategies by the Arabic native speakers when they read a text in Arabic and English. The survey results showed a moderate to high overall reported use of the problem solving strategies, the global reading strategies, and the supporting reading strategies respectively. The think-aloud protocols showed the participants use more reading strategies when they read a text in English than when they read a text in Arabic. Also, there was a significant statistical difference in the reported use of reading strategies form using both research instruments. The participants reported using a higher rate of reading strategies when they read in English than when they read in Arabic, too. In general, both data obtained showed that Arabic native speakers have a preference for using problem solving reading strategies, global reading strategies, and support reading strategies.

### 3. Reporting Reading Strategies Use of EFL Non-Arab College Students

Sheorey and Baboczky (2008) used the OSR to look into the reading strategies use of 134 male and 411 female EFL Hungarian college students majoring in English. The participants' reading strategies while they read academic texts in English were reported by using the SORS instrument. Overall, the study results showed the Hungarian students reported using reading strategies with moderate frequency (overall SORS mean =3.95) and reported preference for using support and problem-solving reading strategies. Also, Female participants reported using more reading strategies than their male counterparts. However, there was no significant linear relation between reported reading strategies and English proficiency. Additionally, the most significant finding of the study is the linear relation between time spent on reading and the perceived use or awareness of reading strategies use. In other words, students who reported spending more time on reading reported using more reading strategies.

In another study, Tabatabaei and Assari (2011) looked into the reading strategies of 90 Iranian ESP learners across three academic fields of medicine, computer engineering and law. The SORS reported the mean frequency of individual and overall perceived reading strategy use among ESP Medical, computer- engineering and law students. Also, the study aimed at knowing if any significant differences exist among medical, computer engineering and law students about the mean frequency of the perceived individual reading strategies and their overall reporting use of reading strategies. The researchers found out that individual the perceived reading strategies used mostly by medical and law students was "trying to stay focused on reading" while used most by computer-engineering were "rereading for better understanding." Individual reading strategy used least by Law and medical students, on the other hand, was "asking oneself questions before reading the text" while used least by computer- engineering and

law students was "checking the accuracy of the predictions." Also, about the overall perceived use of reading strategies, all the three majors reported they are moderate strategy users.

Lastly, Temur and Bahar (2011) examined the reading strategies use of 132 female and male freshmen, sophomores, and junior Turkish students studying English Language Education at a state university. They used the SORS to collect the data. The study revealed three main findings. First, participants reported using problem-solving, global, and support reading strategies respectively. The survey participants reported using the problem-solving strategies to solve comprehension problems when they read texts, they use global strategies to such as pre-reading to understand the text; and they use support strategies the least to better understand and to increase remembering. Second, freshmen reported using more global, support, and problem-solving reading strategies than sophomores and juniors which suggest that reading strategies decrease as the grade level increases. Finally, there was a difference in the students' metacognitive awareness of using reading strategies in favor of females, but this difference is not statistically significant.

4. Studies that Researched Whether Gender Affects the Choice and Use of Reading Strategies

Poole's study (2009) aimed at finding out if male and females use reading strategies differently. Three hundred and fifty two (males =117 and females= 235) low to intermediate Colombian university students completed the SORS. The collected data revealed that females reported using reading strategies with high overall frequencies while males reported overall strategies use with medium frequencies. Females' reported reading strategies use was significantly higher than those reported by male participants.

Unlike Poole (2009), Taki and Soleimani (2012) looked into the "online" reading strategies use of 15 male and 15 females' master students at IAU University of Shahreza, Iran. They used the OSRS (Anderson, 2003) to find out if EFL male and female Iranian university students use reading strategies differently. The study results showed that master students reported using reading strategies moderately. Reading strategies used most were problem-solving and global strategies. Also, although male and female participants did not report overall significant differences in using online reading strategies, they reported using a number of strategies differently. In four individual reading strategies, females indicted higher strategy use of one global reading strategy (live chat with other learners), of one problem-solving strategy (pausing and thinking about reading) and of one support strategy (paraphrasing for better understanding). Male participants, on the other hand, reported higher strategy use of one problem-solving strategy use (adjusting reading speed). Lastly, the study also indicated that skilled readers are active strategy users when they read a printed text or when they read a text online.

#### Reading Strategies Research at the College Level in Iraq

Although researchers from different countries, including Iraq neighboring countries, used the different research instruments, including the SORS, to examine reading strategies use of college students, reading strategies research in Iraq is behind other countries. When I decided to research for reading strategies use of Iraqi college students, I used "Google Scholar" and OSU library resources to find Iraqi studies inside or outside the US. The result, I found none. Next, I contacted friends in Iraq who are either graduate students or professors and asked them if they can find me any theses, dissertations, or journal papers that looked into reading strategies use, they found me only

one survey research (Al-Kubaisi, 1993).<sup>5</sup> Dr. Al-Kubaisi (1993) used 584 undergraduate students majoring in English at College of Education (Ibn-Rushed), University of Baghdad. Al-Kubaisi used three research designs to answer four research questions. He administered a "cloze" test to 495, a questionnaire to 395, and interviewed 30 "efficient" and "inefficient" readers. The purpose was to show whether the use of "efficient" reading strategies develops within the passage of time and whether the use of "inefficient" reading strategies decreases with the passage of time. The results of data analysis revealed there is gradual improvement across the four stages in using efficient strategies and in avoiding inefficient ones by efficient readers.

Although Dr. Al-Kubaisi (1993) used a survey research and a big research sample for his study, I have several criticisms against his study. First, the study is over 19 years old and its results cannot be used to explain how Iraqi colleges currently use reading strategies. Nineteen years ago, I was in my second year of undergraduate programs in the English department at College of Education (Ibn-Rushid). Then, I was one of Dr. Al-Kubaisi's undergraduate students in the "Methodology Class." At 1993, Iraq and Iraqi college students were cut off from the rest of the world because of the economic sanctions imposed by the United Nations after Saddam Hussain invaded Kuwait in 1990. Iraqi college students had no access to internet and international journal articles. Thus, his study results are inapplicable for interpreting how Iraqi college students currently use reading strategies. Another criticism I have against Dr. Al-Kubaisi's study is the sample population. The whole sample was undergraduate students, studying English as Foreign Language, taking classes in one college (College of Education) and in one campus (at University of Baghdad). For generalizability purposes,

<sup>&</sup>lt;sup>5</sup> Al- Kubaisi, A. (1993). Reading Strategies Used By Iraqi College Students Of English As A Foreign Language. (Unpublished Doctoral Dissertation). University of Baghdad.

<sup>&</sup>lt;sup>6</sup> "Methodology Class" is the name for the "Teaching English as Foreign Language (TEFL)" class.

his research results cannot be used to explain how Iraqi college students from other majors use reading strategies. The sample does not represent Iraqi college students in different majors and/or in different locations.

### **Summary of the Chapter**

Reading is an active process whereby readers interact with the text they read and use various reading strategies to achieve text comprehension. If ELL/EFL learners want to read texts successfully, they need to make use of their background knowledge and effective reading tactics while reading. Different variables which are related to readers' first language or readers' second/foreign language can facilitate reading comprehension or make reading comprehension a difficult and stressful task for ELL/EFL learners. As a result, these readers can overcome these difficult reading tasks if they know how to select and employ strategic reading techniques.

Although several studies (Mokhtari & Reichard, 2002 and Sheorey & Mokhtari, 2001) researched and reported the reading strategies of various ELL/EFL college students, including Arab college students, there is no evidence that those studies included Iraqi college students, or if they did, their number was quite limited. Also, although Al-Kubaisi's study (1993) used a survey research to examine reading strategies use among Iraqi college students, the results cannot be generalized because the population sample does represent the whole Iraqi college students' population. As a result, this study is conducted to fill the gap in the literature of reading strategies use among ELL Iraqi and Arab college students.

#### **CHAPTER III**

#### **METHODOLOGY**

This chapter describes the methodology that was used in this study. It begins with describing the participating subjects, the instrument used to collect the data, data collection, research questions, and data analysis. The purpose of this study was to examine the general reading strategies Iraqi graduate students reported using when they read academic texts in English and to examine if gender affects these students' reading-strategy use.

### **Subjects**

This study began with a Consulting Group (consulting phase of the study) before beginning the research proper (construction phase of the study) with Referral Subjects and Embassy Subjects.

The Consulting Phase: Consulting Group Subjects

The subjects of this phase (N=4) were a convenient sample (Table 1) of Iraqi graduate students at the researcher's university. The subjects were selected because of their graduate majors, degree programs, and because they all have 13–19 years experience in English-language use. The consulting group consisted of 2 male doctoral students, one in geography with 13 years of English-language experience and one in food science with 16 years of English-language experience; 1 male masters' student in international studies with 19 years of English-language experience and 1 female master's student in agriculture with 10 years of English-language

experience. Two subjects were in their second year of their graduate programs (geography and international studies subjects) and two were in the English Language Institute (ELI) (food science and agricultural subjects). The purpose of using Consulting Group subjects was to read the *Modified SORS Draft One* (See the "Instrument" section of this chapter) and provide feedback for the researcher if they can understand the English survey statements and if they have any suggestions for improving survey. To achieve this purpose, the researcher contacted the Consulting Group subjects through their personal emails inviting them to participate in the survey research as a consultant. After the consultants emailed the researcher and agreed to participate, the research emailed each consultant a copy of the *Modified SORS Draft One* and asked the consultants if they can read the survey and provide the researcher with a hard copy of the survey and his/her feedback within one week's time.

Table 1

Consulting Group Subjects (N=4)

<u>Degree Programs</u>	<u>Gender</u>	Years of Studying English	<u>Major</u>
PhD	Male	13	Geography
PhD	Male	16	Food Science
Master	Male	19	International Studies
Master	Female	10	Agriculture

The Construction Phase: Referral and Embassy Group Subjects

The subjects of this phase were a convenient sample (N=115). They came from referrals and from the Iraqi Embassy in Washington DC. The Referral Group included Iraqi graduate students the researcher knows, knows how to contact, or had referred to him. These participants are: self-funded graduate students known to the researcher; from the Iraqi Scholars and Leaders

Program (ISLP),<sup>7</sup> and from Fulbright Programs.<sup>8</sup> The researcher contacted the Referral Group subjects through their personal emails inviting them to participate in the survey research with the understanding that their survey results would not be anonymous but known to the researcher.

Embassy in Washington DC, mediated to protect the anonymity of individuals on the Embassy's list. Thus, the researcher emailed the Cultural Attaché his curriculum vita, greeting letter, short description of the thesis project and significance of the research for Iraqi college students inside and outside Iraq. The Cultural Attaché agreed to forward the researcher's email requesting participants to the Iraqi graduate students on his Embassy's list. Those willing to participate clicked on a link in the e-mail that took them directly to *Survey Monkey*. These graduate students remained anonymous throughout the process: their survey results could not be connected to them, their e-mail accounts, or their university in the US. For the purposes of this study, these 2 groups are not distinguished from each other but become anonymous once the survey data is collected and transferred to an *Excel* worksheet with identification numbers given for subjects. The demographic information for the Referral and Embassy subjects is summarized in Table 2.

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<sup>&</sup>lt;sup>7</sup> *ISLP* is a competitive scholarship program that provides selected graduate (Master's or Doctoral) and current or prospective undergraduate students from Iraq with fully funded scholarships toward the completion of a degree at a college or university in the United States.

<sup>&</sup>lt;sup>8</sup> Sponsored by the United States Department of State, Bureau of Educational and Cultural Affairs, the Fulbright Program provides funding for students, scholars, teachers, and professionals to undertake graduate study, advanced research, university teaching, and teaching in elementary and secondary schools.

<sup>&</sup>lt;sup>9</sup> Survey Monkey is online survey software and questionnaire tool service.

Table 2

Gender, Age, Degree Programs, and Majors of Participants

# Referral and Embassy-Contacted Graduate Students Studying in the USA (N=115)

<b>Background Variables</b>	<b>Frequency</b>	Percentage of Sample
<b>Gender</b>		
Female	32	27.6
Male	83	72.2
<u>Age</u>		
23-29	27	23.5
30-39	64	55.6
40-57	24	20.9
Degree programs		
MAs	66	57.4
PhDs	49	42.7
<u>Majors</u>		
Engineering	29	25.2
Medical and Veterans	15	13.0
Science	71	61.7

## Instrument

# The Original SORS

As mentioned earlier in Chapter II of this research, Mokhtari and Sheorey (2002) created the SORS based on the *Metacognitive-Awareness-of-Reading-Strategies Inventory, the MARSI*,

(Mokhtari & Reichard, 2000) and developed the SORS originally to learn the reading strategies native English-speakers use. They and other researchers came to use the SORS to determine which reading strategies English Language Learners (ELL) and English as a Foreign Language (EFL) learners use when reading English. The SORS has 30-item, reading-strategy survey statements. Each of the 30 survey items fits within one of 3 reading comprehension strategy categories (global, problem-solving, and support) and includes answer choices based upon a fivepoint Likert scale ranging from 1 ("I never or almost never do this") to 5 ("I always or almost always do this"). The respondents read each statement and click the number that applies to them indicating the frequency with which they use the reading strategy identified in the statement. Thus, the higher the number, the more frequent the respondent's perceived strategy use. Since the SORS was based on Mokhtari & Reichard's (2002) Metacognitive -Awareness-of-Reading-Strategies Inventory (MARSI), the reliability and internal consistency of the MARSI was used to describe the reliability of the SORS. The alpha coefficient for internal consistency and reliability was .93. The subscales of the MARSI also show high internal consistency and reliability, with an alpha coefficient of .92 for the global subscale, .79 for the problem-solving strategies subscale, and .87 for the support strategies scale (Mokhtari & Reichard, 2002).

## The Modified SORS Draft One

In *The Modified SORS Draft One*, I made one modification to the original SORS (Mokhtari &Sheorey, 2002). I kept the instructions section and the 30-item, reading-strategy survey statements in the English, but I added a background information section in English (Appendix A). In the background information section, participants are asked to write their names, targeted degrees, gender, years of studying English, majors, how the participants would rate their reading ability in their native language on a scale from 1-6, and "comments/feedbacks" and "thank you" note section. I borrowed the questions in this background information section from

the background information section of the SORSI. Willcut (2002) used the SORSI to examine the reading strategies of Hispanic undergraduate students studying at Oklahoma State University. Next, I contacted the Consulting Group subjects through their personal emails inviting them to participate in the survey research as a consultant. After the consultants agreed to participate, I emailed each consultant a copy of *The Modified SORS Draft One* and asked the consultants if they can read the survey and provide the researcher with a hard copy of the survey and his/her feedback within one week's time. After the researcher received the hard copies from the consultants, the researcher met with the consultants and asked them for verbal feedbacks. These are some of their verbal suggestions:

- 1. They suggested removing the "name" question in background information.
- 2. They suggested adding Arabic translation for the English strategy statements.
- 3. They suggested adding a Greeting Letter in Arabic. The letter should explain who the research is, what the title and purpose of the survey research is, and the email address and phone number of the researcher.

### The Modified SORS Draft Two

In this phase, the researcher decided to translate <sup>11</sup> and make adjustments to *The Modified SORS Draft One*. At the end of this phase, *Modified SORS Draft One* changed into *Modified SORS Draft Two* and was used to collect the data from the Referral Group and Embassy Group subjects.

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<sup>&</sup>lt;sup>10</sup> SORSI stands for the Survey of Reading Strategies Inventory for Students of Spanish.

<sup>&</sup>lt;sup>11</sup> The researcher is a certified translator in Iraq, has worked as a professional translator for more than five years in Iraq, and has taught English language for over 15 years. The researcher modified Al-Nujaidi and Alsheikh's Arabic translation to be more "friendly" to Iraqi readers.

# Translation of "The Modified SORS Draft One"

The researcher decided to translate *The Modified SORS Draft One* from English into Arabic based on the Consultant Group subjects' suggestions, his own expertise as an English learner and teacher, and Al-Nujaidi's recommendation. In the following section, I will explain why Al-Nujaidi wanted to translated his adopted SORS into Arabic and why I followed his recommendation and translated *The Modified SORS Draft One*.

Al-Nujaidi (2003) was a PhD student in the English Department at Oklahoma State University. Al-Nujaidi wanted to examine the reading strategies of Arab undergraduate students studying in Saudi Arabia. Al-Nujaidi adopted the original SORS (Mokhtari& Sheorey, 2002) to achieve his research purposes (For full details why Al-Nujaidi adopted the original SORS, see pp.81-85 of his dissertation). Next, Al-Nujaidi translated the adopted SORS into Arabic. To ensure that both the Arabic and English versions of the adopted SORS will elicit the same results, Al-Nujaidi sent the two versions into 6 graduate students in US universities and 2 Saudi professors in Saudi Arabia. After the pilot group (N=8) filled out the two versions and sent them back to Al-Nujaidi, Al-Nujaidi analyzed the responses and found out some "inconsistent responses." Al-Nujaidi further explained these inconsistencies:

The examination of response inconsistency revealed that, in general, the Arabic translation [of the adopted SORS] did not seem to pose a problem in understanding the reading strategies elicited in the survey... [Another] response inconsistency was related to the participants' confusion about some statement in the English version of [the adopted SORS]. The confusion some of the participants had in understanding the English strategy statements emphasized the importance of the translation. If such items were confusing to a participant [in the pilot group] who had had 10 years of experience with English texts as a graduate student at US universities, the strategy statements will cause more

confusion and misunderstanding for [undergraduate students in Saudi Arabia]. (pp. 84-85)

I should also mention that I used Alsheikh's (2002) Arabic translation of the original SORS (Mokhtari &Sheorey, 2002) to translate *The Modified SORS Draft One* from English into Arabic. I wanted to borrow from Alsheikh's Arabic translation because I wanted a second "strong" translation besides Al-Nujaidi's translation.

Next, after I borrowed the Arabic translations from Al-Nujaidi and Alsheikhs' translations, I decided to make two modifications to their translations:

- 1. Although Iraqis and Saudi college students speak Arabic, they use two different dialects of Arabic. These dialects use different vocabularies and sometimes are not mutually intelligible. For this reason, I replaced some Arabic words from Al-Nujaidi and Alsheikhs' translations with words that Iraqi participants would understand (for example, for the word "survey" I replaced the word, "استبان" with its Iraqi counterpart, "استبان").
- 2. I rephrased Arabic translation of some strategy statements so that they sound intelligible for Iraqi-educated graduate students. For example, for SORS strategy number 2, "I take notes while reading to help me understand what I read," I rephrased Al-Nujaidi's translation " كتب " with my translation " المناف المنا

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<sup>&</sup>lt;sup>12</sup> Al-Nujaidi's translation reads "write some notes while I read to help me in comprehending what I have read" while my translation reads "take notes while reading a text to help me understand what I am reading/ what I read." The subjects in both Arabic translations are omitted but it is understand from the context that it means "I".

# Adjustments to "The Modified SORS Draft One"

The adjustments to *The Modifies SORS Draft One* were in response to the Consultant Group subjects' suggestions and the researcher's expertise as an English learner and teacher (See *Appendix: B*). Below are the adjustments:

- 1. I added a *Greeting Letter Page in Arabic*. The Greeting Letter tells the survey participants who the researcher is, what the title and purpose of the survey research is, and the email address and phone number of the researcher.
- 2. I kept the *Background Information* section *in English*, but I removed the "name" question. I kept the questions that ask the survey participants their ages, genders, degrees(masters/PhDs), how long they have been studying English, how the participants would rate their reading ability in their native language on a scale from 1-5. But, and I added a question that asks participants to rate their reading ability in English on a scale from 1-5.
- 3. I added an *Instructions Page in Arabic*. In this page, the participants read why the researcher is conducting the survey research, the title of the survey study, how to fill out the survey statements online, and three reminders: there is no right or wrong answer; if the survey window is closed while they are filling out the survey statements online, they can always go back and click on the survey link in the email sent to them and finish their answers; their answers are always saved; pictures and examples were added along each survey statement to clarify the meanings of the survey statements in English; and they need only 5-8 minutes to finish the 30 survey statements.
- 4. I typed the Arabic sentences beneath each English survey statement. Based on my experience as a professional translator, I knew to format the translation to help participants understand what the English statement means, for the Arabic translation complements the English one by filling in gaps in understanding. The desired result would be for the participants to understand

- each statement well enough to answer accurately so the researcher has the most accurate information possible.
- 5. I added one picture per English survey statement item. For over 15 years of teaching English to Iraqi learners in Iraq and the US have taught me that visualization helps Iraqi learners with learning in general and with reading comprehension in particular. Also, because Mokhtari and Sheorey (2002) developed the SORS to learn native English speakers' reading strategies, I expected a good number of Iraqi graduate students to have never heard about these strategies and therefore they would have difficulty understanding what the statements mean. The Consulting Group subjects already confirmed this observation through their "verbal" feedbacks explaining that some of the original English-language SORS statements were ambiguous and did not "click" in their brains. Also, although the Arabic translation helps in understanding most of the English survey statements, it does not help with every survey statement item. For example, the Arabic translation for "I try to guess what the context of the text is about when I read" does not explain what the strategy means in English or how it works when someone is reading. It is a conceptual, "skilled or advanced" reading strategy. A picture might help make clear the statement's meaning. In short, I selected colorful pictures that would help readers connect each survey item to their prior knowledge, that would help fill any gaps in comprehending the English and Arabic statements, that would simplify the meaning of difficult ones, and that would not offend any participants—I was especially sensitive to culture, age, gender, and ethnicity.
- 6. I added *examples in English*. I used 5 examples to help survey participants understand the meaning of couple of difficult strategy statements. For survey statement "I have a purpose in mind" I used this example "I read, for example, to find important detail or information, to answer a specific question, to evaluate what I reading, etc."; for "I think about what I know to help me understand what I read," I used "link the text I read to my background(prior) knowledge"; for "I take an overall view of the text to see what it is about before reading it" I

used this example "examine the outline of the text, the headings and subheadings, illustrations, etc."; for "when reading, I decide what to read closely and what to ignore" I used this example "I, myself, for example, when I read an article, I read the abstract to make sure the papers is what I am looking for and is worthy my time and effort... I choose which sections are important for me to read and I ignore reading others" and lastly for "I use context clues to help me better understand what I am reading" I used this example "context clues (as in the examples in the picture) help readers find out the meaning of unknown words, explain the meaning of concepts and terminologies, etc." Again, I tried to use my teaching, translating, and life experiences to choose examples that would not confuse the participants.

- 7. I added a Thank You and Feedback/Comment Page.
- 8. As final step to refine to the Arabic translations for the Greeting Letter and the Instructions

  Page, I asked two graduate students to review and check the translations. The two reviewers

  were PhD agricultural students. The reviewers have a strong knowledge about Iraqi Arabic as
  they published couple of journal papers in Arabic in Iraq. After they reviewed the translation,
  they approved it.

Noteworthy, I had the good fortune of working with one of the creators of the original, English-language SORS, *Professor R. Sheorey*. I only made the above modifications after consulting Dr. Sheorey and receiving his approval for making the modifications I used for my own research.<sup>13</sup>

The Construction of the Modified Online SORS Draft Two

Unlike the original SORS developers, Mokhtari and Sheorey (2002), I administered *The Modified SORS Draft Two* electronically through *Survey Monkey* rather than in person using

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<sup>&</sup>lt;sup>13</sup> The researcher adviser at the time when the researcher borrowed original SORS (Mokhtari &Sheorey, 2001) and worked on Modified SORS Draft One and Two, and adding the Arabic translation for Modified SORS Draft Two was Dr. Ravi Sheorey.

Letter Section " in Arabic (a short biography of the researcher, the purpose for conducting the survey, and benefits of conducting the research); 2) "Background Information Section" in English (subjects provide age, gender, graduate major, years of studying English, and rate their reading ability in English and their native language); 3) "Instructions Section" in Arabic (subjects read the instructions which explain the rating scale, how to answer the survey items, and that they do not need to finish the survey in one sitting but may close the browser [with answers automatically saved] and return to finish the survey at a later time); 4) "Survey Statements Pages" (each page includes one survey item in English with an Arabic translation, one example in English for selected survey statements in English and a picture that illustrates each survey statement in English); 5) "Thank You and Feedback/Comment Page" in English (researcher thanks the subjects for their participation and requests that they leave feedbacks or comments in English or Arabic).

#### **Data Collection**

On August 1<sup>st</sup>, 2011, the researcher sent an email with the link to *The Modified Online SORS Draft Two* to the participants through their personal email addresses (Referral Group) and through the Iraqi Cultural Attaché (Embassy Group). In the emails, the researcher informed the participants that they have two weeks window time to complete the survey, explained that clicking on the link will take them to the survey on *Survey Monkey*, and guided them to move from reading the instructions to the survey itself where they were to click on the answer choice that best applies to them for each item. After each participant completed the survey through *Survey Monkey*, their responses appeared on the researcher's *Survey Monkey* account where they were saved. The researcher then exported the data to *Excel* worksheets for data analysis.

Although the Referral Subjects were identified through their e-mails on *Survey Monkey* while the

Embassy Subjects were anonymous, once the data were saved to *Excel* worksheets, all subjects were assigned numbers for anonymity.

# **Research Questions**

- 1. Which reading-comprehension strategies do Iraqi graduate students (studying at US universities) perceive themselves to use when reading English-language academic texts?
- 2. Do the participants' genders affect their perceived reading strategies use?

#### **Data Analysis**

The data for this study were analyzed by using the Statistical Package for the Social Sciences (SPSS, version 9.0). First, descriptive statistics such as frequencies were calculated to obtain the overall patterns of reported general reading strategies of Iraqi graduate students studying at US universities. This procedure provided information about their strategy choices within the sample by ranking the subjects' reported general strategies in order of their preferences according to mean frequency. Calculating the mean frequency provided the answer to research question one. Second, the t-test was used to examine the impact of gender on reading strategy use. The t-test provided the answer to research question two. The results of analysis are discussed in detail in the following chapter.

#### **CHAPTER IV**

#### FINDINGS AND DISCUSSION

This chapter begins with the findings of the research study outlined in Chapter III with a summary and discussion. "General Perceived Reading Strategy Use" is a summary of the results Iraqi graduate students studying in US schools reported of their reading strategy use; next "Impact of Gender on Strategy Use" is a summary and report of the results of the impact of gender of the participants in the survey research on the reading strategy use; and finally "Summary of Findings and Discussion" is a summary and discussion of the findings.

#### **General Perceived Reading Strategy Use**

Three reading strategy categories are surveyed in this study: global strategies (GLOB), problem-solving strategies (PROB), and support strategies (SUP). All 30 survey items fall within one of these types of reading comprehension strategies. Throughout the chapter, for reading ease, I refer to the survey participants as "Iraqi graduate students." The reader is to understand that these are the Iraqi graduate students studying in US schools who participated in this study (n=115). Table 3 shows the results for the first research question: Which reading-comprehension strategies do Iraqi graduate students (studying at US universities) perceive themselves to use when reading English-language academic texts? Note that results in bold-faced type on Table 3 indicate the highest use of reading strategies. Iraqi graduate students' reported preferences are arranged in descending order by their means (i.e., the most often used to the least often used strategies).

On a scale of one to five, mean frequencies of 3.5 or above indicate students used the strategy frequently; mean frequencies between 2.5 and 3.4 indicate moderate use; and mean frequencies of 2.4 and below indicate no use of the strategy surveyed (Oxford, 1990). With respect to reported general reading strategy use, 20 of the 30 items fell in the high usage group (mean=3.5 or above), and 10 strategies had means between 2.5 and 3.4 indicating moderate use of these strategies. The average for reported general strategy use reflects how often these Iraqi readers (n=115) report using the strategies when reading English texts.

Table 3

General Perceived Reading Strategy Use in Descending Order (N=115)

Strategy	Survey	Strategy Descriptions	Mean	SD
Category	Item #			
PROB	9	I try to get back on track when I lose	4.36	.740
		concentration.		
PROB	14	When the text becomes difficult, I pay close	4.30	.749
		attention to what I am reading.		
PROB25	25	When the text becomes difficult, I re-read it to	4.28	.744
		increase my understanding.		
GLOB	15	I use tables, figures, and pictures in text to	4.25	.963
		increase my understanding.		
GLOB	1	I have a purpose in mind when I read	4.10	.882

Strategy	Survey	Strategy Descriptions	Mean	SD
Category	Item #			
GLOB	3	I think about what I know to help me understand	3.97	.873
		what I read.		
PROB	7	I read slowly and carefully to make sure I	3.97	.858
		understand what I am reading.		
PROB	28	When I read, I guess the meaning of unknown	3.97	0954
		words or phrases.		
SUP	10	I underline or circle information in the text to help	3.88	1.163
		me understand.		
PROB	1	I adjust my reading speed according to what I am	3.84	.996
		reading		
GLOB	23	I check my information when I come across new	3.83	.982
		information.		
SUP	22	I go back and forth in the text to find relationships	3.78	.825
		among ideas in it.		
PROB	19	I try to picture or visualize information to help me	3.77	.958
		remember what I read.		
GLOB	21	I critically analyze and evaluate the information	3.77	.994
		presented in the text.		
GLOB	12	When reading, I decide what to read closely and	3.74	1.018
		what to ignore.		
PROB	16	I stop from time to time and think about what I am	3.74	.965
		reading.		

Strategy	Survey	Strategy Descriptions		SD
Category	Item #			
GLOB	6	I think about whether the content of the text fits	3.71	.998
		my reading purpose.		
GLOB	4	I take an overall view of the text to see what it is	3.69	1.087
		about before reading it.		
SUP	2	I take notes while reading to help me understand	3.60	1.091
		what I read.		
GLOB	17	I use context clues to help me better understand	3.60	1.041
		what I am reading.		
GLOB	20	I use typographical features like boldface and	3.48	1.209
		italics to identify key information.		
GLOB	24	I try to guess what the context of the text is about	3.41	1.042
		when I read.		
GLOB	8	I review the text first by noting its characteristics	3.32	1.081
		and organization.		
SUP	13	I use reference materials (e.g., a dictionary) to	3.32	1.174
		help me understand what I read.		
SUP	26	I ask myself questions I like to have answered in	3.23	1.140
		the text.		
SUP	18	I paraphrase (restate in my own words) to	3.16	1.204
		better understand what I read.		
GLOB	27	I check to see if my guesses about the texts are	3.13	1.151
		right or wrong.		

Strategy	Survey	Strategy Descriptions	Mean	SD
Category	Item #			
SUP	30	When reading, I think about information in	2.98	1.228
		both English and my mother tongue.		
SUP	25	When the text becomes difficult, I read aloud	2.55	1.299
		to help me understand what I read.		
SUP	29	When reading, I translate from English into	2.53	1.293
		my native language.		
Overall Av	erage		3.64	32.79

The overall average of 3.64 for the thirty items would indicate that the Iraqi graduate students studying in US schools typically perceive themselves as using a variety of strategies while reading English texts. The top five strategies that Iraqi graduate students reported generally using most while reading in English are: (PROB9), "I try to get back on track when I lose concentration" (M=4.36; SD.740); (PROB14), "When the text becomes difficult, I pay close attention to what I am reading" (M=4.30; SD=.749); (PROB25), "When the text becomes difficult, I re-read it to increase my understating" (M=4.28; SD=.744); (GLOB15), "I use tables, figures, and pictures in text to increase my understating" (M=4.25; SD.963); and (GLOB1), "I have a purpose in mind" (M=4.10; SD=,882). The next five strategies, on the other hand, that Iraqi graduate students reported generally using least while reading in English are: (SUP18), "I paraphrase(restate in my own words) to better understand what I read" (M=3.16; SD=1.204); (GLOB27), "I check to see if my guesses about the texts are right or wrong" (M=3.13; SD=1.151); (SUP30), "When reading, I think about the information in both English and my own tongue" (M=2.98; SD=1.228), (SUP25), "When the text becomes difficult, I read aloud to help me

understand what I read" (M=2.55; SD=1.299); and (SUP29)," When reading , I translate from English into my native language" (M=2.53; SD=1.293).

As shown in Table 4 below, 9 of the 20 strategies that fell in the high usage group (mean of 3.5 or above) were global reading strategies; 8 were problem-solving strategies; and 3 were support strategies. In the moderate group, strategy use shifted to 6 of 10 support strategies and 4 of 10 global strategies.

Table 4

Reading Strategies Most and Least Used (N=115)

Strategy	Strategy Category	Mean	SD	Level
Items #	and Description			
	Global Reading Strategies			
15	I use tables, figures, and pictures in text to increase	4.25	.963	High
	my understanding.			
1	I have a purpose in mind when I read	4.10	.882	High
3	I think about what I know to help me understand	3.97	.873	High
	what I read.			
23	I check my information when I come across new	3.83	.982	High
	information.			
21	I critically analyze and evaluate the information	3.77	.994	High
	presented in the text.			
12	When reading, I decide what to read closely and	3.74	1.018	High
	what to ignore.			

Strategy	Strategy Category	Mean	SD	Level
Items #	and Description			
6	I think about whether the content of the text fits my	3.71	.998	High
	reading purpose.			
4	I take an overall view of the text to see what it is	3.69	1.087	High
	about before reading it.			
17	I use context clues to help me better understand	3.60	1.041	High
	what I am reading.			
20	I use typographical features like boldface and italics	3.48	1.209	Medium
	to identify key information.			
24	I try to guess what the context of the text is about	3.41	1.042	Medium
	when I read.			
8	I review the text first by noting its characteristics	3.32	1.081	Medium
	and organization.			
27	I check to see if my guesses about the texts are right	3.13	1.151	Medium
	or wrong.			
	<b>Problem Reading Strategies</b>			
9	I try to get back on track when I lose concentration.	4.36	.740	High
14	When the text becomes difficult, I pay close	4.30	.749	High
	attention to what I am reading.			
25	When the text becomes difficult, I re-read it to	4.28	.744	High
	increase my understanding.			
7	I read slowly and carefully to make sure I	3.97	.858	High
	understand what I am reading.			

Strategy	Strategy Category	Mean	SD	Level
Items #	and Description			
28	When I read, I guess the meaning of unknown	3.97	0954	High
	words or phrases.			
11	I adjust my reading speed according to what I am	3.84	.996	High
	reading			
19	I try to picture or visualize information to help me	3.77	.958	High
	remember what I read.			
16	I stop from time to time and think about what I am	3.74	.965	High
	reading.			
	Support Reading Strategies			
10	I underline or circle information in the text to help	3.88	1.163	High
	me understand.			
22	I go back and forth in the text to find relationships	3.78	.825	High
	among ideas in it.			
2	I take notes while reading to help me understand	3.60	1.091	High
	what I read.			
13	I use reference materials (e.g., a dictionary) to help	3.32	1.174	Medium
	me understand what I read.			
26	I ask myself questions I like to have answered in the	3.23	1.140	Medium
	text.			
18	I paraphrase (restate in my own words) to better	3.16	1.204	Medium
	understand what I read.			

Strategy	Strategy Category	Mean	SD	Level
Items #	and Description			
30	When reading, I think about information in both	2.98	1.228	Medium
	English and my mother tongue.			
25	When the text becomes difficult, I read aloud to help	2.55	1.299	Medium
	me understand what I read.			
29	When reading, I translate from English into my	2.53	1.293	Medium
	native language.			

### **Impact of Gender on Strategy Use**

The researcher ran a t-test to answer the second research question: *Do the participants'* gender affect their perceived reading strategies use? The t-test revealed no statistically significant differences between the mean strategies use male and female participants reported.

# **Summary of Findings and Discussion**

Research question one: Which reading-comprehension strategies do Iraqi graduate students (studying at US universities) perceive themselves to use when reading English-language academic texts?

Using the *Modified Online SORS Draft Two*, I wanted to determine the types of reading strategies Iraqi graduate students studying in US universities report using when reading academic texts in English. Data analysis revealed that these Iraqi graduate students' reported reading strategies use, as measured by the SORS statements, range from high (20 of the 30 reading strategies with M = 2.5 or above) to moderate (10 of the 30 reading strategies with M = 2.4 to 3.3) use.

As a group, the Iraqi graduate students reported using global strategies more frequently than problem-solving and support strategies. Which factors have led to the high frequency of global reading strategy use? A possible explanation is the participants' degree programs. A large number of subjects (n=115) are engineering or science students. Students in these majors tend to have textbooks written logically to lay out information. Readers are required neither to interpret nor to draw inferences as they would when reading articles, essays, novels, and other genres. Such texts tend to be similarly organized across languages, countries, and cultures. Thus, these readers come to reading textbooks already knowing how to use global reading strategies: they come to reading with a purpose, use their background knowledge, review the text and its features, and examine the tables, figures, and bold-faced headings that summarize portions of text. They have practice using these vital reading strategies for effective comprehension in their own language and therefore come to English-language texts as skilled readers of academic texts in their own language and content areas. Another reason why these students may have ranked global reading strategies high concerns their ages: a large percentage of the subjects in this study are older (88 participants are older than 30), mature graduate students who come to English-language texts with extensive life, school, and reading experiences. They know how to navigate through academic texts and are skilled at navigating academic texts using global reading strategies. They therefore ranked their use of global strategies high. A possible third reason for ranking global reading strategy use high concerns how they were taught to read in Iraq. In Iraq, students are taught how to read college textbooks by being taught global reading strategies. Since students learn and use these strategies often, they transfer that reading knowledge to reading Englishlanguage texts. Fourth, many Iraqi graduate students learn "effective" (global) reading strategies when studying at English language institutes (ELI) in the US. Because they learned these strategies and use them well, they also perceived that they indeed use these strategies often.

In contrast and perhaps surprisingly, Iraqi graduate students reported using problemsolving and support strategies only moderately to address comprehension problems that arise

while reading. This relatively infrequent use of support strategies at first seems inconsistent with such studies as Al-Nujaidi's (2003) and Sheorey and Mokhtari's (2001). Specifically, Al-Nujaidi (2003), examining reading strategies of 226 Saudi in Saudi Arabia, found his participants showing "more frequent use of problem-solving strategies while they seem to use global and support strategies with similar frequency" (p.102). Sheorey and Mokhtari (2001), studying undergraduate English language learners (n=152), found ELL "students attribute high value to support reading strategies regardless of their abilities" (p. 445). Although the results may appear to contradict each other, one must compare apples to apples. Unlike the participants of this study, the participants in Al-Nujaidi's (2003) and Sheorey and Mokhtari's (2001) studies were undergraduates. The difference in age, maturity, school, and life experiences might well account for the shift away from support reading strategies seen in this study's graduate student sample (n=115). Malcolm's (2009; 2012) and Amer, Al Barwani, and Ibrahim's (2010) research evidences senior college students using more skilled reading strategies than freshmen and sophomores because they have been reading and studying in English longer than freshmen and sophomores. Based on Malcolm's (2009; 2012) and Amer, Al Barwani, and Ibrahims' (2010) research, one might conclude that Iraqi graduate students in this study (n=115) are skilled readers and learners, for they have spent numerous years working professionally and reading and studying academic texts in both Arabic and English. Perhaps, Iraqi graduate students use support strategies only as a last resort when global and problem-solving strategies do not work and comprehension is failing.

Research Question Two: Do the participants' gender affect their perceived reading strategies use?

T-test results revealed *no statistically significant* differences between the overall mean use of using strategies male and female participants reported. This result is inconsistent with the findings of other studies which have shown that with respect to language learning strategies,

females typically use strategies more frequently than males (Sheorey, 1999 and Oxford & Crookall, 1989) and with Sheorey and Mokhtari (2001) reported reading strategy study. A possible reason that can explain the inconsistent results of this study with other studies is due to the low number of female participants (n=32) in this study. The interaction between the general reported strategy use and gender warrants further research.

#### **CHAPTER V**

### **CONCLUSION**

In this chapter, I identify the implications, conclusions, limitations, and suggestions for future research.

# **Implications**

For Future Researchers

The SORS is a useful tool for surveying reading strategies of college students and collecting data. It has been field-tested and appraised for its content. Yet, researchers should think ahead whether they want to use Mokhtari and Sheorey's original SORS (2002) or they want to use a modified SORS version, as I did in this study, before they administer the survey to their research participants. Also, Arab researchers, in particular, should think ahead whether or not they want to translate the SORS into Arabic, and if they do, what Arabic they want to use for translating the SORS. One last comment, Arab researchers may need to think if they would administer both the English and Arabic versions of the SORS to their research participants, or they should use only a modified SORS version. Based on my knowledge and experience as an ELL/EFL learner and teacher, and based on comments from couple of my survey participants, my modified SORS version worked well for my research purposes and participants. In my version of the SORS, I was not testing my participants' abilities to read in English. Rather, my purpose

when I modified the SORS was to ensure that participants understand the survey strategy statements in English along their Arabic translations so that my participants give me good responses that reflect their actual use of reading strategies.

Moreover, although couple of SORS studies looked into Arab college student's reading strategies use, it is always safer that researchers administer their SORSs to their own research sample to examine their own population within their particular school contexts. This helps these researchers obtain concrete evidences about their research participants and come up with accurate conclusions about how their participants read. Lastly, although survey research is a great tool for collecting data, they can be very frustrating for researchers. Researchers should think ahead of selecting the research sample, pilot study group, translation if they decide to translate the SORS, administrating the survey, colleting the data, and results analysis. Researchers should think ahead of all these factors so that they carry out a strong research, come up with strong results, and draw accurate conclusions.

#### For ELL/EFL Teachers and Learners

Because using reading strategies is important to understand academic texts in English, the results of this study have several implications for teachers and learners in ELL and EFL classrooms:

- 1. ELL and EFL reading teachers can use the SORS or a modified SORS version to survey their students' reading strategies use in their classrooms. They can use the survey results analysis to identify which reading strategies their students use to understand academic texts in English. Also, teachers can learn from these results if their students use "poor" reading strategies and thus they can work on designing in-class reading instruction that help these students avoid using poor reading strategies and learn to use skilled ones.
- 2. ELL/EFL teachers can use the SORS or a modified SORS version to make their students aware of additional reading strategies that their students were not acquainted with before.

This help students learn extra reading strategies that make these students comprehend English school texts successfully.

- ELL/EFL teachers can read SORS studies in different school contexts and learn from these studies. These studies may give them some insights why their students are struggling with reading.
- 4. ELL/EFL learners can learn from this study that college students use reading strategies differently. Skilled readers are proficient readers because they read for longer hours, they have been reading for a longer time in their academic programs, they are older people, they have extensive knowledge in their focus areas of study, they have extensive life experience, and probably because of their own interest in reading. Poor readers also read differently. But, if poor readers want to read as skillfully as good readers, they need to learn from skilled readers how to read effectively and improve their own reading.

#### **Conclusions**

Three main conclusions are drawn from this study:

First, Iraq graduate students studying in US universities are aware of arsenal of reading strategies. This study clearly shows that these students perceived using various reading strategies at the high and medium level when they read academic texts in English. They reported using global strategies more frequently while they reported using problem solving and support strategies less frequently.

Second, and most importantly, Iraqi graduate students are "skilled readers" who know how to use various reading strategies "effectively" for successful comprehension. The survey results provided evidences and examples of their proficient reading strategies use. For example, they use textual aids to understand what they read, they identify their goals before they start reading a text, they link the text they read to their background knowledge for better comprehension, they check what they read against their prior knowledge, they think and criticize

what they read, they make strategic decisions on what to read and what to ignore, they make preguessing of the text content, they monitor their comprehension while reading, they avoid thinking in Arabic to understand the English text, and they use dictionary and translation strategies as a last resort to prevent comprehension from failing down.

Lastly, although gender did not seem to have an impact on the perceived general reading strategies used by Iraqi students, the females sample number was small (N=32) and thus cannot be used for making accurate calculations and conclusions about whether gender affected strategy use.

#### Limitations

- 1. The population sample of this study included only 115 Iraqi graduate students. When the researcher contacted the Iraqi Embassy in the US, they informed the researcher that there are between 100 and 124 graduate students sponsored by Iraqi government studying in US universities in June 2011. Based on my estimations and contacts, there were also 40-45 ISLP, Fulbright, and self-funded graduate students in US universities in June 2011. Therefore, this study used a "strong sample" of the total number of Iraqi graduate students studying in US universities. Still, for generalizability purposes much larger numbers are needed.
- 2. The study had an "unequal" number of Iraqi female and male participants. It would be useful to conduct a survey study with equal numbers from both genders.
- 3. To the researcher's knowledge, this study was the first Iraqi study that used a modified SORS version to examine the reading strategies use of Iraqi college students in ELL school environments. Although the modified SORS version of this study has been useful in identifying what reading strategies Iraqi graduate students use when they read academic texts in English, the modified SORS version might need more investigation and improvement to

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<sup>&</sup>lt;sup>14</sup> As a member of the *Iraqi Scholars and leaders Program*, the researcher has contact with the other Program members and Fulbright Scholars. Through these programs and social networking internet accounts, the researcher also has contact with self-funded Iraqi graduate students.

strengthen its reliability and validity.

#### **Recommendations for Future Research**

- 1. The researcher surveyed how Iraqi graduate students perceive themselves using reading strategies when they read academic texts in English. Further research should survey which reading strategies Iraqi graduate students perceive using when reading Arabic texts. This information would confirm and/or disconfirm the theory of "transfer of reading strategies" from reading in Arabic into reading in English.
- 2. It would be useful to research if Iraqi graduate students' oral language proficiencies affect their use of reading strategies when reading academic English text. These results might help explaining the target language proficiency's role in using reading strategies in the target language.
- It would be useful to assess which reading strategies Iraqi students use when reading texts of different lengths, difficulties, and topics.
- It would be use useful to conduct a survey study that compares reading strategies of Iraqi
  graduate students who are studying in US school with graduate students who are studying in
  Iraq.
- 5. It would be useful to study the relation between participants' years of studying English and reading strategies use.
- 6. It would be useful to survey reading strategies use of non-science and non-math majors to determine if there is a difference in strategy use between academic/textbook reading for information and reading of literary texts.
- **7.** Finally, it would be useful to conduct a think-aloud study by randomly selecting a few survey participants to uncover how Iraqi readers read and understand academic texts in English and to help them in becoming strategic readers.

# **REFERENCES**

- Aebersold, J., & Field, M. (1997). From reader to reading teacher: Issues and strategies for second language classrooms. Cambridge: Cambridge University Press.
- Afflerbach, P., Pearson, P. D., & Paris, S. (2008). Skills and Strategies: Their Differences, their Relationships, and why it Matters. In K. Mokhtari & R. Sheorey (Eds.), *Reading Strategies of First- and Second-Language Learners: See How They Read* (pp. 11-24).

  Norwood, Massachusetts: Christopher-Gordon Publisher, Inc.
- Alderson, J., & Urquhart, A. H. (1988). "This test is unfair: I'm not an economist". In P.L. Oxford, R. L., Ehrman, M., & Nyikos, M. (1988). Vive la difference? Reflections on sex differences in use of language learning strategies. *Foreign Language Annals*, 21(4), 321-329.
- Alderson, L. (1984). Reading in a foreign language: A reading problem or language problem? In J. Alderson, and A. Urquhart (Eds.), *Reading in a foreign language*, (pp.1-24), New York: Longman.
- Al- Kubaisi, A. (1993). Reading Strategies Used By Iraqi College Students Of English As A Foreign Language. (Unpublished doctoral dissertation). University of Baghdad.

- Al-Nujaidi, A. H. (2003). The relationship between vocabulary size, reading strategies, and reading comprehension of EFL learners in Saudi Arabia. (Unpublished doctoral dissertation). Oklahoma State University.
- Alsheikh, N. (2002). An examination of the metacognitive reading strategies used by native speakers of Arabic when reading academic texts in English and Arabic. (Unpublished doctoral dissertation). Oklahoma State University.
- Alsheikh, N. (2011). Three readers, three languages, three texts: The strategic reading of multilingual and multiliterate readers. *The Reading Matrix*, 11(1), 34-53.
- Alsheikh, N., & Mokhtari, K. (2011). An examination of the metacognitive reading strategies used by native speakers of Arabic when reading in English and Arabic. *English Language Teaching*, 4 (2), 151-160.
- Amer, A., Al Barwani, T., & Ibrahim, M.(2010). Student teachers' perceived use of online reading strategies. *International Journal of Education and Development using Information and Communication Technology*, 6 (4), 102-113.
- Anderson, N. J. (1999). Exploring second language reading: Issues and strategies. *The Electronic Journal for English as a Second Language*, 4 (1). Retrieved from <a href="http://www.tesl-ej.org/wordpress/issues/volume4/ej13/ej13r7">http://www.tesl-ej.org/wordpress/issues/volume4/ej13/ej13r7</a> on June 6, 2011.
- Anderson, N. J. (2003). Scrolling, clicking, and reading English: Online Reading strategies in a second/foreign language. *The Reading Matrix*, *3*(3), 1-33. Retrieved from <a href="http://www.readingmatrix.com/articles/anderson/article.pdf">http://www.readingmatrix.com/articles/anderson/article.pdf</a> on June 6, 2011.
- Auerbach, E., & Paxton, D. (1997). "It's not the English thing": Bringing reading research into ESL classroom. *TESOL Quarterly*, *31*, 237-261.
- Baily, C. A. (1996). Unobtrusive computerized observation of compensation strategies for writing to determine the effectiveness of strategy instruction. In R. L. Oxford (Ed.), Language learning strategies around the world: Cross-cultural perspectives (Tech. Rep. No. 13, pp.

- 141-150). Honolulu: University of Hawaii, Second Language Teaching & Curriculum Center.
- Baker, L., & Brown, A. L. (1984). Metacognitive skills and reading. In R. Barr, M. L. Kamil, P.Mosenthal, & P. D. Pearson (Eds.), Handbook of reading research (Vol. 2, pp. 353–394).White Plains, NY: Longman.
- Barnett, M. A. (1988). Reading through context: How real and perceived strategy use affects L2 comprehension. *The Modern Language Journal*, 72, 150-162.
- Block, E. (1986). The comprehension strategies of second language readers. *TESOL Quarterly*, 20, 463-494.
- Carrell, P. (1983). Three components of background knowledge in reading comprehension. *Language Learning*, 32, 183-207.
- Carrell, P. L (1988). Introduction: Interactive approaches to second language reading. In P. Carrell, J. Devine, & E. Eskey (Eds.), Interactive Approaches to Second Language Reading (pp. 1-7). Cambridge University Press.
- Carrell, P. (1989). Metacognitive awareness and second language reading. *Modem Language Journal*, 73, 121-134.
- Carrell, P. (1991). Second language reading: Reading ability or language proficiency? *Applied Linguistics*, 12, 159-179.
- Carrell, P, Gajdusek, L, & Wise, T. (1998). Metacognition and ESL/EFL reading. *Instructional Science*, 26, 97-112.
- Cheng, L. (1995). What foreign learners do in their academic reading? (Eric Document Reproduction Service No. ED 386 041)
- Coady, J., & Huckin, T. (1997). Second language vocabulary acquisition. Cambridge: Cambridge University Press.
- Cohen, A. (1986). Mentalistic measures in reading strategies research: Some recent findings.

- *English for Specific Purposes*, *5*, 13 1-145.
- Eskey, D. (1988). Holding in the bottom: An interactive approach to the language problems of second language readers. In P. Carrel, J. Devine, & D. Eskey (Eds.) *Interactive* approaches to second language reading (pp.73-92). New York: Cambridge University Press.
- Feng, X., & Mokhtari, K. (1998). Reading Easy and Difficult Texts in English and Chinese:

  Strategy Use by Native Speakers of Chinese. *Asian Journal of English Language*Teaching, 8, 19-40.
- Garcia, G.E., Jimenez, R.T., & Pearson, P.D.(1998). Metacognition, childhood bilingualism, and reading. In: Hacker, D., Dunlowsky, J. and Graesser, A., (Eds), 1998. Metacognition in Educational Theory and Practice, Lawrence Erlbaum, Mahwah, NJ.
- Garner, R. (1987). Metacognition and reading comprehension. Norwood, NJ: Ablex.
- Goh, C., and Foong, K. (1997). Chinese ESL students' learning strategies: A look at frequency, proficiency, and gender. *Hong Kong Journal of Applied Linguistics*, 2(1), 39-53.
- Goodman, K. (1967). Reading: A psycholinguistic guessing game. *Journal of the Reading Specialist*, 6, 126-135.
- Gough, P. (1972). One second of reading. In J. Cavanaugh and I. Mattingly (Eds.), Language by ear and by eye (pp. 331-358). Cambridge, Mass.: MIT press.
- Grabe, W. (1991). Current developments in second language reading research. *TESOL Quarterly*, 25(3), 375-549.
- Grabe, W. (2009). Reading in a second language: Moving from theory to practice. Cambridge: Cambridge University Press.
- Horiba, Y. (1990). Narrative comprehension processes: A study of native and non-native readers of Japanese. *The Modern Language Journal*, 74, 188-202.
- Hyland, K. (1990). Providing productive feedback. ELT Journal, 44(4), 294-304.

- Jimenez, R., Garcia, G., & Pearson, P. (1996). The reading strategies of bilingual Latina/o students who are successful English readers: opportunities and obstacles. *Reading Research Quarterly*, 31, 90–112.
- Karbalaei, A. (2010a). A comparison of the metacognitive reading strategies used by EFL and ESL readers. *The Reading Matrix*, 10(2), 165-180
- Karbalaei, A. (2010b). Iranian EFL and Indian ESL college students' beliefs about reading strategies in L2. *Profile*, 12(2), 51-68.
- Malcolm, D. (2009). Reading strategy awareness of Arabic –speaking medical students studying in English. *System*, *37*, 640-651.
- Malcolm, D. (2012). Changes in awareness of academic reading strategies among Arab medical students. *Arab World English Journal*, *3*(2), 4-30.
- Meissner, J., & Yun, T.C. (2008). Verbal solution guide. Manhattan: Manhattan Review.
- Mokhtari, K., & Reichard, C.(2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology System*, 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*, 379-394.
- Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students' awareness of reading strategies.

  \*\*Journal of Developmental Education, 25(3), 2-10.
- Nist, S., & Mealey, D. (1991) Teacher-directed comprehension strategies. In R. Flippo & D. Caverly (Ed.), Teaching Reading & Study Strategies at the College Level. (pp. 42 85).

  Newark, DE: International Reading Association.
- Otero, J.C., & Campanario, J.M. (1990). Comprehension evaluation and regulation in learning from science texts. Journal of Research Science Teaching, 27(5), 447-460.
- Oxford, R. L. (1990). Language learning strategies: What every teacher should know.

- Oxford, R. L. (1993). Instructional implications of gender differences in second/foreign language (L2) learning styles and strategies. *Applied Language Learning*, 4(1&2), 65-94.
- Oxford, R. L., & Burry-Stock, J. A. (1995). Assessing the use of language learning strategies
- Oxford, R., & Crookall, D. (1989). Research on language learning strategies: Methods, findings, and instructional issues. *Modem Language Journal*, 404-419.
- Oxford, R. L., Ehrman, M., & Nyikos, M. (1988). Vive la difference? Reflections on sex differences in use of language learning strategies. *Foreign Language Annals*, 21(4), 321-329.
- Paris, S. G., & Jacobs, J. E. (1984). The benefits of informed instruction for children's reading awareness and comprehension skills. *Child Development*, *55*, 2083–2093.
- Paris, S.G., Lipson, M.Y., & Wixson, K.K. (1983). Becoming a strategic reader. *Contemporary Educational Psychology*, 8, 293–316.
- Paris, S. G., & Winograd, P. (1990). How metacognition can promote academic learning and instruction. In B. F. Jones & L. Idol (Eds.), Dimensions of thinking and cognitive instruction (pp. 15-51). Hillsdale, NJ: Erlbaum.
- Poole, A. (2009). The reading strategies used by male and female Colombian university students. *Profile*, 11, 29-40.
- Presley, M. (2002). Metacognition and self-regulated comprehension. In A. E. Farstrup & S.J. Samuels (Eds.), What Research Has to Say About Reading Instruction (pp. 291-309).

  Newark, DE: International Reading Association.
- Pressley, M., & Afflerbach, P. (1995). Verbal protocols of reading: The nature of constructively responsive reading. Hillsdale, NJ: Erlbaum R. Barr (Eds.), Handbook of reading research (pp.185-224). Mahwah, NJ:
- Rinehart, S.D., & Platt, J.M. (2003). Metacognitive awareness and monitoring in adult and college readers. In E. Paulson, L. Michelin, S.A. Biggs & T.L. Bullock (Ed.), College

- Reading Research and Practice: Articles from "The Journal of College Literacy and Learning." (pp. 19-29). Newark, DE: International Reading Association.
- Rumelhart, D. (1977). Towards an interactive model of reading. In S. Dornic (Ed.), Attention and performance (pp. 573-603). Hillsdale, N.J.: Erlbaum.
- Sheorey, R. (1999). An examination of language learning strategy use in the setting of an indigenized variety of English. *System*, *21,173-*190.
- Sheorey, R., & Baboczky, E.S., 2008. Metacognitive awareness of reading strategies among Hungarian college students. In: Mokhtari, K., Sheorey, R. (Eds.), *Reading Strategies of First- and Second-language Learners: See How They Read*. Christopher-Gordon Publishers, Inc., Norwood, MA, pp. 161–174.
- Sheorey R., & Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System*, 29(4), 431-449.
- Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Stanovich, K. E. (1980). Towards an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly*, *16*, 32-71.
- Sweet, E.P., & Snow, C.E. (2003). *Rethinking reading comprehension*. New York: The Guilford Press.
- Szoke, E., & Sheorey, R. (2002). A comparative study of the learning strategies of Hungarian and Russian college students. *Novelty*, *9*(3), 23-36.
- Tabatabaei, O., & Assari, F. (2011). Investigating strategic processes of 12 reading comprehension among collegiate Iranian ESP learners across three academic fields of study. *Canadian Social Science* 7(5), 205-214.
- Taki, S., & Soleimani, G. (2012). Online reading strategy use and gender differences: The case of Iranian EFL learners. *Mediterranean Journal of Social Sciences*, 3 (2), 173-184.

- Temur, T., & Bahar, O. (2011). Metacognitive awareness of reading strategies of Turkish learners who learn English as a foreign language. *European Journal of Educational Studies* 3(2), 421-427.
- Usó-Joan, E. (2006). The compensatory nature of discipline-related knowledge and English language proficiency in reading English for academic purposes. *The Modern Language Journal*, 90, 210 227.
- Willcut, J. (2000). Reported general and task-sensitive reading strategies of American university students learning Spanish as a foreign language. Unpublished master's thesis, Oklahoma State University.

#### **APPENDICES**

# **Appendix A: The Modified SORS Draft One**

The purpose of this study 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). 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.

Category		Reading Strategy	Never			A	Always
GLOB	1.	I have a purpose in mind when I read	1	2	3	4	5
SUBP	2.	I take notes while reading to help me understand what I read.	1	2	3	4	5
GLOB	3.	I think about what I know to help me understand what I read.	1	2	3	4	5
GLOB	4.	I take an overall view of the text to see what it is about before reading it.	1	2	3	4	5
SUP	5.	When the text becomes difficult, I read aloud to help me understand what I read.	1	2	3	4	5

Category		Reading Strategy	Never				Always
GLOB	6.	I think about whether the content of	1	2	3	4	5
PROB	7.	I read slowly and carefully to make my user I understand what I am	1	2	3	4	5
GLOB	8.	reading.  I review the text first by noting its characteristics and organization.	1	2	3	4	5
PROB	9.	I try to get back on track when I lose concentration.	1	2	3	4	5
SUP	10.	I underline or circle information in the text to help me understand.	1	2	3	4	5
PROB	11.	I adjust my reading speed according to what I am reading	1	2	3	4	5
GLOB	12.	When reading, I decide what to read closely and what to ignore.	1	2	3	4	5
SUP	13.	I use reference materials (e.g., a dictionary) to help me understand what I read.	1	2	3	4	5
PROB	14.	When the text becomes difficult, I pay close attention to what I am reading.	1	2	3	4	5
GLOB	15.	I use tables , figures, and pictures in text to increase mu understanding.	1	2	3	4	5
PROB	16.	I stop from time to time and think about what I am reading.	1	2	3	4	5
GLOB	17.	I use context clues to help me better understand what I am reading.	1	2	3	4	5
SUP	18.	I paraphrase ( restate in my own words) to better understand what I read.	1	2	3	4	5
PROB	19.	I try to picture or visualize information to help me remember what I read.	1	2	3	4	5
GLOB	20.	I use typographical features like boldface and italics to identify key information.	1	2	3	4	5
GLOB	21.	I critically analyze and evaluate the information presented in the text.	1	2	3	4	5
SUP	22.	I go back and forth in the text to find relationships among ideas in it.	1	2	3	4	5
GLOB	23.	I check my information when I come across new information.	1	2	3	4	5
GLOB	24.	I try to guess what the context of the text is about when I read.	1	2	3	4	5
PROB	25.	When the text becomes difficult, I reread it to increase my understanding.	1	2	3	4	5

Category	Reading Strategy	Never				Always
SUP	26. I ask myself questions I like to have answered in the text.	1	2	3	4	5
GLOB	27. I check to see if my guesses about the texts are right or wrong.	1	2	3	4	5
PROB	28. When I read, I guess the meaning of unknown words or phrases.	1	2	3	4	5
SUP	29. When reading, I translate from English into my native language.	1	2	3	4	5
SUP	30. When reading, I think about information in both English and my mother tongue.	1	2	3	4	5

		ation in both Eng tongue.	lish and my			
Name:				Years of study	ing of English:	
Degree :				Major:		
Gender:						
	•		•	inguage (i.e., Ara xcellent? (Please	abic/ Kurdish) on a circle one):	
1	2	3	4	5	6	

Comments: PLEASE provide any comment you would like in either English or Arabic.

Thank you for your cooperation in filling out the survey.

# Appendix B: The Modified Online SORS Draft Two

# **Greeting Letter in Arabic**

# بسم الله الرحمن الرحيم

الإخوة والأخوات الأعزاء, السلام عليكم...

إني طالب الدراسات العليا نبيل الربيعي في قسم "علم اللغة وطرائق تدريس اللغة الانكليزية" في جامعة ولاية اوكلاهوما في الولايات المتحدة الامريكية. أقوم حاليا بإكمال اطروحتي والمعنونة " استراتيجيات القراءة المستخدمة من قبل طلبة الدراسات العليا العراقيون الدارسين في الجامعات الامريكية في فهم واستيعاب النصوص الأكاديمية الجامعية". لذا ارجو مساعدتي في اكمال بحثي وذلك بملء استمارة الاستبيان الالكترونية.

اشكر لكم مساعدتي في ملء استمارة الاستبيان وأتمني من الله التوفيق لي ولكم في إكمال دراستكم.

نبيل الربيعي

001(405) 614 0393

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# 1. Background Information

Age	
Gender	
Degree (Master/PhD)	
Major in US College	
How long have you been studying English?	

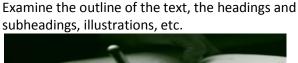
2.	How would you	ı rate your re	eading ability in E	nglish on a sca	le of 1 to 5, where "1" = k	pelow
	average and "5	" = excellent	?			
	<b>O</b> 1	<b>O</b> 2	<b>3</b>	<b>O</b> 4	<b>O</b> 5	
3.	How would you	ı rate your re	eading ability in y	our Native lan	guage on a scale of 1 to 5	,
	where "1" = be	low average	and "5" = excelle	nt?		
	<b>O</b> 1	<b>O</b> 2	<b>3</b>	<b>O</b> 4	○5	
		Arabio	: Instructions for	Filling out the S	Survey	
	ة النصوص الأكاديمية	خدمها عند قراءة	جيات(الطرق) التي تست	مات عن الاستراتيـ	، من هذا الاستبيان هو جمع المعلو	إن الهدف
	يزية.	بة في اللغة الانكل	<ul> <li>ق) في دراستك الجامعي</li> </ul>	بية, المقالات العلميا	على سبيل المثال, المناهج الدراس	والبحثية(
	الأتى:	طرق على النحو	تعمالك لكل من هذه الد	لذي يعكس مدى اس	على الاستبيان اضغط على الرقم اا	للاجابة ع
1=	I never or almos	t never do th	افعل هذا إطلاقا nis	أبدا لا		
2=	I do this only occ	casionally	ك من حين إلى أخر	افعل ذا		
3 =	I sometimes do	this (about 5	50% of the time)	<sup>2</sup> 50% من الوقت)	أحيانا افعل ذلك (افعلها بنسبا	
4 =	I usually do this	ادة افعل ذلك	اد			
5 =	l always or almo	ost always do	دائما افعل ذلك this			
		ستبيان .	فقرات الواردة بهذا الاه	سحيحة أو خاطئة لا	ارجو الانتباه انه لا توجد إجابة ــ	ملاحظة <u>:</u>
ä	لاستبيان واكمال الاسئل	نك العودة الى الا	لية ملئ الاستبيان, يمك	ب( بالخطأ) اثناء عم	<u>1):</u> اذا ما تم اغلاق نافذة الحاسوب	توضيح(ا
	الى صفحة الاستبيان	suı) ليتم اعادتك	الالكترونية(rvey link	ضغط على الوصلة	التي لم يتم اكمالها من خلال الم	
				ق النافذة.	التي كنت تعمل عليها قبل اغلا	

#### **Survey Statements**

# **English Strategy Statements with Arabic Pictures and Examples Translation** 4. I have a purpose in mind when I I read, for example, to find important detail or read. information, to answer a specific question, to عندما اقرأ نصاً باللغة الانجليزية يكون لدى evaluate what I reading, etc. مقصداً (هدف) من القراءة Surgeons left behind - The real percentage of uneducated surgeons in Laparoscopic Surgery 5. I take notes while reading to help me understand what I read. أدون الملاحظات خلال قراءتي للنص لتساعدني على فهم ما أقرأه 6. I think about what I know to help Link the text I read to my background(prior) me understand what I read). knowledge أفكر بما اعرفه مسبقا لمساعدتي على فهم ما اقرأ

7. I take an overall view of the text to see what it is about before reading it.

القي نظرة عامة على النص لأعرف ماهيته قبل أن الدأ بالقراءة





8. When the text becomes difficult, I read aloud to help me understand what I read.

عندما تصبح قراءة النص صعبة, أقراء بصوت مرتفع(عالي) لمساعدتي على فهم ما اقرأ



9. I think about whether the content of the text fits my reading purpose. أفكر فيما إذا كان محتوى النص المقروء يتفق مع مقاصدي (أهدافي) من القراءة



1 O 2 O 3 O 4 O 5 O

10. I read slowly and carefully to make my user I understand what I am reading.

اقرأ ببطء وبتروي للتأكد من استيعابي لما قرأته





11. I review the text first by noting its characteristics and organization. اقوم بتفحص النص أولا للتعرف على خصائص وتنظيم(تركيب) النص	Introduction (Vest is of insured) (Vest insured)
4 5 5 12. I try to get back on track when I lose concentration.	
المجع النص مرة ثانية حينما افقد التركيز فيما اقرأ على المراجع النص مرة ثانية حينما افقد التركيز فيما اقرأ على المراجع النص مرة ثانية حينما افقد التركيز فيما اقرأ على المراجع النص مرة ثانية حينما افقد التركيز فيما اقرأ المراجع النص مرة ثانية حينما المراجع النص المراجع النص المراجع النص المراجع النص المراجع ال	Read it again
4 5 5 13. I underline or circle information in	The Food and Drug Administration has formulated certain severe restrictions regarding the use of antibiotics, which are used to promote the health and growth of meat animals.
the text to help me understand. أضع خطا أو دائرة حول المعلومات في النص لمساعدتي على الاستيعاب  1	Though the different types of includes, a continuous of the animals kills many microorganisms, it also encourages the appearance of bacterial strains, which are resistant to antiminetive drugs.  It has already been observed that penicillin and the tetracyclines are not as effective therapeutically as they once used to be. This resistance to drugs is chiefly caused due to tiny circlets of genes, called plasmids which are transmits are also one of the two kinds of vehe learning to the two kinds of vehe learning and the properties of particular to the confidence of the control of the con
4 5 5 14. I adjust my reading speed according to what I am reading.	Rate Control
أقوم بتعديل سرعة قراءتي طبقا للنص الذي إقرأه  1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Slow

Fast

15. When reading, I decide what to read closely and what to ignore. عندما اقرأ , احدد بالضبط ما أريد قرأته بتمعن وما أريد إهماله او عدم قرأته

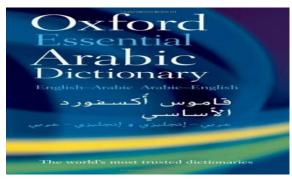
I, myself, for example, when I read an article, I read the abstract to make sure the papers is what I am looking for and is worthy my time and effort. After that, if the abstract indicates the paper is of interest to me, I move on to the introduction to skim the main topics and paragraphs. Next, I move to examine the results and discussion sections and finally I focus on the implications section. I choose which sections are important for me to read and I ignore reading others

00000



16. I use reference materials (e.g., a dictionary) to help me understand what I read.

أثناء القراءة استعين ببعض المراجع(كالقاموس الأنكليزي -أنكليزي أو القاموس أنكليزي-عربي)
للساعدتي على فهم النص



17. When the text becomes difficult, I pay close attention to what I am reading.

عندما تصبح قراءة النص صعبة, أقوم بالتركيز فيما اقرأ

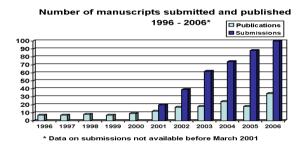




18. I use tables, figures, and pictures in text to increase mu understanding.

استعين بالجداول والأشكال والصور في النص لزيادة استيعابي

1 O 2 O 3 O 4 O



19. I stop from time to time and think about what I am reading.

أتوقف من حين إلى أخر الأفكر فيما اقرأه

1 O 2 O 3 O 4 O



20. I use context clues to help me better understand what I am reading.

أستعين ببعض المؤشرات اللغوية في محتوى النص لتساعدني على فهم ما أقرا

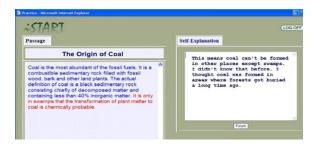
Context clues (as in the examples in the picture) help readers find out the meaning of unknown words, explain the meaning of concepts and terminologies, etc.



21. I paraphrase (restate in my own words) to better understand what I read.

أقوم بإعادة صياغة بعض الأفكار بكلماتي (مفرداتي) الخاصة لاستيعاب ما أقرا





22. I try to picture or visualize information to help me remember what I read.

أحاول أن أتصور وأتخيل المعلومات لتساعدني على تذكر ما قرأته

1	$\subset$	$\supset$
2		$\supset$
3	$\subset$	$\supset$
4	$\subset$	$\supset$

5 🔾

information.

23. I use typographical features like boldface and italics to identify key

استعين بالترتيبات المطبعية على سبيل المثال تفخيم الخط (استخدام اللون الأسود الغامق) والخط المائل لتحديد المعلومات الأساسية المهمة

1	>
2	$\geq$
3	$\geq$
4	$\geq$
5	>

24. I critically analyze and evaluate the information presented in the text.

أحلل وأقيم المعلومات المطروحة في النص

1		$\supset$
2		$\supset$
3	$\subset$	$\supset$
4	$\subset$	$\supset$
5		$\supset$

25. I go back and forth in the text to find relationships among ideas in it.

أراجع النص مراجعة تامة لإيجاد العلاقة بين الأفكار المطروحة في النص

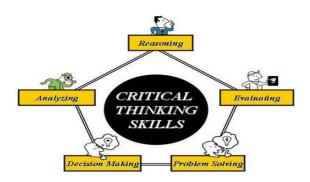
1		2
2		$\supset$
3		$\supset$
4	$\subset$	$\supset$
5		$\supset$

Make a mind movie or a picture of the text I am reading



ext in italics does not stand out very much;

instead, it signifies a context difference only while the text is being read. A single word in **boldface** attracts the eye and is useful for keywords that the reader might be actively looking for. (Source Unknown)



Read back and	forth the text
Surgeons left behind of uneducated surgeons	
Irene Christodowlou	s. Crimitrios Babalis
AMSTRACT  ANSTRACT  To condition to the control of this black is the control of the control of this black is the control of this black is the control of the	The State of General Particles of the State
Ann of this shady was to assume the sourced gray in Laparousey the Special Coupling of the sample of 20 points to the Special Coupling of the Special Coupling of the tent for tent of angle, and to prompt consistency the Uniquities statistical Coupling of the Special Coupling of the Special Coupling of the Special Coupling of the Special Coupling of the Special Coupling of the Coupling of the Special Coupling of the Special Coupling of the Special Coupling of the Special Coupling of the Special Coupling of the Special Coupling of Special Coupling of Special Coupling of Special Coupling of Specia	Constitution  of the control of the

26. I check my information when I come across new information.  ال المجع ما استوعبته حينما تعترضني معلومة جديدة الله عبد الستوعبته حينما عرضني معلومة عليه عليه عليه المتوعبته عليه عليه المتوعبته عليه المتوعبة المتوع	
27. I try to guess what the context of the text is about when I read.  ا الحاول تخمين محتوى النص عندما اقرا	
28. When the text becomes difficult, I re-read it to increase my understanding. عندما تصبح قراءة النص صعبة, أقوم بقراءته مرة اخرى لأفهمه فهما تاما	Read it again
29. I ask myself questions I like to have answered in the text.  اطرح على نفسي بعض الأسئلة التي ارغب أن أجد الفراء الموية في النص الذي سوف اقرأه اللها أجوية في النص الذي سوف اقرأه اللها أجوية في النص الذي سوف اقرأه اللها الموية في النص الذي اللها الموية في النص اللها الموية في النص الذي اللها الموية في النص اللها الموية في الموية في اللها الموية في اللها الموية في اللها الموية في اللها الموية في الموية في اللها الموية في الموية	

30. I check to see if my guesses about the texts are right or wrong. الما التأكد فيما إذا كانت التخمينات التي لدي عن النص صائبة أم خاطئة	
31. When I read, I guess the meaning of unknown words or phrases. الحاول تخمين معنى الكلمة أو العبارة التي لا اعرف معناها إثناء القراءة  1	As you are reading you will naturally find unfamiliar words. If you are a perspicacious reader, your keen sense of detail may find the meaning from the context clues.  Context Clue  Dictionary   per-spi-ca-cious  adj. able to understand or perceive keenly
32. When reading, I translate from English into my native language. حينما اقرأ أترجم(ترجمة شفوية او كتابية) من اللغة الام الانجليزية الى اللغة الام	So your compoder is connected to the intermed of has a unique address. How does it had to other compoder in the connected by the intermed of has a unique address. How does it had to other compoder in the connected by the intermed of his and in restage to the connectes your compoder in the connectes of the compoder of 6.7.2 for metable your word to send in "helic compoder for 6.7.2 for metable your word to send in "helic compoder for 6.7.2 for metable your word to send in "helic compoder for 6.7.2 for metable your word to send in "helic compoder for 6.7.2 for metable your word to send in "helic compoder for 6.7.2 for metable your word to send in "helic compoder for 6.7.2 for metable your word of the principle (and the principle of the principle
33. When reading, I think about information in both English and my mother tongue. وأثناء القراءة أفكر بالمعلومات المعطاة في النص في النص في اللغة الانجليزية واللغة الام	Read and think in two languages  The purpose of this study is to find out the reading strategies that Irengi students we when the Irengi students we when the Irengi students we when the Irengi students and articles

-	t(s) about the sui	rtaion in filling ou rvey either in Engl	-	•	-
Good Luck fo	r everybody with	n their cademic pr	ograms.		
Your Comme	nt(s):				
			7		
•		-			

# **Appendix C: Oklahoma State University**

#### In situational Review Board

# Oklahoma State University Institutional Review Board

Date: Thursday, June 09, 2011

IRB Application No AS1154

Proposal Title: Reading Strategies Used by Iraqi ESL Graduate Students in the Comprehension of Academic Texts

Reviewed and

Processed as:

Status Recommended by Reviewer(s): Approved

Protocol Expires: 6/8/2012

Principal Investigator(s):

Nabil Al-Rubaye

Ravi Sheorey

28 N. Univ. Place Apt. 5

205 Morrill

Stillwater, OK 74075

Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

The PI must provide a copy of the recruitment email to be sent by the Iraqi Embassy once it has been accepted by the embassy.

As Principal Investigator, it is your responsibility to do the following:

- Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
   Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
   Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
   Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North(phone: 405-744-5700, beth.mcternan@okstate.edu).

Shelia Kennison, Chair Institutional Review Board

helie M. Kennisa

#### **VITA**

## Nabil AbdulMuhsin Hussain Al-Rubaye

#### Candidate for the Degree of

#### **Master of Science**

Thesis: REPORTED READING STRATEGIES OF IRAQI GRADUATE STUDENTS STUDYING IN US UNIVERSITIES

Major Field: Teaching and Curriculum Leadership

#### **Education:**

- Master of Science in the field of Teaching, Learning, and Leadership Oklahoma State University, Stillwater, Oklahoma, December 2012
- Bachelor of Arts in the field of Teaching English as a Foreign Language, University of Baghdad, Iraq, October 1996
- Diploma in the field of Teaching English as a Foreign Language, Teacher Training Institute, Baghdad, Iraq 1992

#### **Experience:**

# TEFL & TOEFL Teaching Experience

- TOEFL volunteer tutor, Oklahoma State University (2008-2011)
- High school teacher, Iraq (2001-2006)
- University private tutor, Iraq (1996-2003)

# Leadership Experience

- President of Iraqi Students and Scholars Association (ISSA)\_ Oklahoma State University (2009-2011)
- ELT project team leader and adviser \_ DFID team, Iraq (2006-2008)

#### Honors, Awards, and Professional Certificates

- TESOL Certificate, Oklahoma State University (May 2012)
- Iraqi Scholars and Leaders (ISLP)program, MA in TESL, Institute of International Education\_ Texas (2008-2011)
- USAID Tatweer Program, MS in public administration\_ Iraq(2007 and 2008)
- Chevening Scholarship, MA in TESL British Embassy, Iraq(2008)
- International Educators Program (IEP), State Department\_ Iraq(2006)

#### Professional Development

- Curriculum design and development workshop, British Council \_ Bahrain(2007)
- Human Resources Management and Development training(MDP)\_ DIFD\_ UK (2007)
- Course in ELT Management and Training, British Council UK (2007)
- Management and Development Program Workshop, DIFD\_ Jordan (2007)