

Metacognitive Reading Strategies of EFL Libyan University Learners

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Abstract: This paper aims to explicate the metacognitive reading strategies employed by Libyan EFL learners. Data were gathered from forty female first year university learners, studying at Al-Asmariya Islamic University, Zliten, Libya using Metacognitive Awareness Reading Strategy Inventory (MARSI). The questionnaire was analyzed quantitatively using descriptive statistics which showed the level of metacognitive awareness on the three sub-scales: global reading strategies, problem-solving reading strategies and support reading strategies. Findings showed that there is a high level of metacognitive awareness for the problem solving strategy (M=3.50, SD=1.36) but only at medium level for both support strategy (M=3.25, SD=1.36) and global strategy (M=3.08, SD=1.26). The finding asserts the need of metacognitive reading strategy instruction in order to improve their metacognitive awareness, and these strategies will eventually help them to become skilled readers and to enhance their reading comprehension performance.

Keywords: metacognitive reading strategies; problem solving strategy; global strategy; support strategy; EFL learners; metacognitive reading strategy instruction.

I. INTRODUCTION

Reading is an essential skill to gain input for learning English as a foreign language (EFL) in a country such as Libya where English texts are the main source of language input. In order to be successful readers, ESL/EFL learners should be equipped with strategies that can assist them while reading English texts. Furthermore, [1] explains that strategies are used to enhance reading comprehension and overcome reading failure. Thus, learners need to be aware of which reading strategies to use that can foster deeper understanding and comprehension of a given task.

A number of researchers [2], [3], [4] emphasize that in order to make reading strategies effective in the reading process, metacognitive awareness or metacognition must be employed. [5] acknowledged that being strategic helps learners to plan, organize and assess their learning, and become more autonomous. In addition, [2] identified that most of the comprehension activities of efficient readers take place at the metacognitive level, and another study noted the effects of metacognitive strategy awareness used on learners' reading ability and reading comprehension [4].

According to [6], metacognitive strategies required learners to think about their thinking as they engage in reading academic texts for successful performance. Similarly, [7] states that successful comprehension depends on readers' metacognitive processing that enable them to use and select appropriate reading strategies consciously to achieve comprehension. However, reading in Libyan context, is commonly taught through Grammar-Translation Method (GTM) in teacher-centered classrooms [8] with more emphasis on decoding, explaining grammatical points, giving the meaning of individual words, and translating into Arabic [9]. The reading instruction of this kind gave little attention to the process of understanding sophisticated texts [10]. As a result, such inabilities have impeded students' critical thinking development and subsequently led to inability to master English at a higher proficiency level among Libyan students.

[11] emphasized that "success in university is partly determined by the ability to read critically and analytically and to apply reading strategies to written and oral tasks" (p.92). For similar reasons, [12] suggested that teachers need to be

aware that ESL learners need to be taught and given more practices on reading strategies. Moreover, [13] asserted that by increasing ESL readers' metacognitive awareness of reading strategies and learning how to use them while reading would enhance comprehension. [3] also claimed that there was a need to understand and increase the readers' metacognitive knowledge about reading and reading strategies in order to develop them into active readers and to design reading development program.

II. METACOGNITIVE READING STRATEGIES

Metacognition is the knowledge of one's learning that consists of two elements: metacognitive knowledge - that is "knowledge of cognition", and regulation of cognition - that is "strategy use" [14]. Moreover, [15] define metacognition as "the knowledge of the readers' cognition about reading and the self-control mechanisms they exercise when monitoring and regulating text comprehension" (p. 249). Metacognition also concerns with learners' knowledge and their own cognitive resources, which involve behaviors such as predicting, self-questioning, paraphrasing, summarizing, rereading to clarify meaning, and retelling [16].

[17] Mentioned metacognitive strategies are important techniques that the readers require to improve their comprehension. [18] Considered that "metacognitive strategies are crucial because they oversee, regulate, or direct the language learning task, and involve thinking about the learning process" (p. 559). [16] claims that metacognitive strategy awareness is essential to productive learning because it includes preparing and planning, monitoring, evaluating as well as selecting appropriate use of reading strategies. Moreover, the use of metacognitive reading strategy ignites one's thinking and can lead to learners' improved performance [19].

Previous research has shown that the strategies that mark the difference between successful and unsuccessful learners are the metacognitive strategies [20], [3], [21]. [15] concluded that skilled readers "tend to be aware of what they are reading; they seem to know why they are reading; and they have a set of tentative plans or strategies for handling potential problems and for monitoring their comprehension of textual information" (p. 249). Therefore, the readers' metacognitive knowledge include a knowledge of the strategic reading processes, reading strategy repertoires, and the application of reading strategies to increase text comprehension [22], [3], [15], [13], [4].

Indeed, learners need to refine their reading ability by integrating their prior knowledge and their metacognitive reading strategies to understand a text. Previous studies [3], [15] categorized metacognitive reading strategies into: (1) global strategies which are planned carefully and intentionally to monitor learners' reading as taking over view of the text before reading; (2) support strategies that are used to aid comprehension as taking notes; and (3) problem-solving strategies that involve employing strategies while reading for overcoming comprehension difficulties, such as reading slowly and carefully. Based on that classification, different studies were conducted on EFL learners' use of metacognitive reading strategies on texts in a classroom environment.

III. PREVIOUS STUDIES

Researchers recognized the role of metacognitive reading strategy awareness in enhancing reading comprehension. [3] compared the metacognitive awareness of the reading strategies of ESL college students with US students. Participants provided information about their backgrounds including rating their reading ability. Then they answered the Survey of Reading Strategies (SORS). Results showed that ESL students reported using more support strategies. In addition, both ESL and the US high reading ability speakers reported more use of support strategies than the low-reading ability ones. An important finding was that reading ability was significantly related to students' reported usage of strategies. [3] state that "students who gave themselves a high rating on reading ability, regardless of their language background, reported a higher use of all the reading strategies in the survey than did those students who gave themselves a low reading ability rating." (p. 446).

[7] Conducted a study to compare the metacognitive awareness and use by EFL and ESL learners. This study used the survey of MARSII to gather data from 96 Iranians and 93 Indians undergraduate student. The study reported that both groups shared similar pattern of metacognitive strategies except Indian students are more aware of global strategies.

Another study was conducted on metacognitive reading strategy awareness with 270 Chinese high school students by [4]. They were asked to complete SORS survey. The results indicated that high proficiency group show higher awareness and strategy usage than intermediate and low proficiency group.

Further research in metacognitive strategy explored the relation between metacognitive awareness and academic reading. The study on metacognitive strategy of this kind has been the major interest of current researchers in seeking to understand the roles of metaconition in reading. [23] conducted a research on the relationship between metacognitive awareness of the Turkish students and their academic reading strategies. In this investigation, Survey of Reading Strategy (SORS) was used to explore the students' metacognitive awareness on Global, Problem-Solving, and Support reading strategies in their academic reading. They found that the participants usually used academic reading strategies so they were often aware of these strategies. The students mostly used and were aware of problem-solving strategies but the supporting strategies were least used in academic reading.

[24] explicated the metacognitive reading strategies employed by undergraduate students who were studying at a public university in Malaysia. The Metacognitive Awareness of Reading Strategies Inventory (MARSII) which are categorized into 3 components: global reading strategies, problem-solving strategies and support reading strategies was administrated to a group of 41 respondents. The findings showed that there is a range of moderate to high level of metacognitive strategy use among the undergraduates. The overall mean scores for all the three categories are Global (M= 3.73) Support (M= 3.38) and Problem solving (M= 4.10). They concluded that effective L2 readers are aware of metacognitive reading strategies available for use and these strategies will help them to become successful readers.

In a recent study, [25] investigated the profiles of metacognitive reading strategies of the less proficient EFL Indonesia learners at English Department, Hasanuddin University. Data were gathered from 40 less proficient learners using Metacognitive Awareness Reading Strategy Inventory (MARSII). Findings showed that there is a high level of metacognitive awareness for the Problem Solving Strategy (M=3.62, SD=0.57) but only at medium level for both Global (M=3.16, SD=0.61) and Support Strategy (M=3.24, SD=0.71). The finding warrants emerging needs of the reading strategy instruction in order to generate their metacognitive awareness to improve their proficiency level.

[26] investigated the relationship between Global reading strategies and Support reading strategies on Iranian intermediate EFL learners reading comprehension ability. Using the Survey of Reading Strategies (SORS), the results indicated that students' awareness pattern of reading strategy use was (Glob M=3.41, Sup M =3.92, Prob M= 3.80). Then, learners are divided into two groups based on their reading strategies use and gave them the same reading comprehension test to observe which of the groups had better understanding of reading. The findings revealed that learners' least preferred strategies are global reading strategies (Sup M=12.62, Glob M=11.08).

In the context of Libya, conducted a study to explore the reading strategy most often used among Libyan university students, to examine the relationship between gender and strategy use, and to show the relationship between the learners' strategies use and their proficiency level. The data was gathered by distributing Reading Strategy Questionnaire (RSQ) and Reading Comprehension Test to the third year EFL Libyan students of Zawia University. The findings revealed that the overall mean score of six learning strategies demonstrate that the participants of the study were medium strategy users (M= 19.2357). The results also showed that the most frequently reading strategies used was metacognitive strategies, there is a statistically differences between male and female learners in their use of language learning strategies. The results also showed that differences between students' level of proficiency and their use of language learning strategies.

These studies reinforced the importance of metacognitive strategies in developing learner to become efficient readers and in enhancing their reading comprehension performance. Moreover, EFL/ESL readers should have the metacognitive awareness during the reading process by being aware of their goals, monitored the reading process, checked their reading comprehension, and evaluated their strategy use.

The present study aimed to assess the use of metacognitive reading strategy among undergraduate students. The objective of this paper was to describe the Libyan students' metacognitive reading strategy awareness and identify the strategies that they have problem with, that will lead to useful implications in designing strategy-based instruction for improving students' reading comprehension. The results of this study might also play a role in raising the metacognitive awareness of learners. Hence, to fill the gap in the literature, the present study was conducted to answer the following question:

- What are the metacognitive reading strategies used by Libyan EFL learners?

IV. METHODOLOGY

The present study employed a quantitative approach to investigate the profiles of metacognitive reading strategies of EFL Libyan tertiary learners. The students' metacognitive awareness of reading strategies was assessed with the Metacognitive Awareness of Reading Strategies Inventory (MARS) which was designed by [15]. This inventory was designed to measure adolescent and adult students' awareness and use of reading strategies while reading academic or school-related materials. MARS was categorized into three sub-scales of reading strategies. These include Global Reading Strategies (GLOB) with 13 items that concerns reading strategies aimed at setting the stage for the reading act. Support Reading Strategies (SUP) with 9 items concerns the use of support mechanisms or tools aimed at sustaining responsiveness to reading such as the use of learning materials and dictionary. Problem-Solving Strategies (PROB) with 8 items concerns strategies used when problems arise in understanding textual information, such as checking ones understanding upon encountering conflicting information. The 30-item questionnaire was validated by [15] where the alpha coefficient for internal consistency and reliability for the MARS was .93. 40 female Libyan EFL learners joining first year at the Department of English, Al-Asmariya Islamic University, Zliten, were selected as the sample for the study. They aged 18-19 years old. The gathered data were analyzed using the Statistical Packages for the Social Sciences (SPSS), version 21 to achieve the descriptive statistics. Three key averages of mean score were used which are 3.5 or higher (High), 2.5 to 3.4 (Medium), 2.4 or lower (Low).

V. RESULT AND DISCUSSION

After analyzing the results of the MARS, the overall average mean was gauged at (3.28). This indicated that generally the participants were considered as Moderate-level strategy users. Figure1 represents the three subcategories of MARS scored by the participants.

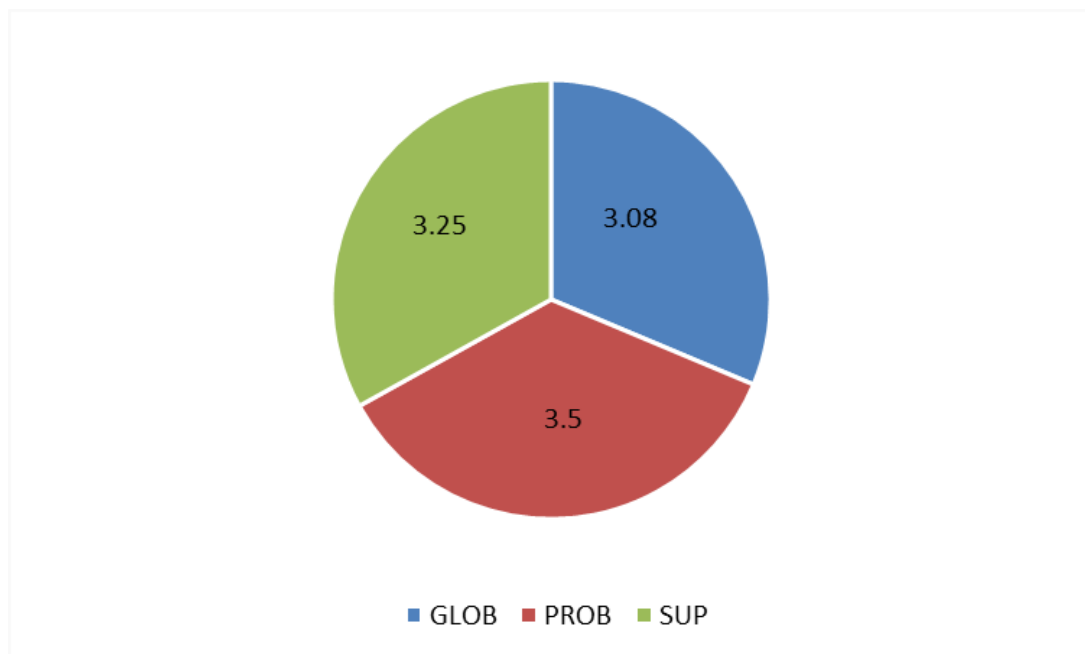


Fig. 1. Mean score of metacognitive strategies by category in MARS

As revealed in Figure1, problem solving strategies (PROB) received the highest mean score of 3.50, which is indicative that the participants are high-level strategy users of problem solving strategies. The support reading strategies (SUP) with a mean score of 3.25 indicate that the Libyan learners are moderate-level strategy users of these strategies. Meanwhile, the global reading strategies (GLOB) received the lowest score at 3.08, suggesting that the participants are moderate-level strategy users.

The participants' perceptions regarding the use of the subcategories of MARS are shown separately in the following tables along with the mean scores to each corresponding items.

TABLE I: Global Strategies (N=40)

Statement NO.	Global Strategies	Mean	SD
1	I have a purpose in mind when I read.	4.13	0.99
3	I think about what I know to help me understand what I read.	3.78	1.12
4	I preview the text to see what it's about before reading it.	2.70	1.29
7	I think about whether the content of the text fits my reading purpose.	2.80	1.26
10	I skim the text first by noting characteristics like length and organization.	2.90	1.17
14	I decide what to read closely and what to ignore.	3.68	1.05
17	I use tables, figures, and pictures in text to increase my understanding.	3.20	1.52
19	I use context clues to help me better understand what I'm reading.	3.40	1.03
22	I use typographical aids like boldface and italics to identify key information.	2.78	1.29
23	I critically analyze and evaluate the information presented in the text.	2.68	1.25
25	I check my understanding when I come across conflicting information.	3.23	1.23
26	I try to guess what the material is about when I read.	2.33	0.86
29	I check to see if my guesses about the text are right or wrong.	2.43	0.84

The global strategy consisting thirteen items has an overall mean score of $M=3.08$ and standard deviation $SD=1.26$ yielding at medium level of metacognitive awareness. Table I shows the thirteen statements of the global strategy in MARSII with their mean scores and standard deviation. Among the thirteen items, statements 1, 3 and 14 exhibit high level of awareness each with mean scores of $M=4.13$, $M=3.78$ and $M=3.68$ respectively. Thus, the result indicates that most students had a purpose in mind when they read; they also think about what they know to assist them in understanding what they read; and the students decide what to read closely and what to ignore.

The results also show that the 40 learners in this study did not go over the previewing process in order to capture what the reading is about as in statement 4 with the mean score at medium level ($M=2.70$). They are also less critical on information presented in the text as shown by statement 23 that yielded at medium level ($M=2.68$). These learners makes little use of tables and figures ($M=3.20$), and contextual clues ($M=3.40$) to increase their understanding. With regard to skimming the text where this group only performed medium level of awareness with the mean score of ($M=2.90$). Skimming is an essential reading strategy that would enable the reader to capture the main idea without necessarily wasting the time to read in details. Item 25 ($M=3.23$) also show medium level of awareness that concern monitoring comprehension. The last two statements, 26 ($M=2.33$, $SD=0.86$), and 29 ($M=2.43$, $SD=0.84$) show lower level of awareness that concern guessing and prediction as well as checking whether the guesses are right or wrong that is confirming predictions. It is obvious that these learners need training on predicting in order to improve their level of awareness for global strategy and make them efficient readers.

TABLE II: Support Strategies (N=40)

Statement NO.	Support Strategies	Mean	SD
2	I take notes while reading to help me understand what I read.	2.43	1.13
5	When text becomes difficult, I read aloud to help me understand what I read.	3.93	1.29
6	I summarize what I read to reflect on important information in the text.	2.15	0.92
9	I discuss what I read with others to check my understanding.	3.55	1.28
12	I underline or circle information in the text to help me remember it.	4.03	1.25
15	I use reference materials such as dictionaries to help me understand what I read.	4.48	0.82
20	I paraphrase (restate ideas in my own words) to better understand what I read.	2.43	1.06
24	I go back and forth in the text to find relationships among ideas in it.	3.28	1.20
28	I ask myself questions I like to have answered in the text.	3.00	1.22

The participants in this study showed medium level of awareness on support strategy with an overall mean score of $M=3.25$ and standard deviation $SD=1.36$ as presented in Table II. The statements that concerned with reading aloud ($M=3.93$), discussing with others ($M=3.55$), underlining information in the text to help understanding ($M=4.03$) and using reference materials to improve comprehension ($M=4.48$) show high level of metacognitive awareness. While items on

finding relationships ($M=3.28$) and asking questions ($M=3.00$) illustrate medium level of awareness. Taking notes ($M=2.43$, $SD=1.13$), summarizing ($M=2.15$, $SD=0.92$), and paraphrasing ideas using own words ($M=2.43$, $SD=1.06$) demonstrate low level of metacognitive awareness implying that these learners are not able to construct and extract meaning from the text. Therefore, these learners need training on summarizing as a support strategy in order to improve comprehension.

TABLE III: Problem-solving Strategies (N=40)

Statement NO.	Problem-solving Strategies	Mean	SD
8	I read slowly but carefully to be sure I understand what I'm reading.	4.40	1.01
11	I try to get back on track when I lose concentration.	3.18	1.17
13	I adjust my reading speed according to what I'm reading.	2.90	1.13
16	When text becomes difficult, I pay closer attention to what I'm reading.	4.20	1.04
18	I stop from time to time and think about what I'm reading.	3.25	1.39
21	I try to picture or visualize information to help remember what I read.	3.43	1.41
27	When text becomes difficult; I reread to increase my understanding.	4.23	1.17
30	I try to guess the meaning of unknown words or phrases.	2.43	1.22

The problem-solving strategy has eight 8 statements that achieve an overall mean score of high level of awareness ($M=3.50$) and standard deviation ($SD=1.36$). It is clear that this group of learners perform an overwhelming preference on problem-solving strategy more significant than global strategy ($M=3.08$, $SD=1.26$) and support strategy ($M=3.25$, $SD=1.36$). The most significant items that have the highest mean score on this sub-category as shown in Table III are concerned with reading slowly but carefully to be certain of understanding what they read ($M=4.40$) and rereading to increase understanding that leads to the long process of task completion ($M=4.23$). These learners clearly show themselves as slow readers probably due several factors that concern unfamiliar expressions and other reading difficulties. With the mean score of $M=4.20$ at high level of awareness, this group consists high preference on paying close attention to what they are reading as in statement 16.

In contrast, statement number 18 ($M=3.25$) that concerns with occasional stop while reading reveals medium level of awareness. The results also show low level of adjustment of reading speed with the mean score of $M=2.90$ implying that this group only occasionally make time adjustment of their reading. The lowest mean score ($M=2.43$, $SD=1.22$) is concerned with guessing unknown words. Thus, these learners need training on making inferences in a text as a problem-solving strategy in order to improve comprehension.

The highest and lowest mean scores among each of the categories of the metacognitive reading strategies reported by all participants of this study are presented in Table IV.

TABLE IV: Comparison of Three Strategies of MARSII

Strategies	Descriptions	Highest Mean	Lowest Mean
Global	I have a purpose in mind when I read. I try to guess what the material is about when I read.	4.13	2.33
Support	I use reference materials such as dictionaries to help me understand what I read. I summarize what I read to reflect on important information in the text.	4.48	2.15
Problem-solving	I read slowly but carefully to be sure I understand what I'm reading. I try to guess the meaning of unknown words or phrases.	4.40	2.43

In the Libyan EFL context, the result (see Table IV) shows that Support has the highest mean score compared to the other two strategies (Global and Problem-solving) which indicate that these learners have used more on the Support metacognitive strategies when they read. For instance, they use reference materials such as dictionaries to help understand what they read ($M=4.48$). The second top mean score of problem-solving strategy is for reading slowly ($M=4.40$) and the last top mean score of global reading strategy ($M=4.13$) is for having purpose in mind. On the other hand, the lowest mean scores also indicated in the Support strategies in terms of summarizing for important information of what they read ($M=2.15$). The second low mean score of GLOB ($M=2.33$) for guessing the content of the text, followed by PROB ($M=2.43$) for guessing the meaning of unknown words. Such indication of lower score denotes that the students did not

know how to summarize the text relating to their understanding of what they read, or making prediction of a text nor making inferences from unknown material. Therefore, training the students on metacognitive reading strategies is crucial.

From the results of MARSII, it was apparent that the participants of this study can be considered as “moderate-level strategy user”. This means that they were not using the metacognitive reading strategies at a very high level based on their perceptions towards metacognitive strategy awareness of the MARSII. This is in line with what other researchers [3], [13] found that ESL and native learners are moderate-level strategy users. This finding is also supported by the result of relevant research study conducted on EFL Libyan learners [27].

Consequently, the results revealed that the pattern of using the metacognitive reading strategies is ranked accordingly, problem-solving strategies (M=3.50), support strategies (M=3.25) and global strategies (M=3.08). The predominant use of problem-solving strategies and medium use of global and support strategies shows consistency with [28]; that non-native readers consider these strategies as highly important for comprehension. This result also is in line with [23] study where their findings indicated that the Turkish students mostly used and were aware of problem-solving strategies.

The present findings seem to be consistent with previous research which found the same pattern of using metacognitive reading strategies among EFL Indonesian learners [25], or freshmen ESL and native English students in USA [3], or Malaysian tertiary learners [24]. Also, this result is in line with the findings of other research study which found that Iranian tertiary EFL learners’ least preferred strategies are global reading strategies [26]. However, the study finding was not consistent with [7] study that Indian students are more aware of global strategies.

VI. CONCLUSION

The present study examined the EFL undergraduate Libyan students’ use of global, support and problem-solving reading strategies to comprehend their reading text. The findings revealed that the participants were moderate-level strategy users. They perceived to use mostly problem-solving strategies (PROB), then support strategies (SUP) and global strategies (GLOB) accordingly while reading. The results also indicated that the lowest mean score was in the Support strategies in terms of summarizing for important information of what they read (M=2.15). The second low mean score of GLOB (M=2.33) for guessing the content of the text, followed by PROB (M=2.43) for guessing the meaning of unknown words. Such indication of lower score denotes that the Libyan tertiary learners had problems with predicting, summarizing, and making inferences strategies. Therefore, the teachers should provide suitable intervention to train learners on these metacognitive reading strategies to comprehend better.

These findings both present important contribution to the corpus of knowledge in terms of reading profiles of EFL learners in a particular context and pedagogical implication on the importance of strategy training within Libyan curricula. Based on the findings of this study, further research remained to be done in this area. Replicating this study with a new or larger sample size considering both males and females to achieve more generalization of the findings, and under new contexts would provide extra dimension to the database of metacognitive reading strategies.

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