



Faculty of Language Studies and Communication Studies

**METACOGNITIVE AWARENESS OF READING STRATEGIES AMONG  
UNDERGRADUATES IN AN ESL CONTEXT**

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**Bachelor of Arts with Honours (Linguistics)  
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**METACOGNITIVE AWARENESS OF READING STRATEGIES AMONG  
UNDERGRADUATES IN AN ESL CONTEXT**

by

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This final year project is submitted in partial fulfilment of the requirements for the  
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## **ABSTRACT**

Reading skills play a significant role in daily lives as reading is required for academic tasks in schools. This study aimed to investigate the metacognitive awareness of reading strategies among 300 first year undergraduates in an ESL context based on their gender and levels of language proficiency using an adapted version of Metacognitive Awareness Reading Strategies Inventory (MARSII). It was found that these students mostly preferred problem-solving strategies than global and support reading strategies. Females were also found significantly employed more metacognitive awareness of reading strategies compared to males. One-way ANOVA showed that there was significant difference based on levels of language proficiency in the use of metacognitive awareness of reading strategies. Tukey's HSD test revealed that high proficient students significantly utilised reading strategies the most followed by intermediate and low proficient students. It is hoped that this study could provide an insight towards readers on the significance of being aware in utilising reading strategies which would help to improve their reading comprehension.

## ABSTRAK

Kemahiran membaca memainkan peranan penting dalam kehidupan seharian kerana membaca diperlukan untuk tugas akademik di sekolah. Tujuan kajian ini adalah untuk mengkaji kesedaran metakognitif dalam strategi pembacaan dalam kalangan 300 mahasiswa tahun pertama dalam konteks ESL berdasarkan jantina dan tahap ketrampilan bahasa mereka dengan menggunakan set inventori MARSII (*Metacognitive Awareness Reading Strategies Inventory*). Didapati bahawa, pelajar prasiswazah tahun pertama lebih cenderung kepada strategi penyelesaian masalah berbanding strategi pembacaan global dan strategi sokongan. Pelajar wanita cenderung menggunakan strategi membaca lebih kerap daripada lelaki. Analisis *ANOVA* sehalu menunjukkan bahawa terdapat perbezaan yang signifikan berdasarkan tahap kemahiran kebahasaan dalam tahap kesedaran metakognitif dalam strategi pembacaan. Analisis *Tukey's HSD* mendedahkan bahawa pelajar dengan tahap kemahiran kebahasaan yang tinggi, paling cenderung menggunakan strategi membaca berbanding pelajar dengan kemahiran kebahasaan sederhana dan rendah. Diharapkan kajian ini dapat memberi gambaran kepada pembaca atas kepentingan kesedaran dalam penggunaan strategi membaca yang akan membantu meningkatkan pemahaman pembacaan mereka.

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## **LIST OF ABBREVIATIONS**

<b>One-way ANOVA</b>	<b>: One-way Analysis of variance</b>
<b>EFL</b>	<b>: English as Foreign Language</b>
<b>ESL</b>	<b>: English as Second Language</b>
<b>GLOB</b>	<b>: Global Reading Strategies</b>
<b>GPA</b>	<b>: Grade-point average</b>
<b>HPR</b>	<b>: Higher proficiency reading group</b>
<b>IRA</b>	<b>: Index of Reading Awareness</b>
<b>LPR</b>	<b>: Lower proficiency reading group</b>
<b>MAI</b>	<b>: Metacognitive Awareness Inventory</b>
<b>MARSI</b>	<b>: Metacognitive Awareness of Reading Strategies Inventory</b>
<b>MSQ</b>	<b>: Metacognitive Strategy Questionnaire</b>
<b>MUET</b>	<b>: Malaysian University English Test</b>
<b>PROB</b>	<b>: Problem-Solving Strategies</b>
<b>SORS</b>	<b>: Survey of Reading Strategies</b>
<b>SPSS</b>	<b>: Statistical Package for the Social Sciences</b>
<b>SUP</b>	<b>: Support Reading Strategies</b>
<b>UNIMAS</b>	<b>: Universiti Malaysia Sarawak</b>
<b>U.S.</b>	<b>: United States</b>

# **CHAPTER ONE**

## **INTRODUCTION**

The first chapter discusses about the background, aim and objectives, scope and significance of the research.

### **1.1 Background**

Reading is very important in language teaching and learning because reading is one of the basic skills. The major problem that most of the students found was they could not comprehend English effectively according to what they read (Sun, 2011). As stated by Ahmadi and Ismail (2012) in their research, “reading comprehension is an important factor in EFL/ESL learning process and should be emphasized in different levels of education....” (p. 154). Readers have not acquired the reading strategies efficiently is one of the major reasons for this phenomenon.

Garner’s study (as cited in Mokhtari & Reichard, 2002) stated that reading strategies defined as “generally deliberate, planful activities undertaken by active learners, many times to remedy perceived cognitive failure” (p. 250). Simpson and Nist (2000) explained that readers able to concentrate on the task by utilising metacognitive reading strategies and these strategies enable them to activate their prior data to understand the comprehension of the content. Barnett (1988) explained that reading strategy as a tool used by the readers in order to solve problems and acquire text information.

Metacognition as a relatively new term studies about the awareness of one’s thinking and the strategies used. Metacognition enables students to use the particular strategy in a similar particular problem context but new context after they are being taught (Kuhn & Dean, 2004).

Metacognitive awareness is being aware of how you think. According to Rivers (2001), learners who were skilled in metacognitive awareness were more strategic and performed better compared to those who were unaware.

According to Ahmadi, Ismail, and Abdullah (2013), students' metacognitive awareness of reading strategies was investigated in order to assist their reading comprehension in foreign or second language studies. Metacognitive reading strategies were separated into three distinctive sub-classes which were support, problem-solving and global reading strategies (Mokhtari & Reichard, 2002). Thus, Mokhtari and Reichard (2002) designed a questionnaire which intended to evaluate understudies' metacognitive awareness and the utilisation of reading strategies while reading scholastic materials, which was Metacognitive Awareness Reading Strategies Inventory (MARSII). According to Zhang (2008), increasing of learners' metacognitive awareness could improve their reading comprehension.

Many researchers (Al-Dawaideh & Al-Saadi, 2013; Arrastia, Zayed, & Elnagar, 2016; Hokkanen, 2015; Khan & Khan, 2013; Madhumathi & Ghosh, 2012; Veloo et al., 2015) stated that females tended to utilise more metacognitive reading strategies while reading compared to males. Besides that, previous studies (Ahmadi et al., 2013; Hossein, 2014; Kim, 2016; Madhumathi & Ghosh, 2012; Magogwe, 2013; Shehadeh, 2015; Zhang & Seepho, 2013) also suggested that high proficient readers tended to utilise metacognitive reading strategies more frequently in their reading than those who were less proficient. Previous studies (Hassan, 2017; Kim, 2016; Zhang & Seepho, 2013) showed that significant difference was found in utilisation of reading strategies based on readers' levels of language proficiency.

## **1.2 Research Problem**

Most of the studies about readers' metacognitive awareness of reading strategy were conducted in other multicultural and western countries. According to Seifoori and Youssefi (2014), learners' strategies used in EFL contexts had been focused in the previous studies. Yet, the reading strategies used differently among the students in ESL contexts and the extent to which they may differ in their metacognitive awareness of reading strategies was less investigated. In addition, it would be of interest to study the relationship amongst sexual orientation and language proficiency level in utilising the reading strategies in ESL contexts.

## **1.3 Aim of Study**

The study aims to investigate the metacognitive awareness of reading strategies among undergraduates in an ESL context based on gender and language proficiency level at University Malaysia Sarawak (UNIMAS).

## **1.4 Objectives of Study**

The objectives of the present study are to determine the:

- i. Metacognitive awareness of reading strategies among undergraduates.
- ii. Metacognitive awareness of reading strategies based on gender.
- iii. Metacognitive awareness of reading strategies based on language proficiency levels.

## **1.5 Research Questions**

1. What are the metacognitive awareness of reading strategies among undergraduates?
2. a) What are the metacognitive awareness of reading strategies based on gender?  
b) Is there a significant difference in metacognitive awareness of reading strategies based on gender?
3. a) What are the metacognitive awareness of reading strategies based language proficiency levels?

b) Is there a significant difference in metacognitive awareness of reading strategies based on language proficiency levels?

### **1.6 Operational Definitions**

Oxford (1990) claimed that “metacognitive strategies as actions which go beyond purely cognitive devices, and which provide a way for learners to coordinate their own learning process” (p. 136). Simpson and Nist (2000) explained that readers able to concentrate on the task by utilising metacognitive reading strategies and these strategies enable them to activate their prior data to understand the comprehension of the content. Metacognitive reading strategies were classified into global, problem-solving and support reading strategies by Mokhtari and Reichard (2002).

Mokhtari and Reichard (2002) defined these three strategies:

Global reading strategies (GLOB) represented a set of reading strategies that oriented toward a global analysis of text...Problem-solving strategies (PROB) represented a set of reading strategies that appeared to be oriented around strategies for solving problems when text becomes difficult to read...Support reading strategies (SUP) represented a set of reading strategies that primarily involved use of outside reference materials, taking notes, and other practical strategies that might be described as functional or support strategies...(p. 252)

### **1.7 Scope of Study**

The researcher focused on the use of metacognitive awareness of reading strategies among undergraduates in an ESL context based on language proficiency levels and sexual orientation in the present study. Other aspects, for example, nationality, age, year of study and so on were not investigated in this study. The study was conducted in Universiti Malaysia Sarawak



(UNIMAS). The respondents selected in this study were 300 undergraduates from the generic courses.

### **1.8 Significance of Study**

The present review concentrated on the undergraduates' employment of metacognitive awareness of reading strategies in ESL context, in which was important in a country such as Malaysia because of English is known as the second language although there are many different languages spoken due to the cultural diversity. The study was significant as it focused on aspects, for example, language proficiency level and sexual orientation in utilising the strategies. The findings of the research could increase our understanding of the differences in gender and language proficiency in utilising the reading strategies. The present study can be used to fill in literature gaps in the metacognitive field. The results of this research can be used as an insight or feedback towards the future researchers about the significance of being aware in utilising metacognitive reading strategies to enhance learners' reading comprehension.

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

This section manages the review of literature about Metacognitive Awareness of Reading Strategies. There are many researchers who conduct their study about the apparent utilisation of metacognitive awareness of reading strategies in various perspectives such as gender and language proficiency level. These related literatures provide a proper guideline to conduct the present study.

#### **2.1 Description of Reading Strategies**

Anastasiou and Griva's study (as cited in Al-Dawaideh & Al-Saadi, 2013) explained that reading is "a complex process involving a combination of perceptual, psycholinguistic, and cognitive abilities" (p. 224). Anderson (2003) concluded that:

Reading is the interaction of four things including the reader, the text, the fluent reading or the ability to read at an appropriate rate with adequate comprehension, and strategic reading, or the ability of the reader to use a variety of reading strategies to accomplish a purpose for reading (p. 8).

Different point of views was given on the description of reading strategies among the researchers. According to Barnett (1988), reading strategy defined as a tool which is used among readers in order to solve problems and acquire text information. Garner's study (as cited in Mokhtari & Reichard, 2002) stated that reading strategies defined as "generally deliberate, planful activities undertaken by active learners, many times to remedy perceived cognitive failure" (p. 250). In addition, Cohen (1990) indicated that reading strategies as mental procedures that readers intentionally used in achieving reading tasks. Pritchard (1990) mentioned that reading strategies took into account of actions where readers built up

comprehension of what they read intentionally. Anderson (1991) declared that readers adopted reading strategies revising, acquiring and storing new. Moreover, Brantmeier (2002) stated that reading strategies were the understanding procedures that readers used to comprehend what they read. Readers chose and master the reading strategies to reach their intention or target (Carrell, Gajdusek, & Wise, 1998).

## **2.2 Classification of Reading Strategies**

Language learning strategies had been grouped into six sub-categories which were metacognitive, affective, social, cognitive, memory and compensation strategies (Oxford, 1990). Meanwhile, Anderson (1991) grouped the reading strategy into five different classifications which were test-taking strategies, paraphrasing strategies, strategies for establishing coherence in the text, support strategies and supervising strategies. Reading strategies were also classified into text-initiated, interactive and reader-initiated strategies by Jimenez, Garcia, and Pearson (1996). Singhal (2001) classified reading strategies into five different categories which were cognitive, memory, compensation, affective and social reading strategies. Baker and Brown (1984) explained that metacognitive strategies incorporated checking the result of any endeavors to solve an issue, arranging one's best course of action, observing the adequacy of any endeavoured activity, revising, assessing and testing one's methodologies for learning. Metacognition as a relatively new term studies about the awareness of one's thinking and the strategies used. Metacognition enables students to be more mindful of the purpose and reason they are doing or learning, and how they use the skills differently based on different situations. Metacognition enables students to use the particular strategy in a similar particular problem context but new context after they are being taught (Kuhn & Dean, 2004). Metacognitive awareness is being aware of how you think. According to Rivers (2001), learners who were skilled in metacognitive awareness were more

strategic and performed better compared to those who were unaware. Being aware could help students to become more efficient while learning as self-awareness assumes a basic part in enhancing the learning procedure. As Saemah et al. (2013) stated in their research, the utilisation of metacognitive strategies was supported and encouraged by most of the students.

### **2.3 Metacognitive Awareness of Reading Strategies**

According to Flavell (1976), metacognitive was referred to one's learning concerned one's intellectual procedures and items or anything identified with them. Oxford (1990) mentioned that "metacognitive strategies as actions which go beyond purely cognitive devices, and which provide a way for learners to coordinate their own learning process" (p. 136). Simpson and Nist (2000) explained that readers able to concentrate on the task by utilising metacognitive reading strategies and these strategies enable them to activate their prior data to understand the comprehension of the content. Auerbach and Paxton (1997) stated that metacognitive awareness involved information of methodologies for preparing writings, the capacity to monitor understanding and the capacity to change systems as required. Singhal (2001) claimed that metacognitive reading strategies were techniques that enhance perception, which showed how learners thought about an undertaking, how they comprehended what they read, and what they did when they didn't understand it. Metacognitive reading strategy awareness studied about how reading comprehension can be achieved efficiently by utilising the strategies (Mokhtari & Reichard, 2002). Metacognitive reading strategies were divided into three different sub-categories which were global, support and problem-solving reading strategies (Mokhtari & Reichard, 2002).

#### **2.3.1 Global Reading Strategies (GLOB)**

According to Mokhtari and Reichard (2002), GLOB strategies represented a set of reading strategies that consisted of 13 items that situated towards a worldwide analysis of content.

Mokhtari and Reichard (2002) mentioned these strategies could be considered as generalised, deliberate reading strategies that focused at setting the phase for the reading demonstration, for instance, providing the reason for reading, expectations and more.

### **2.3.2 Problem-solving Strategies (PROB)**

As Mokhtari and Reichard stated in their study, PROB strategies represented “a set of reading strategies which contained 8 items that applied by the users for solving problems when they found the texts became difficult to understand” (p. 252). According to Mokhtari and Reichard (2002), learners with action plans would be able to explore through the content skilfully by employing problem-solving reading strategies. Readers tended to utilise PROB strategies when they found difficulties in comprehending the text (Mokhtari & Reichard, 2002). Hence, readers could navigate through text in a more efficient way by providing action plans.

### **2.3.3 Support Reading Strategies (SUP)**

Mokhtari and Reichard (2002) indicated that SUP strategies represented a set of reading strategies that consisted of 9 items which basically included utilisation of extra reference materials as fundamental component to support reading comprehension. SUP strategies empowered the students to discover reference materials, for example, dictionaries as their fundamental support component (Mahmoudi, 2014).

## **2.4 Various Questionnaires Used to Measure Metacognitive Awareness of Reading Strategies**

Few instruments had been used to investigate metacognitive awareness and perceived use of reading strategies. The Index of Reading Awareness (IRA) that aimed to measure metacognitive awareness of elementary school students was designed by Jacobs and Paris

(1987). This instrument consisted of 22 multiple-choice items that measuring metacognition in four aspects which were the evaluation, regulation, planning and conditional knowledge. McLain, Gridley, and McIntosh (1991) reported that IRA ought to be utilised cautiously as a measure of metacognition in reading since the reliability index (0.61) was minimal. In order to measure elementary students' consciousness of strategic reading procedures, a questionnaire comprised of 12-items multiple choice was designed by Schmitt (1990). According to Mokhtari and Reichard (2002), the questionnaire developed by Schmitt had limitations for research despite the fact that its reliability was good. Mokhtari and Reichard (2002) explained that many of the choices in Schmitt's questionnaire seemed to lead the students to select the right answer. Moreover, a 10-item multiple-choice inventory was developed by Miholic (1994) to measure metacognitive awareness of reading strategies among students from junior high to college. Mokhtari and Reichard (2002) also stated that there was no scoring rubric for Miholic's inventory and no reliability or validity data was presented.

## **2.5 Factors that Influence the Utilisation of Reading Strategies**

There were some factors such as the area of specialisation, nationality, grade-point average (GPA), scholastic achievement and age that could influence the utilisation of metacognitive reading strategies regarding previous studies (Al-Dawaideh & Al-Saadi, 2013; Alhaqbani & Riazi, 2012; Commander, Ashong, & Zhao, 2016; Khan & Khan, 2013; Mahasneh, Alkhalwaldeh, & Almakani, 2016; Mesgar, Bakar, & Amir, 2012).

Al-Dawaideh and Al-Saadi's (2013) study identified the difference in the use of strategy based on area of specialisation. 550 undergraduate students from different area of specialisation, for example, junior level, students with autism spectrum disorders, students with learning disabilities and students with intellectual disabilities were selected randomly in

this study. The undergraduate students were required to complete the MARSII. The findings revealed that problem-solving reading strategies were the favoured strategy used among the respondents; followed by global and support reading strategies. The results also showed that there was no significant difference in employment of reading strategies based on area of specialisation. The findings were consistent with the present study, in which problem-solving reading strategies were the most preferred reading strategies among the respondents. Additionally, Al-Dawaideh and Al-Saadi's study (2013) provided more insights about the use of reading strategies based on area of specialisation which would fill in the literature gap in metacognitive field.

Another research that revealed the utilisation of reading strategy among students from different nationality belongs to Alhaqbani and Riazi (2012). The intention behind this survey was to investigate whether nationality influences the utilisation of reading strategies significantly. Around 122 undergraduates were selected to take part in this study. A translated version of Survey of Reading Strategies (SORS) was employed as the instrument in this study. None of the reading strategies were accounted for at a low-utilisation level as indicated by the participants' awareness of reading strategies. The results showed that students preferred problem-solving reading strategies the most; followed by global and support reading strategies. The results demonstrated that students' nationality was the significant variable that influenced their use of metacognitive reading strategies. Asian students utilised metacognitive reading strategies less frequently compared to African students. The results of Alhaqbani and Riazi's study (2012) were consistent with the present study where students favoured to employ problem-solving reading strategies more often compared to global and support reading strategies. The research carried out by Alhaqbani and Riazi (2012) increased readers' understanding about the use of metacognitive reading strategies might different based on

nationality, but the sample size for this study was relatively small which might produce inconclusive findings.

Commander, Ashong, and Zhao (2016) focused on the use of metacognitive awareness of reading strategies based on different nationalities, for example, undergraduates from United States and China. The aim of this study was to analyse the strategy used while reading academic materials in English among U.S. and Chinese undergraduates. A total of 234 undergraduate students were chosen where 117 were U.S. undergraduates and the other 117 were Chinese undergraduates. The instrument used in this study was consistent with Alhaqbani and Riazi's study (2012), which was Survey of Reading Strategies (SORS). Both U.S. and Chinese undergraduates indicated a moderate awareness level of reading strategies. Besides that, U.S. undergraduates reported a slightly higher of overall strategy usage compared to Chinese undergraduates. The findings demonstrated a similar pattern for reported strategies used among U.S. and Chinese undergraduates, in which, problem-solving reading strategies were mostly employed among the undergraduates. In addition, this study was consistent with previous studies by Alhaqbani and Riazi (2012), where both of these studies aimed to investigate the reading strategies used based on nationality. However, this study only focused on undergraduates from United States and China. Future studies should include more respondents from different nationalities to enhance the data of the research.

Mesgar, Bakar, and Amir (2012) aimed to investigate the utilisation of online metacognitive reading strategies based on age and fields of study. 39 postgraduates from different universities (Universiti Malaya, University Putra Malaysia, Universiti Kebangsaan Malaysia and Universiti Technology Malaysia) were chosen in this study. The instrument used in this study was Metacognitive Awareness Reading Strategies Inventory (MARSI) developed by Mokhtari and Sheorey (2002). The results indicated that there were critical contrasts in