

Metacognitive Awareness and Utilization of Reading Strategies among Tertiary Level Students at Private Sector University in Karachi, Pakistan

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ABSTRACT

In the 21st century, awareness regarding the usage of metacognitive reading strategies is of paramount importance, at tertiary level. Comprehension of difficult texts requires learners to possess cognizance and usage of certain strategies to counterpoise the shortcomings of not understanding the text, specifically in first time read. This research, thus, investigated the metacognitive awareness of reading strategies (MARS). A sample of 300 students was taken using purposive sampling. MARS has three basic categories: Problem-Solving, Support and Global Reading Strategies. A quantitative study was conducted on undergraduate students at private university, in Karachi, Pakistan. Survey of Reading Strategies (SORS) was used as an instrument, adapted from Mokhtari and Shoerey (2002). The results were obtained through quantitative analysis using SPSS (Statistical Package for the Social Sciences) version 22; in particular, Descriptive analysis was used to investigate the perception of MARS. Findings revealed that the high level of awareness of Problem-Solving Reading Strategies (PSRS), medium level of awareness was of Global Reading Strategies (GRS) and the least awareness was of Support Reading Strategies (SRS). However, this study was limited to Private Sector University which prevents its result to be generalized. The novelty provided by the present research is relevant data in spreading awareness regarding the reading skills and strategies that are crucial in comprehension of texts. As a result, so students, themselves should continue to strive, while teachers or instructors or trainers should assist the students, in order to refine their metacognitive reading strategies (MARS) to next level and intensify their understanding and enabling them to become even confident and effective readers.



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INTRODUCTION

Reading is a prerequisite skill needed for learning and acquiring knowledge. It is one of the essential skills because it extends its significance across different aspects of individual,

educational and professional development. Reading is a mindful act and interactive process (Shah, Ali & Ahmad, 2024). The sole purpose to read is to comprehend. If the reader reads, and is unable to understand and construct the meaning of the information presented in text, then the purpose of reading is not achieved. Instead, it becomes passive and unproductive activity. Bilal, Tariq, Masood and Nasim (2013) states that reading is an active process, in which learners or readers are actively and interactively involve during the process of reading, as a result, readers are able to comprehend the text and construct meaning from the text. However, reading comprehension does not occur in a vacuum, the research conducted by Ahmed (2019) asserts that it requires learners to use their cognitive abilities and regulate the use of reading strategies, while reading. Further, Abdelrahman (2020) posits as the ability of the reader to evaluate the outcomes on use of reading strategies, and adjust the strategies, if needed.

In 21st century, students' ability to read is a serious concern, especially for non-native English language speakers. According to Zhang and Lu (2018) students at a tertiary level are expected to have higher order thinking skills for comprehending the text in contrast to what they are familiar of during their school time. To overcome these challenges, the circumstances demand dire need of developments of metacognitive awareness of reading strategies (MARS). Metacognitive reading strategies (MARS) are defined as cognitive strategies, which can be used by students during reading for enhancement of their understanding of written text (Baker & Brown, 2014). Metacognitive Reading Strategies (MARS) is a necessary strand in learning of the reading strategies. Teng (2020) posits that metacognition upsills reading performance of students, in terms of reading comprehension. Developing awareness of metacognitive reading strategies, incorporates regulation, and monitoring of one's thinking process and also of learning process during reading, can be instrumental in overcoming the challenges faced by learners (Ahmed & Khan, 2021).

Ahmed (2019), however, through his study asserts that there is a widely held assumption that learners possess low awareness of metacognitive reading strategies (MARS), but if they do so, still learners' lack the ability to monitor, evaluate and regulate their cognitive processes accordingly during reading. Consequently, which grievously affects learners' comprehension of text and the deduction of meaning from the passage they read. Learners inability to read and comprehend the text effectively, hinders their academic performance, according to Pintrich (2019), Metacognitive awareness of reading strategies (MARS) is a pre-requisite skill for academic success. Unfortunately, in Pakistan, students are consciously unaware of how to regulate their cognitive and metacognitive reading strategies, while reading.

Undergraduate tertiary students, in Pakistan, face many challenges in reading academic texts due to language barriers, limited access to resources, and inadequate training in reading strategies (Jabeen & Khan 2016). Additionally, the cultural background of learners also impacts their perception of metacognitive reading strategies, students from different cultural backgrounds have different cognizance of MARS. Moreover, the possible reason for difference in awareness of ESL learners is as per the research administered by Ahmed (2019) is due to difference in teaching instruction of reading strategies and Metacognitive awareness of reading strategies (MARS). Thus, investigating the level of perception of metacognitive awareness of reading strategies (MARS) among Pakistani undergraduate tertiary students is a substantial research domain.

In this current study, researchers aim to investigate the metacognitive awareness of reading strategies (MARS) within the Pakistani undergraduate, tertiary students at a university of private sector, Karachi Pakistan. This research's finding will have necessary implications for teaching and learning practices in Pakistani higher education, likewise for the development of reading programs and interventions that target the specific needs of Pakistani undergraduate tertiary students. Therefore, following question was raised:

Research Question

To what degree undergraduate BS English students are aware of metacognitive awareness of reading strategies?

Research Hypothesis

H1: Undergraduate BS English students are not aware of metacognitive reading strategies.

LITERATURE REVIEW

Defining Reading

In learning a language, reading is a peculiar skill of a language. The purpose of reading is to comprehend the information presented. According to Noor, Siddiqui and Khan (2023) "Reading is a fundamental means of acquiring understanding that serves as the foundation for the educational process." (p.2). It is the creative systematic process of understanding information and extracting intended messages from the written text (Amazie & Buiguit, 2018). It is an excellent way for learners not only to acquire new information but also to expand their knowledge. Nilforoushan, Rashtchi and Abbasian (2023) asserts, acquiring competency of the reading skill significantly contributes not only to become successful in academia, but also reading plays a key role in intellectual evolution of a reader. However, reading is not a trivial act of decoding words and interpreting their meanings, rather it requires the use of background knowledge, vocabulary, and reader experience so that the reader is able to understand the meaning of text as whole (Pebriyanti, Ratminingsih & Santosa, 2024). In better words, reading can be defined as an intricate course of action in which various components of language are collated together to create the big picture of text, for better and meaningful comprehension of text. Besides, the Ahmed (2019) in his research highlighted the multiple units of language that are key considerations to effective reading as identification of grapheme, ability of the reader to access the word in their mental lexicon and to produce desired meaning in context, recognition of sound structures, and understanding of linguistic structure processing, in addition to the use of prior knowledge, awareness of different numerous reading strategies and techniques, understanding the organization of text, language proficiency and various aspects of vocabulary knowledge, for instance, denotative and connotative meaning, collocations, and so on.

Reading Comprehension

Reading Comprehension is a multifaceted skill which encompasses use of various reading strategies and techniques to effectively comprehend written information presented in written text across different genres. Even Ahmed (2019), points out "reading comprehension does not occur in a vacuum; rather it comprises the use of a number of skills and capabilities while carrying out a task or tasks." (p.26). The set of abilities a reader needs to manifest in the process of reading,

comprises of identifying key ideas, understanding vocabulary in given context, making inferences, connecting the information and drawing conclusions based on evidence presented in given text. Noor, Siddiqui and Khan (2023) posit “Better reading comprehension has been connected with a variety of reading techniques (p.2).” Reading comprehension is a fundamental requirement and is not only essential for academic success but also it is important for daily tasks, for instance, to read instructions, to read newspapers, articles etc. However, good reading comprehension requires practice. Perhaps, to be precise, good comprehension requires use of metacognitive reading strategies. Several studies, have been carried out in this matter, the researchers had directed attention to the fact that learners could become strategic or good readers by possessing awareness of use of reading strategies (Feller et. al, 2020; Khurran, 2023, Nilforoushan, Rashtchi & Abbasian, 2023). Also Bhutto, Ahmad and Sarhandi (2023) indicated that awareness of cognitive and metacognitive reading strategies can decrease reading anxiety among ESL learners.

Metacognitive Awareness of Reading Strategies

Metacognition, the term was introduced in 1970s by Flavell. He defined metacognitive reading strategies (1976) as “one’s knowledge concerning one’s own cognitive processes and products or anything related to them” (p. 232). In simpler words, thinking about one’s thinking. An immediate sense of definition given by Abdelrahman, (2020) is “the ability of learners to take necessary steps to plan suitable strategies for solving the problems they face, to evaluate consequences and outcomes and to modify the approach as needed, based on the use of their prior knowledge” (p.1).

As stated by Sheikh (2020), Mäkipää, Kallio and Hotulainen (2021), and Khurram (2023) Metacognition widely comprised of two components, that is, the knowledge component and regulative component. This means metacognition involves understanding of Metacognitive knowledge, which is also known as metacognitive awareness (Pintrich et al., 2000, p. 45), and the ability to regulate the knowledge, that is, when, where and how to use that knowledge. Nonetheless, Metacognitive knowledge is categorized into declarative, procedural and conditional Knowledge (Brown, 1987; Dunn, 2017; Garner, 1987; Jacobs & Paris, 1987; Paris et al., 1983; Schraw & Moshman, 1995; Soto et al., 2019). However, Flavell (1979) confers metacognitive knowledge into: person, task, and strategy. Despite the use of different registers to debate the compartmentalization of metacognitive knowledge, but the intended concept is same, respectively. Altogether, the terms refer to knowledge about one’s intellect and awareness of cognition, knowledge about the demand and objective of task, and knowledge of when and where which effective strategy or procedure to be used depending upon the condition to achieve aim in particular cognitive activity (Sheikh 2020; Khurram 2023). Further Mokhtari and Sheory (2002) put forwarded three key strategies of reading: Global Reading Strategies (GRS), Support Reading Strategies (SRS) and Problem-Solving Reading Strategies (PSRS). GRS refers to the type of strategy of reading which incorporates consciously and purposefully planned techniques employed during reading. In particular, it includes skimming, scanning, predicting and pre-viewing text, to know the gist of the information presented. The second PSRS, pertains to the actions taken by learners when they come across difficult text. It includes using contextual knowledge, adjusting speed and so on. Next, SRS referred to as a basic strategy to assist readers understand the information presented in a text. It includes the usage of supplementary materials, for instance, guides, dictionaries, key books, etc. to facilitate comprehension of text.

Research Studies on Metacognition in Reading

To the best of researchers' cognizance, a few researches were administered related to metacognitive reading strategies in Pakistan, as evidenced by the literature review. For instance, Sarwar, Yosuf, Hussain, and Noreen (2009), conducted research that aims at investigating the association between meta-cognition, achievement goals, and success in academics. Besides, goals of achievement were partitioned into domains of performance and mastery. There respondents of this research were 119, who were registered in M.A Education Department of Education, University of Sargodha. This research opted tool used by Coutinho (2006) in his research. The questionnaire constituted three sections. The first one measures mastery of goals, the second measures performance of goals, and the third measures meta-cognition. However, the results showed a negative correlation between achievement and performance goals at the master level. Also, there was no substantial association concerning academic achievement and metacognition.

Qanwal, Karim and Haq (2017) conducted research for investigation of the relationship between students' metacognitive awareness of reading strategies (MARS) and students potential to comprehend. Sample collected was based on forty L2 Learners which were enrolled in BA (Hons) program at the department of English, the Islamia University of Bahawalpur, Pakistan. With slight modifications, (MARS) - introduced by Mokhtari and Reichard (2002), and later was amended by Mokhtari and Sheorey (2002) as the survey of reading strategies (SORS), which was used for data collection. Also, a test was used for analyzing reading comprehension; SPSS software was used to analyze data as the research was purely quantitative. The relationship between the variables was measured by a Correlational test. The findings concluded that a highly significant positive correlation exists between metacognitive awareness of reading strategies (MARS) and capability of the ESL students to comprehend.

Kazi, Moghal and Asad (2020) explored which metacognitive reading strategy was utilized by undergraduates' learners of Lahore, as well as the relationship of various demographic variables on their usage of reading strategy. Two universities of both private and two public sectors were selected randomly. The students were selected from different departments of each university, making a total sample size of 500 students. The data was collected through survey questionnaire by using "Metacognitive Awareness of Reading Strategies Inventory" (MARS) created by Mokhtari and Reichard. The findings revealed that problem -solving strategy and support strategies were equally preferred by learners over global strategies. Further, it was also revealed that learners of public sector demonstrate higher strategy awareness as compared to learners of private sector.

Sheikh, Khan, and Rehman (2022), the purpose of the study was to determine the connection between metacognitive awareness of reading strategies (MARS), and socioeconomic status (SES) of undergraduate business students with the help of MARS. MARS (Mokhtari & Reichard, 2002) was used; however, a few items were developed to evaluate SES of students. Students of both public and private universities willingly participated. The findings disclosed that Socioeconomic Status is a notable predictor of Metacognitive Awareness of Reading Strategies (MARS) among tertiary level learners. The results, further recommend that training sessions and workshops should be conducted in order to promote MARS, which will help learners to maintain

their focus while reading, which will eventually significantly affect their habits of reading and learning.

Bhutto, Ahmad and Sarhandi (2023), the research aimed to explore the co-relations between reading anxiety, reading strategies and self-efficacy among undergraduate university students in Pakistan. Four different adapted tools were merged to form a comprehensive questionnaire for survey, consisting altogether fifty-four items. The tools used were: Foreign language reading anxiety scale (FLRAS) developed by Satio, Howtiz and Garza (1999), Meta-cognitive Awareness of Reading Strategies Inventory (MARS) is developed by Mokhatri and Richard (2002), Reading self-efficacy (RSE) questionnaire was adapted from Zare and Mobarakeh (2011), and Tool of reading proficiency (RP). Data was collected from 240 learners of Sindh, including both private and public sector, using convenience sampling technique. As far as the findings are concerned, the study explored anxiety of reading did not impact the reading proficiency and effective reading of learners. Although anxiety of reading was a constant factor, but students employed metacognitive reading strategies to deal with their nervousness and anxiety.

RESEARCH METHODOLOGY

Research Design

The current study primarily employed quantitative research design. Quantitative research involves the exploration of phenomena by gathering numerical data, which is subsequently interpreted by using mathematically based methods. (Aliaga & Gunderson, 2002). It will provide data in a way that can be easily recognized, analyzed and interpreted. Further a survey Questionnaire was provided to learners "to gather information about the opinions and behaviors of individuals" (Williams, 2003). An online self-administered close-ended questionnaire known as "Survey of Reading Strategies" (SORS) was utilized as a primary means to gather data, with the consent of the participants. According to Benlyazid (2019), "It's one of the most reliable" (Cronbach's alpha was .89). The instrument has 30 items and it included sub-sections or themes of three strategies: Global Reading Strategies (GRS), Problem-solving Strategies (PSRS), and Support Reading Strategies(SRS). Learners responded to items about their usage of reading strategies on a 5-point Likert scale ranging from "never" to "always". Further, pilot study was conducted, in addition to expert validation, to know the reliability and validity of the instrument.

Participants

In the current research, purposive sampling technique was employed. The participant of study are students of undergraduate BS English from first semester to eighth semester, at a private sector university in Karachi. All the learners had similar educational background, in a sense; they all were from same department of the undergraduate program, BS English, of a private university. The overall sample of the present study was 307. Henceforth, learners' perception of metacognitive awareness of reading strategies (MARS) was investigated.

RESULTS

The research question of this study is aimed at investigating metacognitive awareness of tertiary students of an undergraduate program of a private university. The questionnaire is categorized

into three sub-sections of reading strategies, i.e. GRS, PSRS and SRS.

GLOBAL READING STRATEGIES (GRS)

Global reading strategies are intentionally used techniques by students to surveil their reading process. It includes skimming, predicting, scanning, and previewing the content of text. This strategy assists learners to determine their purpose of reading and identify useful and relevant information presented in text. Eventually, helping learners grasp the main ideas or gist of text, structure, and organization of the text to navigate through the content of text.

Table 1. Global Reading strategies (GRS)

	N	Mean	Minimum	Maximum	Median	Mode	SD	Range
1. I read with a purpose in my mind.	300	4.13	3	5	4.00	4	.604	2
2. While reading, I use my existing knowledge to help me understand what I read, in a better way.	300	4.02	1	5	4.00	5	1.050	4
3. Before reading, I run-through the text to see what is it about.	300	3.91	1	5	4.00	5	1.153	4
4. I ponder whether the content of the text aligns with my aim of reading.	300	3.73	1	5	4.00	4	1.080	4
5. I initially analyze the text by observing the length and organization of the content.	300	3.64	1	5	4.00	4	1.146	4
6. While reading, I choose which part to read carefully and which part to overlook.	300	3.69	1	5	4.00	4	1.142	4

7. I examine visuals like tables, figures, and pictures in the text to enhance my comprehension of the text.	300	3.95			4.00	5	1.050	4
			1	5				
8. When reading, I use contextual clues to help me increase my understanding of text.	300	3.80	1	5	4.00	4	.982	4
9. I make use of typographical aids such as boldface, capitalization, and italics to identify key points.	300	3.80	1	5	4.00	5	1.140	4
10. I engage in critical analysis and evaluation of the information presented in the text.	300	3.58	1	5	4.00	4	1.102	4
11. I verify my conception of text when I come across contradictory information.	300	3.63	1	5	4.00	4	.957	4
12. While reading, I try to make assumption about the content of the text.	300	3.69	1	5	4.00	4	1.053	4
13. I confirm whether my assumptions about the content are right or wrong.	300	3.71	1	5	4.00	5	1.168	4

The first section of Global Reading Strategies has thirteen items. The mean of it is 3.79. It is shown in Table 1 that the means of individual strategy use ranged from a high of 4.13 (I read with a purpose in my mind.) to a low of 3.58 (I engage in critical analysis and evaluation of the information presented in the text.). Further, it can be scrutinized from the table that all the GRS

(Global Reading Strategies) have mean higher than of 3.5. So, it indicates that learners have remarkable mindfulness of the Global Reading Strategies.

Table 1.1.1 read with a purpose in my mind.

	Frequency	Percent	Valid Percent	Cumulative Percent
Sometimes	38	12.7	12.7	12.7
Usually	186	62.0	62.0	74.7
Always	76	25.3	25.3	100.0
Total	300	100.0	100.0	

From the analysis of the first question of GRS Table 1.1, it is concluded that in the first item, 62% students responded that they Usually read with purpose in their minds, 25.3 % Always read with the purpose in their mind and 12.7% Sometimes read with the purpose in their mind.

Table 1.2. While reading, I use my existing knowledge to help me understand what I read, in a better way.

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	8	2.7	2.7	2.7
Occasionally	23	7.7	7.7	10.3
Sometimes	45	15.0	15.0	25.3
Usually	103	34.3	34.3	59.7
Always	121	40.3	40.3	100.0
Total	300	100.0	100.0	

It is observed from the Table 1.2 that 40.3% Always, 34.3% Usually, 15% Sometimes, and 7.7% Occasionally and 2.7% Never use their existing knowledge to help them apprehend what they read in a better way.

Table 1.3. Before reading, I run-through the text to see what is it about.

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	13	4.3	4.3	4.3
Occasionally	27	9.0	9.0	13.3
Sometimes	54	18.0	18.0	31.3
Usually	85	28.3	28.3	59.7
Always	121	40.3	40.3	100.0
Total	300	100.0	100.0	

It is concluded from the Table 1.3, that 40% students Always, 28% Usually, 18% Sometimes, 9% Occasionally and 4.3% Never run through the information presented to know what is it regarding, prior they start reading.

Table 1.4. *I ponder whether the content of the text aligns with my aim of reading.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	11	3.7	3.7	3.7
Occasionally	27	9.0	9.0	12.7
Sometimes	78	26.0	26.0	38.7
Usually	99	33.0	33.0	71.7
Always	85	28.3	28.3	100.0
Total	300	100.0	100.0	

It is concluded from the Table 1.4, 33% students Usually, 28.3% Always, 26% Sometimes, 9% Occasionally, and 3.7% never ponder whether the content of text they are reading aligns with their aim of reading.

Table 1.5. *I initially analyse the text by observing the length and organization of the content.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	20	6.7	6.7	6.7
Occasionally	22	7.3	7.3	14.0
Sometimes	83	27.7	27.7	41.7
Usually	95	31.7	31.7	73.3
Always	80	26.7	26.7	100.0
Total	300	100.0	100.0	

It is concluded from the Table 1.5, 31.7% students Usually, 27.7% Sometimes, 26.7% Always, 7.3% Occasionally, and 6.7% never initially analyse the text they going to read by observing the length and organization of the content.

Table 1.6. *While reading, I choose which part to read carefully and which part to overlook.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	14	4.7	4.7	4.7
Occasionally	34	11.3	11.3	16.0
Sometimes	70	23.3	23.3	39.3

Usually	95	31.7	31.7	71.0
Always	87	29.0	29.0	100.0
Total	300	100.0	100.0	

It is concluded from the Table 1.6, 31.7% students Usually, 29% Always, 23.3% Sometimes, 11.3% Occasionally, and 4.7% never choose which part to read carefully and which part to overlook, while reading.

Table 1.7. *I examine visuals like tables, figures, and pictures in the text to enhance my comprehension of the text.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	8	2.7	2.7	2.7
Occasionally	24	8.0	8.0	10.7
Sometimes	52	17.3	17.3	28.0
Usually	106	35.3	35.3	63.3
Always	110	36.7	36.7	100.0
Total	300	100.0	100.0	

It is observed from the Table 1.7 that 36.7% students Always, 35.3% Usually, 17.3% Sometimes, 8% Occasionally and 2.7% never examine visuals like tables, figures, and pictures in the information presented in a text to augment their conception of a text.

Table 1.8. *When reading, I use contextual clues to help me increase my understanding of text.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	7	2.3	2.3	2.3
Occasionally	22	7.3	7.3	9.7
Sometimes	73	24.3	24.3	34.0
Usually	121	40.3	40.3	74.3
Always	77	25.7	25.7	100.0
Total	300	100.0	100.0	

It is observed from the Table 1.8, 40.3% students Usually, 25.7% Always, 24.3% Sometimes, 7.3% Occasionally, and 2.3% never use contextual clues to them increase their comprehension of text.

Table 1.9. *I make use of typographical aids such as boldface, capitalization, and italics to identify key points.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	17	5.7	5.7	5.7
Occasionally	20	6.7	6.7	12.3
Sometimes	69	23.0	23.0	35.3
Usually	95	31.7	31.7	67.0
Always	99	33.0	33.0	100.0
Total	300	100.0	100.0	

It is concluded from the Table 1.9, 33% students Always, 31.7% Usually, 23% Sometimes, 6.7% Occasionally and 5.7% never make use of typographical aids such as boldface, capitalization, and italics to identify key points.

Table 1.10. *I engage in critical analysis and evaluation of the information presented in the text.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	12	4.0	4.0	4.0
Occasionally	40	13.3	13.3	17.3
Sometimes	78	26.0	26.0	43.3
Usually	101	33.7	33.7	77.0
Always	69	23.0	23.0	100.0
Total	300	100.0	100.0	

It is concluded from the Table 1.10, 33% students Usually, 26% Sometimes, 23% Always, 13% Occasionally and 4% never engage themselves in critical analysis and evaluation of the content manifested the text.

Table 1.11. *I verify my conception of text when I come across contradictory information.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	4	1.3	1.3	1.3
Occasionally	36	12.0	12.0	13.3
Sometimes	81	27.0	27.0	40.3
Usually	125	41.7	41.7	82.0
Always	54	18.0	18.0	100.0
Total	300	100.0	100.0	

It is concluded from the Table 1.11, 41.7% students Usually, 27% Sometimes, 18% Always, 12% Occasionally and 1.3% never verify their conception of text when they came across conflicting information.

Table 1.12. *While reading, I try to make assumption about the content of the text.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	6	2.0	2.0	2.0
Occasionally	40	13.3	13.3	15.3
Sometimes	70	23.3	23.3	38.7
Usually	108	36.0	36.0	74.7
Always	76	25.3	25.3	100.0
Total	300	100.0	100.0	

It is concluded from the Table 1.12, 36% students Usually, 25.3% Always, 23.3% Sometimes, 13.3% Occasionally and 2% never try to make assumptions about the content of the text, while they reading.

Table 1.13. *I confirm whether my assumptions about the content are right or wrong.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	13	4.3	4.3	4.3
Occasionally	39	13.0	13.0	17.3
Sometimes	65	21.7	21.7	39.0
Usually	88	29.3	29.3	68.3
Always	95	31.7	31.7	100.0
Total	300	100.0	100.0	

It is concluded from the Table 1.13, 31.7% students Always, 29.3% Usually, 21.7% Sometimes, 13% Occasionally and 4.3% never confirm whether their assumptions about the content are correct or incorrect.

SUPPORT READING STRATEGIES (SRS)

Support reading strategy is basic among other strategies, in order to assist readers in comprehending content of the text effectively. It includes using supplementary materials, for instance, dictionaries, guides etc. to thoroughly understand the presented concepts. It includes taking notes, jotting key points, highlighting important information, to reinforce the understanding. Thus, this strategy facilitates comprehensive understanding.

Table 2. Support Reading strategies (SRS)

	N	Mean	Minimum	Maximum	Median	Mode	SD	Range
1. During reading, I take notes to help me retain what I read.	300	3.65	1	5	4.00	4	1.20 5	4
2. When I encounter challenging text, I read aloud as a means to help myself in comprehension of what I read.	300	3.67	1	5	4.00	4	1.24 1	4
3. When reading, I engage in the process of translation from English in to my native language	300	3.41	1	5	4.00	4	1.30 9	4
4. I think about information in both English and my mother tongue, while reading.	300	3.70	1	5	4.00	4	1.18 6	4
5. I mark as in circle or underline key information in the text to help me remember it.	300	3.93	1	5	4.00	5	1.18 6	4
6. I use supplementary material, such as a dictionary, to assist me in comprehending the text.	300	3.46	1	5	4.00	4	1.24 1	4
7. I paraphrase (restate ideas in my own words) to increase my conception of text.	300	3.69	1	5	4.00	5	1.21 9	4
8. I move back and forth in the text to find connections and relations among concepts presented in it.	300	3.79	1	5	4.00	4	1.08 2	4
9. In advance, prior to reading of the text, I formulate questions, for myself, that I anticipate the text will address.	300	3.07	1	5	3.00	3	1.34 1	4

The second sub-section of Support Reading Strategies has nine items. The mean of it is 3.59. It is shown in the Table 2 that the means of individual strategy utilized by students, ranged from a high of 3.93 (I mark as in circle or underline key information in the text to help me remember it.)

to a low of 3.07 (In advance, prior to reading of the text, I formulate questions, for myself, that I anticipate the text will address.). Further, it can be scrutinized from the table that 3 out of 9 items of the SRS (Support Reading Strategies) have mean higher than of 3.5, which indicates that it 66.6% of students are aware of support reading strategies, while 33.3% students had means sandwiched between 3.07 and 3.46, indicating medium level of awareness.

Table 2.1. *During reading, I take notes to help me retain what I read.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	20	6.7	6.7	6.7
Occasionally	35	11.7	11.7	18.3
Sometimes	63	21.0	21.0	39.3
Usually	94	31.3	31.3	70.7
Always	88	29.3	29.3	100.0
Total	300	100.0	100.0	

From the analysis of first question of SRS Table 2.1, it is concluded that, 31.3% students Usually, 29% Always, 21% Sometimes, 11.7% Occasionally responded that they pen down important postulates during reading, as in to assist themselves to retain the content.

Table 2.2 *I encounter challenging text, I read aloud as a means to help myself in comprehension of what I read.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	26	8.7	8.7	8.7
Occasionally	30	10.0	10.0	18.7
Sometimes	51	17.0	17.0	35.7
Usually	104	34.7	34.7	70.3
Always	89	29.7	29.7	100.0
Total	300	100.0	100.0	

It is concluded from the Table 2.2, 34.7% students Usually, 29.7% Always, 17% Sometimes, 10% Occasionally and 8.7% never read aloud as a means to help themselves in comprehension of what they read, when encountered with challenging text.

Table 2.3. *When reading, I engage in the process of translation from English in to my native language.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	35	11.7	11.7	11.7
Occasionally	38	12.7	12.7	24.3
Sometimes	73	24.3	24.3	48.7
Usually	77	25.7	25.7	74.3
Always	77	25.7	25.7	100.0
Total	300	100.0	100.0	

It is concluded from the Table 2.3, 25.7% students Usually, 25% Always, 24.3% Sometimes, 12.7% Occasionally, 11.7% never engage themselves in the process of translation from English language to their mother tongue.

Table 2.4. *I think about information in both English and my mother tongue, while reading.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	17	5.7	5.7	5.7
Occasionally	40	13.3	13.3	19.0
Sometimes	46	15.3	15.3	34.3
Usually	109	36.3	36.3	70.7
Always	88	29.3	29.3	100.0
Total	300	100.0	100.0	

It is concluded from the Table 2.4, 36.3% students Usually, 29.3% Always, 15.3% Sometimes, 13.3% Occasionally, 5.7% never think about information presented in both English language, and also in their mother tongue, while they read.

Table 2.5. *I mark as in circle or underline key information in the text to help me remember it.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	20	6.7	6.7	6.7
Occasionally	18	6.0	6.0	12.7
Sometimes	47	15.7	15.7	28.3
Usually	92	30.7	30.7	59.0
Always	123	41.0	41.0	100.0
Total	300	100.0	100.0	

It is concluded from the Table 2.5, 41% students Always, 30.7% Usually, 15.7% Sometimes, 6.7% Never and 6% Occasionally mark the key information in text they are reading.

Table 2.6. *I use supplementary material, such as a dictionary, to assist me in comprehending the text.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	25	8.3	8.3	8.3
Occasionally	44	14.7	14.7	23.0
Sometimes	73	24.3	24.3	47.3
Usually	84	28.0	28.0	75.3
Always	74	24.7	24.7	100.0
Total	300	100.0	100.0	

It is concluded from the Table 2.6, 28% students Usually, 24.7% Always, 24.3% Sometimes, 14.7% Occasionally and 8.3% never use supplementary materials like dictionary, to assist them in comprehending the text.

Table 2.7. *I paraphrase (restate ideas in my own words) to increase my conception of text.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	22	7.3	7.3	7.3
Occasionally	28	9.3	9.3	16.7
Sometimes	68	22.7	22.7	39.3
Usually	86	28.7	28.7	68.0
Always	96	32.0	32.0	100.0
Total	300	100.0	100.0	

It is concluded from the Table 2.7, 32% students Always, 28.7% Usually, 22.7% Sometimes, 9.3% Occasionally and 7.3% never paraphrase the text they reading to increase their conception of text.

Table 2.8. *I move back and forth in the text to find connections and relationships among concepts presented in it.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	10	3.3	3.3	3.3
Occasionally	26	8.7	8.7	12.0
Sometimes	75	25.0	25.0	37.0

Usually	95	31.7	31.7	68.7
Always	94	31.3	31.3	100.0
Total	300	100.0	100.0	

It is concluded from the Table 2.8, 31.7% students Usually, 31.3% Always, 25% Sometimes, 8.7% Occasionally, 3.3% never move to and fro in a text to seek connections and associations amongst concepts presented in it.

Table 2.9. *In advance, prior to reading of the text, I formulate questions, for myself, that I anticipate the text will address.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	49	16.3	16.3	16.3
Occasionally	53	17.7	17.7	34.0
Sometimes	85	28.3	28.3	62.3
Usually	54	18.0	18.0	80.3
Always	59	19.7	19.7	100.0
Total	300	100.0	100.0	

It is concluded from the Table 2.9, 28.3% students Sometimes, 19.7% Always, 18% Usually, 17.7% Occasionally and 16.3% never in advance formulated questions for themselves, prior reading of text.

PROBLEM-SOLVING READING STRATEGIES (PSRS)

Problem-solving reading strategy is utilized by learners when they encounter difficulties or challenges in comprehending text. This strategy refers to actions and processes that readers use to overcome the hindrance in their understanding of text. It includes seeking clarification through contextual clues, asking oneself questions, adjusting speed and so on.

Table 3. *Problem-Solving Reading Strategy (PSRS)*

	N	Mean	Minimum	Maximum	Median	Mode	SD	Range
1. I employ deliberate and attentive reading approach to ensure that I understand what I read.	300	3.77	1	5	4.00	4	0.988	4

2. When I lose my concentration, I make an effort to re-focus my attention.	300	4.02	1	5	4.00	4	0.986	4
3. I adjust my reading speed based on what I'm reading.	300	4.01	1	5	4.00	5	1.038	4
4. When encountered with the challenging text, I read it carefully and attentively to pay close attention to what I am reading.	300	4.23	1	5	5.00	5	1.032	4
5. I stop from time to time to reflect on the content I am reading.	300	3.83	1	5	4.00	4	1.061	4
6. I make an effort to create visual representation of the text I read, in order, to retain what I read.	300	3.87	1	5	4.00	5	1.120	4
7. When the text becomes difficult, I engage in the practice of re-reading to increase my comprehension.	300	4.19	1	5	4.00	5	0.904	4
8. While reading, I make assumptions about the meaning of unfamiliar words or phrases.	300	3.97	1	5	4.00	5	1.040	4

The third sub-section of Problem-solving Reading Strategies has eight items. The mean of it is 3.98. It is shown in the Table 3 that the means of individual strategy utilized, ranged from a high of 4.23 (When encountered with the challenging text, I read it carefully and attentively to pay close attention to what I am reading.) to a low of 3.77 (I employ deliberate and attentive reading approach to ensure that I understand what I read.). Further, it can be scrutinized from the table that all of the PSRS (Problem-Solving Reading Strategies) have mean higher than of 3.5. So, it indicates that students manifested solid cognizance of Problem-solving Reading Strategies.

Table 3.1. *I employ deliberate and attentive reading approach to ensure that I understand what I read.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	8	2.7	2.7	2.7
Occasionally	19	6.3	6.3	9.0
Sometimes	84	28.0	28.0	37.0
Usually	113	37.7	37.7	74.7
Always	76	25.3	25.3	100.0
Total	300	100.0	100.0	

From the analysis of the first question of SRS Table 3.1, it is concluded that, 37.7% of the students Usually, 28% Sometimes, 25.3% Always, 6.3% Occasionally and 2.7% never employ deliberate and attentive reading approach to ensure that they understand what they read.

Table 3.2. *When I lose my concentration, I make an effort to re-focus my attention.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	6	2.0	2.0	2.0
Occasionally	21	7.0	7.0	9.0
Sometimes	43	14.3	14.3	23.3
Usually	120	40.0	40.0	63.3
Always	110	36.7	36.7	100.0
Total	300	100.0	100.0	

It is concluded from the Table 3.2, 40% students Usually, 36.7% Always, 14.3% Sometimes, 7% Occasionally and 2% never make an effort to re-focus their attention, when they lose their concentration.

Table 3.3. *I adjust my reading speed based on what I'm reading.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	6	2.0	2.0	2.0
Occasionally	22	7.3	7.3	9.3
Sometimes	57	19.0	19.0	28.3
Usually	92	30.7	30.7	59.0
Always	123	41.0	41.0	100.0
Total	300	100.0	100.0	

It is concluded from the Table 3.3, 41% students Always, 30.7% Usually, 19% Sometimes, 7.3% Occasionally and 2% never adjust their reading speed based on whatever they read.

Table 3.4. *When encountered with the challenging text, I read it carefully and attentively to pay close attention to what I am reading.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	8	2.7	2.7	2.7
Occasionally	18	6.0	6.0	8.7
Sometimes	31	10.3	10.3	19.0
Usually	84	28.0	28.0	47.0
Always	159	53.0	53.0	100.0
Total	300	100.0	100.0	

It is concluded from the Table 3.4, 53% students Always, 28% Usually, 10.3% Sometimes, 6% Occasionally and 2.7% never read the text carefully and attentively to pay close attention to what they are reading, when encountered with challenging text.

Table 3.5. *I stop from time to time to reflect on the content I am reading.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	11	3.7	3.7	3.7
Occasionally	21	7.0	7.0	10.7
Sometimes	69	23.0	23.0	33.7
Usually	106	35.3	35.3	69.0
Always	93	31.0	31.0	100.0
Total	300	100.0	100.0	

It is concluded from the Table 3.5, 35.3% students Usually, 31% Always, 23% Sometimes, 7% Occasionally and 3.7% never stop from time to time to reflect on the content they are reading.

Table 3.6. *I make an effort to create visual representation of the text I read, in order, to retain what I read.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	13	4.3	4.3	4.3
Occasionally	25	8.3	8.3	12.7
Sometimes	56	18.7	18.7	31.3
Usually	99	33.0	33.0	64.3

Always	107	35.7	35.7	100.0
Total	300	100.0	100.0	

It is concluded from the Table 3.6, 35.7% students Always, 33% Usually, 18.7% Sometimes, 8.3% Occasionally and 4.3% never make an effort to create visual representation of the text they read, in order, to retain what they read.

Table 3.7. *When the text becomes difficult, I engage in the practice of re-reading to increase my comprehension.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	3	1.0	1.0	1.0
Occasionally	9	3.0	3.0	4.0
Sometimes	54	18.0	18.0	22.0
Usually	96	32.0	32.0	54.0
Always	138	46.0	46.0	100.0
Total	300	100.0	100.0	

It is concluded from the Table 3.7, students 46% Always, 32% Usually, 18% Sometimes, 3% Occasionally and 1% never engage themselves in the practice of re-reading to increase their comprehension of text, when the text becomes difficult.

Table 3.8. *While reading, I make assumptions about the meaning of unfamiliar words or phrases.*

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	12	4.0	4.0	4.0
Occasionally	12	4.0	4.0	8.0
Sometimes	59	19.7	19.7	27.7
Usually	108	36.0	36.0	63.7
Always	109	36.3	36.3	100.0
Total	300	100.0	100.0	

It is concluded from the Table 3.8, 36.3% students Always, 36% Usually, 19.7% Sometimes, 4% Occasionally and 4% never make assumptions about the meaning if unfamiliar words or phrases while reading.

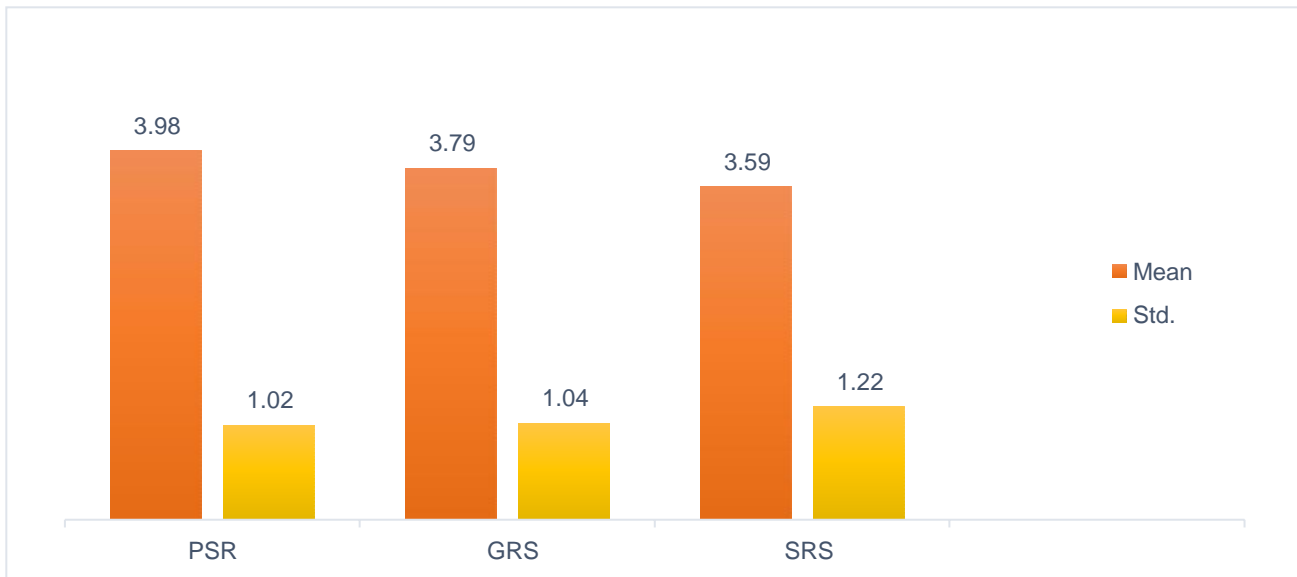
Table 4. *Overall means of subscales or themes of MARS.*

	N	Mean	Std. Deviation
Global Reading strategies (GRS)	300	3.79	1.04
Support Reading Strategies (SRS)	300	3.59	1.22

Problem-Solving Reading Strategies (PSRS)	300	3.98	1.02
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When contrasting and evaluating the overall means of perceptions of three different metacognitive reading strategies (MARS), from the Table 4, it is concluded that the most prominent strategy used by students was PSRS (M= 3.98; SD= 1.02) followed by GRS (M= 3.79; SD= 1.04), and the seldom used was SRS (M= 3.59; SD=1.22). The graphical representation is shown below.

Figure 1. Graphical Representation of Metacognitive Awareness of Reading Strategies (MARS)



DISCUSSION AND FINDINGS

The current study intended to discover the degree perception of Metacognitive reading strategies (MARS) among undergraduate students. The data obtained through descriptive statistics has revealed that students are fully aware of Global reading Strategies (GRS). Furthermore, Support reading Strategies (SRS) is one of the most frequently used by students. Moreover, there is an overall positive result of students' use of Problem-solving reading strategy (PRS) (see Table 34). The hypothesis of the research resulted in awareness of Metacognitive reading strategies (MARS) has supported the richness and consciousness of learners' cognizance of Metacognitive reading strategies (MARS). Moreover, when comparing all-inclusive different reading strategies of Metacognition, i.e., MARS, it is concluded that on average that most regularly utilized strategies by tertiary level learners were PSRS (M=3.98; SD=1.02) subsequently GRS (M=3.79; SD=1.04) and the least regularly used is SRS (M=3.59; SD=1.22). The results revealed that students mostly prefer using Problem-solving reading strategies during reading than other two strategies. However, the situation could be altered if learners are conscious of the potential benefits of utilizing Global and Support reading strategies. Consequently, it will reduce learners' dependency on problem-solving reading strategies. It is so because although they have awareness of Global and Support reading strategies, but students are unable to drill these strategies while reading, as a result, whenever they encounter any difficulty in reading, they are naturally inclined

to utilize problem-solving reading strategies in the moment. With this situation, students might be able to pass their courses but when learners would have to work independently their performance will be poor. In a nutshell, which will hinder their reading skills.

CONCLUSION AND RECOMMENDATIONS

Thus, the study concluded that BS English Undergraduate students are moderately aware of the strategies of reading. In other words, learners are consciously prone to monitor and regulate their processes of reading. In Pakistani context, although the tertiary learners have mindfulness of the metacognitive strategies of reading-MARS, but they are uncertain about its application and its benefit. The concept of 'Metacognitive Awareness' and implementing this paradigm in educational institutions to enhance students' learning will be fruitful. It is because students are cognitively unaware of reading strategies, which eventually affects their learning and academic performance. They mainly read for the sake of examination and are less motivated and interested in reading themselves or for pleasure. So, incorporating metacognitive awareness of reading strategies (MARS) in curriculum, and syllabus will empower learners to become familiar with their learning processes and will consequently improve their performance. Furthermore, educators should assist students by providing tailored support based on specific needs of students, whilst considering gender and academic differences.

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