

FACTORS INFLUENCING METACOGNITIVE REGULATION FOR ENGLISH READING COMPREHENSION AT UNIVERSITY LEVEL IN KARACHI, PAKISTAN

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ABSTRACT

In this study, undergraduate students in the Department of Education at a prestigious university in Karachi, Pakistan, were asked to consider the influences on their metacognitive skills in English reading comprehension. The study used a mixed-methods approach that combined the gathering and analysis of data that was both qualitative and quantitative. A purposive sample of fifty-two undergraduate students was given a self-administered survey with a five-point Likert scale, and five respondents were chosen for in-depth interviews. Statistical methods for quantitative data analysis and content analysis for qualitative data were both used to examine the data gathered from the questionnaire and the interviews. According to the results, language competency, group learning, context and environment, motivation, text type, and feedback and evaluation were all found to have an impact on learners' ability to engage in metacognitive processes in English reading comprehension. According to the findings, pupils used metacognitive techniques to a great degree. By focusing on these important elements, the study provides useful insights for teachers and students to improve reading comprehension skills. Future studies can examine how these variables interact and how they affect metacognition in English reading comprehension. The research advances the understanding of practical methods for raising English reading comprehension in a classroom setting.

KEYWORDS: *Metacognition, English reading comprehension, learning style, language proficiency, motivation.*

INTRODUCTION

The ability to read effectively is a skill that students should own. Students read literature for a variety of reasons, from learning to getting through time to having pleasure. It helps EFL students know about the disciplines that make up their educational credentials and advances their language skills (Gilakjani, 2016). Reading is a crucial skill that pupils must develop if they are to succeed academically overall. Reading has an impact on a person's mental and emotional development (Baba, 2020). Numerous studies from the past have demonstrated how important reading abilities are for learning. Reading comprehension is crucial for acquiring new information because it helps pupils perceive meaning beyond the obvious surface structures of words and phrases (Rahmat, 2020), (Yang, 2016). Reading is a challenging task (Meniado, Metacognitive Reading Strategies, Motivation, and Reading Comprehension Performance of Saudi EFL Students, 2016). Reading comprehension is one of the most crucial study skills in higher education. To excel in academics and beyond, students must be able to grasp what they read because academic and even technical courses require extensive reading. The various elements that influence reading comprehension are diverse.

Metacognition refers to thinking about thinking (Meniado, Metacognitive Reading Strategies, Motivation, and Reading Comprehension Performance of Saudi EFL Students., 2016). Flavell (1979) Metacognition entails active observation and control of cognitive processing activities as well as an understanding of one's own thought processes and end results. Understanding or views about how various variables or circumstances affect the growth and results of cognitive endeavors make up a large portion of metacognitive information. People, purpose, and technique are the three categories of these components or elements. According to a consensus regarding academics, cognition is the act of thinking, especially, metacognitive intelligence refers to how an individual is aware of this intellectual process. Metacognition assists readers in proactively taking control of their cognitive process when they learn knowledge and interpret a text (Saukah, 2020). Metacognition, also known as second-level cognitions, involves thinking about

thoughts, reflecting on ideas, and having awareness of our own knowledge and cognitive processes. It encompasses the ability to reflect on our perception, understanding, memory, and other mental processes while engaging in cognitive activities (Papleontiou-Louca, 2003).

Initially, reading serves as the majority of EFL students' language input because they are immersed in non-English speaking situations. They usually start reading books, texts, articles, etc. when learning English. According to several research, this in-depth reading will improve pupils' fluency in the English language (Martina, 2020). A study on the outcomes of extensive reading, specifically highlighting the positive impacts it has on different aspects of EFL reading attitudes. The results indicate that extensive reading has the potential to enhance students' motivation in learning EFL, as well as improve their reading speed and writing skills. Ultimately, frequent reading indirectly influences students' perception and behavior toward their English language proficiency. Significant reading can also improve broader understanding (Salameh, 2017). In the historical context of Pakistani colleges and universities, students often do not have the opportunity to receive formal English writing lessons. English language exposure is typically restricted to a mere four hours per week. When writing, they worry about word choice, proper grammar usage, sentence structure, and concept development. Students, on the other hand, typically lack the knowledge necessary to author a paper that is contextually relevant and enhances their creative writing abilities (Hassan, 2020). Reading is a talent that is equally vital at the university level as it is at other levels of higher education. Students must adjust to new learning requirements when they transfer from high school or college to a university. Students need to change their inactive reading habits into engaged reading. However, due to their lack of familiarity with or practice with active reading, students struggle to develop proper comprehension of the materials offered (Qanwal, 2014). Numerous studies have shown that when EFL learners use their native language's sociocultural rules to convey speech acts in English, intercultural misunderstanding often results. A pragmatic transfer is used to describe this phenomenon. This could be a Positive pragmatic transfer, which is thought to be a sign of sociocultural and pragmatic universality across languages or a negative pragmatic transfer. For EFL learners to demonstrate communicative intent and use foreign language successfully in a variety of contexts, it is crucial to develop their understanding of the sociocultural rules of the target language. This has been stressed by numerous linguists working in the field of interlanguage pragmatics (Azam, 2018).

The diversity of students attending higher education keeps expanding. Colleges accept students from a variety of training programs and institutions, as well as students from different ethnic and cultural backgrounds and with different learning preferences (Romanelli, 2009). Many individuals think that success in higher education is influenced by learning preferences. The examination of learning styles and online training highlights two prominent constraints. The initial challenge revolves around the absence of concrete evidence regarding the correlation between students and their preferred instructional style, academic achievement, and mindsets in the realm of online courses (Dunn, 2003). (Moussa, 2014) Cognitive, affective, and physiological traits are relatively stable indicators of how learners perceive, interact with, and respond to the learning environment, Learning styles refer to individuals' cognitive, emotional, and behavioral patterns when it comes to acquiring knowledge. McCarthy (2010) described learning styles as a student's preferred methods of information processing and perception. The insights offered by these two definitions and the cognitivist idea that learning is an internal process in which information is processed in accordance with personal learning preferences are all placed within the context of the current study. Students' bad learning methods also affect their learning styles. The style described by this word differs most from the student's native style. A low score frequently indicates that you would find it difficult to pick up the technique. One answer might be to tailor your learning to fit your preferred learning preferences. Another option is to try to enhance your learning preferences in the unimportant area(s) by acquiring some of the required abilities.

In the context of globalization, one significant aspect is the process of 'deterritorialization' of language, which refers to how language transcends geographical boundaries and is no longer confined to specific regions. This phenomenon involves the perception and attribution of values to language that goes beyond its traditional association with a particular area (Blommaert, 2010). In the field of second language motivation, contemporary theorists have embraced the view that challenges the legitimacy of the concept known as 'integrative Ness'. They argue that this construct is no longer valid due to the diminishing connection between the English language and the people and culture of major English-speaking countries. Consequently, learners' inclination to identify with these nations becomes less significant in their motivation to acquire the language (Islam, 2013). It is believed that motivation plays a significant role in any activity's success. It is essential for getting the intended results, and it is considered an essential factor that affects the success of second language motivation (Rehman, 2014). According to this paradigm, there are three degrees to motivation. The terms effort, desire, and affect refer, respectively, to the learner's motivation, desire, and emotional response. Based on these elements, the learner can be classified into two types of motivation: integrative motivation and instrumental motivation. Students that are intrinsically driven are eager to learn the language to better understand its native speakers. They desire to understand them and participate in their culture. Instrumental learners are those

who are motivated by practical considerations like obtaining a salary or bonus or entering college. Instrumental motivation was taken into consideration by Gardner (1992) to obtain social and financial benefits through second language Learning. The ability to be motivated is crucial to studying a second language. According to academics, both kinds are crucial to achieving learning goals. Therefore, understanding how the two categories combine is essential (Rehman, 2014).

LITERATURE REVIEW

Reading comprehension is receiving more attention because of the need for strong reading comprehension in today's information-based culture (Gilakjani, A study of factors affecting EFL learners' reading comprehension skills and the strategies for improvement, 2016). Reading is therefore essential to all academic disciplines. To better understand how people read, reading research tries to tap into the processes of understanding. Having a better knowledge of reading abilities might help teachers create more productive lesson plans. We can decode the symbols by reading. According to neurological research, the human brain must adapt for people to read and write. The brain can reorganize itself to be able to read in other languages, according to recent brain imaging techniques. Existing neural networks that were initially created for cognition, language, and vision were trained to create a brand-new neural network for reading (Dehaene, 2005). Based on the concept of neuronal recycling, it is proposed that every cultural acquisition needs to find its specific place in the human brain. This hypothesis suggests that a circuit with a similar original function and sufficient adaptability can be repurposed to support this new function.

Teaching English as a foreign language (EFL) comes with difficulties in Pakistan. The necessity to use methods of instruction that consider students' learning styles is one of the most important difficulties. The multivariate skill of reading encompasses a complex blend of cognitive, linguistic, and non-linguistic abilities. It requires proficiency in various levels of processing, as well as an advanced understanding of text representation and the ability to integrate ideas on a global scale (Kheirzadeh, 2012). The requirement for students to recognize, describe, and understand their learning styles is also crucial. Teachers must be aware of the consequences of mismatches between their classroom choices and students' learning preferences (Sabeh, 2011). It has been established that there are at least three principles that can assist students in improving their reading comprehension. Firstly, fluency plays a crucial role as it allows the mind to concentrate on understanding the text. Secondly, having a wide vocabulary range enhances comprehension and promotes a desire to read more. Lastly, domain knowledge, as supported by recent research, not only improves fluency, and broadens vocabulary, but also enables a deeper level of understanding. He goes on to say that understanding language and the outside world is necessary for understanding reading comprehension (Nassaji, 2003), (Hirsch, 2003). Teaching university-level English writing in Pakistan is a difficult task for English teachers from Pakistan because it calls for not just strong language proficiency among the teachers themselves but also expert writing instruction (Hassan, 2020). Regardless of the enormous increase in reading load and complexity when students move from college to university learning, the nature of reading changes. To understand important modules in a course of study, independent reading is now becoming more and more necessary (Qanwal, 2014).

Learning happens in a naturalistic way. We differ from other species most likely because of our capacity for learning. People can increase their knowledge, discover new abilities, and learn new things. There are numerous important aspects of human learning, including the fact that it frequently occurs subconsciously and only comes to consciousness in specific situations and at specific times (Alkhatnai, 2011). Learning method, the term learning styles refers to distinctive cognitive, practical, and psychosocial behaviors that serve as reasonably stable indicators of how learners perceive, engage with, and respond to the learning environment (Romanelli, 2009). Learning styles are a crucial component of creating effective virtual learning environments (Graff, 2004), (Tu, 2002). One of the most important abilities students need to enhance their academic performance is reading comprehension. It plays a vital role in helping students become proficient readers. Developing strong reading comprehension skills is crucial as it enables students to effectively understand and interpret written information. These skills are essential for students to excel in their academic endeavors, as they are commonly required to comprehend various texts assigned by their teachers (Gilakjani, A study of factors affecting EFL learners' reading comprehension skills and the strategies for improvement, 2016). Metacognition promotes independent learning by enabling one to understand their own thinking. With such information, one can develop flexible, self-assured problem-solving skills as well as feelings of pride and self-efficacy. Instead of being passive recipients of information and coerced experiences, metacognition empowers students to actively participate in their learning and performance. Constructivist explanations of self-controlled learning are congruent with this theory. Second, examining individual variances in cognitive development and learning is the main goal of metacognition since it places a high priority on self-awareness and self-management. Third, metacognition is a part of cognitive development and serves as an illustration of the knowledge and executive abilities that result from training and experience. One of its products is the growth of cognitive ability. The term metacognition has recently come to mean more than just thoughts about thoughts, as was once thought, and now encompasses the ideas of knowing one's own knowledge, processes, and cognitive and affective states, as well as the ability to monitor and

regulate one's own knowledge, processes, and cognitive and affective states (Papleontiou-Louca, 2003) consciously and deliberately.

Dissatisfaction with the conventional socio-psychological model for second language motivation has led to a significant re-conceptualization of L2 motivation research in recent years (Csizér, 2005), (Dörnyei, 2009), (Ryan, 2009). In a globalized world, some researchers contend that integrative Ness, a key concept in socio-psychological research that stands for the desire to identify and blend with English-speaking individuals and their culture has lost much of its significance (Islam, 2013). With sufficient inspiration, any goal is possible to achieve. In every educational situation, but particularly during the acquisition of a second language, it is an essential component that facilitates learning (Rehman, 2014). Woolfolk, 1998, defined motivation as an internal state that arouses, directs, and maintains behavior. Salvin, (2001) defined motivation as an internal process that activates, guides, and maintains behavior over time. According to Brown (2000), students who are learning a target language prefer a mix of these two approaches. According to Fillmore (1991), there are three prerequisites for acquiring a second language, a) a motivated student population is required to study the target language, b) aid from native speakers to learn a second language, and c) interaction between learners and native speakers of the target. Previous research has shown that a lot of scholars have focused on the conflict between integrative and instrumental motivation. According to Gard (2009), motivation can be categorized as either intrinsic or extrinsic. In the context of psychological research, Woolfolk (1998), defined intrinsic motivation as one that originates from internal factors such as personal interest or curiosity. Extrinsic motivation involves doing something to obtain something else, a means to an end (Santrock, 2004). Engin (2009) The different types of motivation needed to learn a foreign language and concluded that integrative motivation rests on the individual's willingness and desire to succeed, whereas instrumental motivation is based on a pragmatic approach. Based on their research findings, motivation plays a crucial role in influencing various aspects of students' second language learning. This includes their utilization of language learning strategies, level of interaction with native speakers, exposure to the target language, performance on academic assessments, overall proficiency, and the duration for which they retain and sustain their language skills even after completing their language studies (Islam, 2013). The insight that students currently possess and is based on their own mental procedures is referred to as metacognitive knowledge. But the mechanisms employed to track their individual learning are revealed through metacognitive regulation. Metacognitive knowledge and metacognitive regulation are the key components utilized in tasks aimed at enhancing reading comprehension and problem-solving abilities (Grotzer, 2012). These elements play a pivotal role in facilitating the process of monitoring and controlling one's own cognitive activities. Metacognitive knowledge, as categorized by Flavell (1979), encompasses three components: understanding of oneself, the task at hand, and the strategies involved. The advantages of engaging in metacognitive activities to enhance learning have been widely recognized. Chi found the advantages of metacognition for learning and informed that pupils who employed metacognitive techniques by immersing them in self-explanations and self-monitoring exercises stayed better problem solvers than those who did not. White and Frederiksen found that when engaging in metacognitive reflection, low-achieving pupils improved their learning. Additionally, metacognition has been recognized as an essential element of self-regulated learning. Metacognition is the process of controlling how students' cognitive processes work as they learn to read and understand the text (Channa, 2018).

METHODOLOGY

The present research was conducted at a prominent university located in Karachi, Pakistan. This research adopted a mixed method design, incorporating both quantitative and qualitative data collection and analysis. The targeted population for this research was comprised of undergraduate students enrolled in the Department of Education in three programs that is, Bachelor of Education 4 years, 2.5 years, and 1.5 years, at one of the reputable universities in the city of Karachi. This student cohort encompasses individuals with diverse majors and educational backgrounds. Due to Spending several years studying English as a subject, all the students are of an age where they can understand and independently complete the survey. The sample of this investigation was the students from all three B. Ed programs with a total size of fifty-two. As part of the 2021/2023 academic year, a purposive sample of students was collected during the even semester. 31 (59.6 %) of them were female, while 21 (40.38 %) were male. Their ages range between 16 to 24 (58.2 %), 25-35 (29.2%), and 35- 40 (12.6%). 12 out of the 52 have studied English for three to five years, 15 for six to eight years, and 25 for over a decade.

RESEARCH INSTRUMENT

A self-administered questionnaire was developed to gather quantitative data from the sample of undergraduate students. The questionnaire contained two sections. Section A included questions regarding demographic pieces of information, such as participants, gender, age, grade, educational background, first language, and number of years spent learning EFL to date. Whereas The questions in Section B probe deeper into students' academic achievement, self-monitoring, learning style, motivation, and ways to learn English as a Second language. Other topics covered in Section B include evaluation, extracting essential ideas from a text, retaining an interest in the reading process, and

linguistic proficiency. A five-point Likert scale, from 1 (strongly disagree) to 5 (strongly agree), is used in this section. After being verified for validity and reliability, the questionnaire was given out.

In addition to this, in-depth interviews were conducted with five respondents selected by purposive sampling to gain deeper insight into their experiences, perspectives of learning English, perception of teaching methods used to particularly English comprehension, learning approaches of the students currently, and strategies related to metacognitive abilities and English reading comprehension. In the said interview, open-ended questions were asked to encourage participants to share their thoughts and experiences.

DATA COLLECTION PROCEDURE

To conduct the research the ethical approval from the university had been obtained priory to ensure the rights and well-being of participants affirming the confidentiality and anonymity of participants throughout the research process. Informed consent from participants, clearly stating the purpose, procedures, and voluntary nature of their participation had also been taken. The responses to the questionnaire had been taken at the university by distributed among the participants providing clear instructions and allocating an appropriate timeframe for participants to complete the questionnaire. It took 10 minutes to completely fill out the questionnaire. However, participants for interviews were contacted face to face and through video calls. In-depth, semi-structured audio and video-recorded interviews were used to generate a holistic view of the experiences and challenges faced by the interviewee. Each interview took approximately 20 minutes. Both qualitative and quantitative data were collected to address the research question and to obtain triangulation.

DATA ANALYSIS

Statistical analytical methods were employed to examine correlations between variables and pinpoint a significant impact on metacognitive skills in English comprehension when reading for the examination of quantitative data. The mean scores and standard deviation were calculated using descriptive statistics with SPSS Statistics version 20.0. The following interpretations were generated based on the mean scores for how much each of these factors influenced meta-cognitive skills: M is equal to 1.00-1.80 (very low), 1.81-2.60 (low), 2.61-3.40 (moderate), 3.41-4.20 (high), and 4.21-5.00 (extremely high). On the other side, content analysis was employed for interview data analysis. The five students’ responses were coded as P1, P2, P3, P4, and P5.

RESULT

Quantitative and qualitative findings were merged and interpreted to articulate connections between the quantitative and qualitative findings. According to the statistics (M = 4.11, SD = 0.430), a lot of metacognitive methods were used. This implies that students continually assess their own comprehension of the reading material. All the students acknowledged that they had utilized metacognitive techniques like evaluation, summarizing important passages from a text, and keeping their attention up throughout the reading process. They were all also confident in their capacity to employ these techniques successfully for English reading comprehension. However, a few of the main variables that affect meta-cognitive abilities are: The level of English proficiency of the reader, motivation of reading, the context, the environment of reading, and the type and genre of the text.

Table 4.1 *Extend of the effect of the factor affecting meta-cognitive abilities on English Reading Comprehension*

S.No	Factor	Further types	Mean	SD
1	Language Proficiency		4.58	0.44
2	Motivation		3.92	0.51
3	Feedback and Assessment		3.66	0.32
4	Context and Environment		4.22	0.45
5	The genre of the text		3.99	0.55
6	Learning Styles	Visual	2.99	0.34
		Auditory	1.98	0.24
		Kinesthetic	2.55	0.49
		Reading/Writing	3.01	0.41
7	EFL learning Approaches	Task-based language teaching	3.44	0.48
		Flipped classroom.	3.31	0.34
		Collaborative learning	4.55	0.39
		Direct instruction	1.76	0.28

The responses of students in the interviews revealed the same opinions about the influences of the mentioned variables on metacognition in learning English reading comprehension: "I can evaluate my reading skill. Only if I work for the text of my choice, which is in no way could be English literature." (P1); "In fact, my reading skill is not at an advanced level as I still face many new words and need more language proficiency, vocabulary building needed, to be able to understand more reading comprehension texts" (P3); "I improved my metacognitive skill rapidly when assigned flipped classroom." (P5).

There are some other factors such as sociocultural effect, mother tongue, and major in prerequisite qualification that have a condition-based influence on evaluating the reading process, figuring out what is most crucial about a text, understanding and keeping on reading, and evaluating.

DISCUSSION

Among the various factors, language proficiency, collaborative learning, and context and environment had the highest mean scores of all that is 4.58, 4.55, and 4.22 respectively ensuring that these three factors importantly enable the reader to use more effective strategies, such as monitoring, evaluating, and planning, to comprehend the text and specifically, the context and environment of reading may influence the reader's metacognitive regulation, such as the availability of resources, feedback, and support. However, the other essential factors are the motivation and type of genre of the text.

Different types and genres of texts may require different kinds of metacognitive regulation, such as activating prior knowledge, summarizing, and setting goals. This indicates that students are responsible enough to know what they do and try to fulfill their goals in learning EFL, particularly English reading comprehension competence.

CONCLUSION

The study aims to discover factors that influence metacognition while doing English reading comprehension at the Department of Education in a university. The conclusions are outlined below, followed by recommendations for the future and suggestions for research directions. The results showed that most students agreed on the significance of seven factors, including language proficiency, collaborative learning, context and environment, motivation, the genre of the text, and feedback and assessment, which were all highly influential in their learning of English reading comprehension. This is a good discovery because it shows how much reading comprehension in English can be improved with knowledge of the challenges and helpful methods. To enhance their reading comprehension in class and outside of it, students should be more involved in their learning, discuss any problems they are having with teachers and peers, and investigate the best reading practices. Only pupils who are engaged and genuinely want to learn can be helped by teachers. Students are advised to identify these aspects through consistent study practices, goal-setting, and greater utilization of language laboratories and internet resources to restock them for their own reading progress.

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