

**THE EFFECT OF A SPEED-READING
COURSE ON READING COMPREHENSION
OF IMPULSIVE AND REFLECTIVE
LEARNERS**

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THE EFFECT OF A SPEED-READING COURSE ON READING
COMPREHENSION OF IMPULSIVE AND REFLECTIVE
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ABSTRACT

Reading comprehension is a daunting task for many ESL learners in the context of Malaysia. Also, little attention, if any, has been accorded to how reflectivity and impulsivity affect language learners' reading comprehension. To solve this problem, this study focused on the effect of an intervention in the form of a speed reading course on the reading comprehension of reflective and impulsive ESL learners at a college in Malaysia. A confirmatory sequence mixed-methods study was designed. Based on the results of the Nelson Denny Reading pretest, selected samples (n=142) were divided into three groups, i.e., one control group and two experimental groups of impulsive and reflective learners. Barrats et al. (1995) impulsivity test and Kember et al. (2000) reflectivity test was used to group the participants into reflective and impulsive learners. Also 18 reading passages were assigned to the participants in 18 sessions of the treatment course. While the control group read the texts at their convenience, the experimental group recorded their reading time in a score sheet. This information and their reading scores were used to check their progress throughout the course. The comparison the pretest and post-test results allowed the researcher to answer the research questions. As the results of the study revealed, while the speed reading course affected the participants' reading comprehension, impulsivity or reflectivity did not result in any significant differences. The participants' reading time was significantly decreased; however, no significant difference was observed between the impulsive and the reflective learners in terms of reading time. Also, after interviewing 13 respondents, the qualitative analysis results through Qualitative Content Analysis (QCA) revealed that the respondents noticed increased efficiency and better comprehension, realized reading techniques, gained confidence in speed reading, found reading easier and more joyful. Time management, answering all questions, reading the whole text, and understanding difficult vocabulary items were among the course's challenges. The respondents also suggested strategy instruction, more practice tests, teaching the essay format and group work to be added to the course. This study has pedagogical implications for course designers and language teachers.

Keywords: Reading Comprehension, Impulsivity, Reflectivity, Speed Reading Course.

APPROVAL

This is to certify that this thesis conforms to acceptable standards of scholarly presentation and is fully adequate, in quality and scope, for the fulfilment of the requirements for the degree of Doctor of Philosophy

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(17 April 2023)

DECLARATION

I hereby declare that the thesis submitted in fulfilment of the PhD degree is my own work and that all contributions from any other persons or sources are properly and duly cited. I further declare that the material has not been submitted either in whole or in part, for a degree at this or any other university. In making this declaration, I understand and acknowledge any breaches in this declaration constitute academic misconduct, which may result in my expulsion from the programme and/or exclusion from the award of the degree.

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LIST OF ABBREVIATION

BIS	Barrat's Impulsivity Scale
EFL	English as Foreign Language
ESL	English as a Second Language
FL	Foreign Language
LSI	Learning Style Inventory
Mobile App	Mobile Application
NDRT	Nelson Denny Reading Test
PFC	Prefrontal cortical
QCA	Qualitative Content Analysis
QRT	Questionnaire for Reflective Thinking
L2	Second Language
SLL	Second Language Learning
SPSS	Statistical Package in Social Sciences
FACT	The Future Advanced Technical College

CHAPTER 1

INTRODUCTION

1.1 Overview

The first chapter of the study aims at introducing the research variables and the problems under investigation. It highlights the importance of the variables in this study and also justifies the need for this study. The study's objectives, the significance of the findings, the limitations of the study, and the definition of the key terms are presented in this chapter.

1.2 Background of the Study

The English Language is the international language people use to communicate worldwide (Holliday, 2005). In Malaysia, English functions as the second language (ESL) and has been widely utilized to interact in various fields, particularly in education (Hiew, 2012). According to Viknesh Nair et al. (2021) one of the greatest strides the Malaysian educational system has taken is to use English as its medium of communication in many educational settings. Definitely, using English occurs through using reading contents that are in English as well. This means that reading is of prime significance in Academic settings in Malaysia. Therefore, reading has a strong link to academic success, since most materials at the university level are paper-based (Fairbairn, & Fairbairn, 2001).

Reading is also one of the most powerful means for communication in English, both in academia and business, is reading, making it one of the most crucial skills to learn for students. A study conducted by Charanjit Kaur Swaran Singh, et al. (2021) reveals that even people in rural Malaysian areas believe that knowledge of English can affect their success rate at being hired. Hence, in the context of Malaysia, English, which is a compulsory subject at schools, mainly occurs through reading.

Globally speaking, reading has received more attention compared to other language skills (Underwood, 2012). Therefore, many aspects of this skill have been unveiled. These aspects include: reading comprehension (Blickenstaff, Hallquist, & Kopel, 2013), incidental vocabulary learning (Brown, Waring, & Donkaewbua, 2008), technology and reading comprehension (Proudfoot, 2016), etc. in the context of Malaysia, type of thinking while reading (Randip Kaur Valdep Singh & Azianuara Hani Shaari, 2019), vocabulary level and reading in English (Wang & Hamidah Yamat, 2019), and reading comprehension (Mohamad Subaidi et al., 2019) are some of the frequently researched topics.

As mentioned earlier, reading the primary source of input for university learners, and speed reading can affect the learners' reading comprehension by increasing reading fluency and, in turn, increasing the performance of the working memory (Yen, 2016). Chung and Nation (2006) note that three types of activities occur while reading, i.e., jumping to the next word, fixations on certain words, and moving backward to a word already read. Among these activities, long fixation on words affects speed reading and can even affect reading comprehension. A study conducted by Pan et al. (2021) reveals that long fixations on words affect lexicon access, and influences comprehension. To this end, any speed reading course should aim at the reduction of fixation on words. Speed reading can be a possible solution to contract fixation on words through increasing reading rate (Acklin & Papesh, 2017).

Various studies have investigated how speed reading (also known as fluent reading) can affect reading comprehension (e.g., Abdulrahman, & Bsharah, 2014; Nazari, Maghsoudi, & Rajabi, 2014; Acklin & Papesh, 2017; Macalister, 2010), and they mostly concluded that developing speed reading skills is vital to foster reading comprehension. However, some studies also concluded that some attempts to increase

reading comprehension through speed reading have failed; especially those delivered through mobile applications (Acklin & Papesh, 2017). As speed reading, to a great extent, depends on the skills the students develop to read, teaching these skills may positively affect the comprehension of the learners. Thus, a speed reading course plays a role in this regard (Förster, Kawohl, & Souvignier, 2018; Macalister, 2010).

Although reading is perpetuated as a significant language skill to acquire by English as a Foreign language (EFL) and English as a Second Language (ESL) learners, limited research has dealt with a speed-reading course and learning styles in Malaysia. Many students achieve poor reading comprehension scores, and there is a need to investigate how to help struggling readers. As reading is a cognitive skill (Nation, 2010), it may have intricacies with the learning styles that are cognitive. Two of the most significant learning styles which have recently been of attention to researchers in the field are impulsivity vs. reflectivity. Unlike introversion vs. extroversion which have been subject to many studies in ESL/EFL contexts, impulsivity and reflectivity have not been investigated thoroughly (Shabani et al., 2017).

Thus, there is the need to gauge the effect of speed reading course by considering the highly cognitive learners (reflective) and those who are more conjecture-oriented (impulsive). In other words, the answer to the question of how much learning styles can affect learning is still not fully reached. While some studies show that learning styles can affect language learning, scholars such as Ellis (2005) state that unless the learners in one context are subject to a study, generalizations cannot easily be made. To this end, the researcher investigates the effect of a speed reading course on the reading comprehension of Malaysian ESL students in Malaysia by considering impulsivity and reflectivity as moderating variables.

Moreover, to fully understand how effective improving the speed reading course may be on reading comprehension, it seems significant to investigate students' perception about using speed reading strategies. Of interest to the researcher in this study was to find out how a speed reading course in the context of Malaysia can affect the reading comprehension of Malaysian undergraduate students. This question is still open in the context of Malaysia and warrants more research.

1.2.1 Speed reading

Nuttall (1996) categorizes readers into two circles of weak readers and good readers. To him, a good reader's reading activities include reading fast, better understanding, more enjoyment, and covering more reading materials in a certain period. In contrast, he introduces the so-called "vicious circle of the weak reader" (Nuttall, 1996, p.127), in which reading is associated with slow reading and lack of reading comprehension. Not only does Nuttall (1996), but also other scholars such as Macalister (2010), Nation (2007), and Hudson (2007) have perpetuated that good reading is associated with speed reading. Macalister (2008), for example, clearly states that "Fluent reading is essential for successful comprehension. One dimension of reading fluency is reading rate or reading speed. Because of the importance of reading fluency, fluency development activities should be incorporated into classroom practice" (p.104).

There may be numerous strategies for speed reading; however, as the learners usually do not know these strategies, Macalister (2010) points out that the teachers should play an active role in instructing speed reading. Thus, a speed reading course as an approach to increase reading speed is required. Elsewhere Grabe (2008) lists four dimensions of fluent reading, i.e., accuracy, reading rate, automaticity, and prosodic structuring. Macalister (2010) notes that word recognition's automaticity and accuracy have link to reading rate. Speed reading is one of the factors that affects reading

fluency and is defined as the reader's ability to recognize the words and comprehend them.

The question left open about the reading comprehension courses in Malaysia is " to what extent these courses comply with the features of a balanced reading course in terms of speed reading (reading rate) as suggested by (Macalister (2010), Nation (2007), Hudson (2007), etc. ". In other words, is speed reading skill considered a pivotal factor in reading comprehension courses in Malaysia, or is the educators' focus mostly accorded to reading accuracy by increasing vocabulary and syntax knowledge? Looking at the literature, one can find out that research on reading comprehension of Malaysia EFL/ESL learners has mainly focused on reading comprehension and reading interest (Sharfuddin, 2013), Reading comprehension, and metacognition (Abdul Rashid Mohamed et al., 2016), reading strategies in L2 reading (Maarof & Yaacob, 2011), online reading (Mohamad Jafre et al., 2011), etc.

Some studies have dealt with reading fluency and reading comprehension in Malaysia. For example, Khor, Low, and Lee (2014) conducted a study to gauge the relationship between 3 subskills of reading fluency, i.e., accuracy, reading rate, and prosody with reading comprehension. They concluded that all these subskills are significantly related to reading comprehension. Also, previous studies that have delved into any component of reading fluency and reading comprehension are mostly cross-sectional studies that have studied the status of the learners and not how a course can affect their reading; contrary to the fact that a course and practicing significantly affect the reading skill.

Although reading speed as a subskill of reading fluency has shown effects on reading comprehension of Malaysian ESL students, these students still struggle with L2 reading. Sidek (2010) links the Malaysian's reading problems in L2 to the

secondary school curriculum, which is top-down, explicit, and based on individual tasks that have no focus on the readers' fluency in reading.

1.2.2 Speed reading and learning styles

According to Paher et al. (2008), learning styles “refer to the concept that individuals differ in regard to what mode of instruction or study is most effective for them. Proponents of learning-style assessment contend that optimal instruction requires diagnosing individuals' learning style and tailoring instruction accordingly” (p. 105). It is essential to know what the learners’ preferred mode of learning is. This requires an assessment of their learning styles. The instructional relevance hypothesis strongly supports the learning styles theory and asserts that mental activities in each individual should match their learning preferences (Dantas & Cunha, 2020). Preference is a keyword in understanding learning styles. Educators should realize what type of instruction and what mode of learning are preferred by the learners. Costa et al. (2020) are of the opinion that the learners’ engagement with the learning content can be increased if they learn the content through their preferred mode. For example, auditory learners should learn via learning and visual learners ought to learn through videos and visual presentations.

Another significant problem with regards to speed reading and reading comprehension in Malaysia is that learning styles have not been intensively studied. Research-based evidences show that learner’s preferences and abilities differ; therefore, educators showed adopt a learning approach that matches their learning style.

Theoretically speaking, cognitive learning styles can affect reading speed, as both reading and cognitive learning styles are based on the learners' cognition (Goodman, 2020). Reflective learners who tend to think more compared to impulsive

learners may have less reading speed, and this may, in turn, affect their comprehension. Chung and Nation (2006) have noted that fixation on words is the leading cause of decreased reading speed. Thus, this issue as a gap has not been investigated in Malaysia and not profoundly studied in other similar contexts. A speed reading course, as suggested by Chung and Nation (2006), has been used to solve these problems. The details about this approach are provided in the methodology section.

1.3 Problem statement

Although reading in L2 is among the most important second language skills, there are pieces of evidence in the ESL context of Malaysia which show that students still have problems with reading comprehension (Mohamead Jafre et al., 2011; Noor Ahmad & Hamidah Yamat, 2021; Khairuddin, 2013; Maarof & Yaacob, 2011; Puteri Rohani Megat et al., 2018; Abdul Rashid Mohamed et al., 2016; Sidek & Rahim, 2015; Minder Kaur Parthanam Singh et al., 2021). For example, Noor Ahmad & Hamidah Yamat (2021) assert that Malaysian students' reading comprehension problems are well observed by the students to the extent that many of them do not possess a positive reading comprehension attitude. Also, Samsul Farid Samsuddin & Yanti Idaya Aspura (2021) believe that the Malaysian students' reading comprehension is negatively affected by reading habits that are not aligned with reading skills.

Previous researchers have linked reading comprehension problems of Malaysian learners to lack of vocabulary knowledge (Chen et al., 2017), use of inappropriate reading strategies (Subbiah & Singh, 2004), inappropriate reading materials (Rahim, 2018), and a lack of critical thinking skills (Zuhana Mohd Zin et al., 2014). What seems to be logical is that the problems mentioned above, such as lack of vocabulary knowledge and lack of awareness of appropriate reading strategies, increase reading time through what Chung and Nation (2006) call 'fixation on words'

or 'moving backward and forward.' In other words, the reading comprehension problems of Malaysian learners affect reading speed and, in turn, reading understanding. This finding is in line with global research conducted on speed reading and reading comprehension, which states a correlation between reading comprehension and reading speed. This gap led to the first objective of the study, i.e., whether or not a speed reading course can increase Malaysian undergraduate students' reading comprehension.

On the other hand, a closer look at the nature of reading activities in Malaysia's context is missing. Jung (2018) asserts that reading is a cognitive skill, and cognitive thinking skills can affect comprehension. One of the factors that can determine the learners' cognitive thinking skills is that of learning style. Kolb and Kolb (2005, as cited in Shabani, Ramezani, and Alipour, 2017) note that "determining one's learning style can indicate what appropriate channel should be opted to conduct classes. Therefore, it seems significant to study learners' learning styles and their effect on reading comprehension" (p. 52) Costa et al. (2020) believe that success at a language course depends on the extent to which the educators and the learners are aware of the learning styles. Though some learning styles, i.e., introversion vs, extroversion, have been delved into more than others learning styles, cognitive styles such as impulsivity vs. reflectivity have not been investigated thoroughly.

Safari and Rastegar (2017) state that one of the problems in language education is that the researchers tend to focus on learning styles such as introversion and have ignored cognitive learning styles such as impulsivity and reflectivity, which may have effects on language learning. Shabani, Ramezani, and Alipour (2017), who considered the effects of impulsivity vs. reflectivity on Iranian EFL learners' reading comprehension, reported that these learning styles could affect reading

comprehension. However, research on reading comprehension, speed reading, and impulsivity vs. reflectivity is rare even in the global context. Thus, as reading a cognitive activity and impulsiveness levels are referred to as a cognitive thinking style, there may be intricacies between these variables, leading to solve reading comprehension problems of Malaysian learners. This led to the study's secondary objectives, i.e., to predict the effects of reflectivity vs. impulsivity on reading comprehension of Malaysian undergraduate students. Also, in order to understand the extent to which a speed reading course can affect the learners' reading speed, their reading time was measured and compared between the groups.

The language learners' perception is another issue that should be investigated in this study. Scholars such as Chung and Nation (2006) posit that educators should understand how language learners perceive speed reading. This issue is in line with the current views about learner-centered education and a gap stated regarding speed reading in the study conducted by Kwon and Linderholm (2013), who note that most studies on speed reading have superficially dealt with the learners' perception.

In conclusion, a comprehensive understanding of the impacts of speed reading on reading comprehension among Malaysian undergraduate students requires putting a number of problems in perspectives. To possibly increase reading comprehension of the Malaysian undergraduate learners through a speed reading course, the impact of a well-constructed speed reading course on reading comprehension should be measured. It is also significant to know whether the learners' reading time has been affected, for reading time is a component of effective reading. In addition, and in order to look at the problem comprehensively, the learners' perceptions should be explored.

1.4 Objectives of the study

While the researcher in this study attempts to find an approach to increase reading comprehension of Malaysian undergraduate students, the overall purpose of this study is to find out how reading comprehension of Malaysian undergraduate students is affected by a speed reading course. Based on the problems stated above, three research objectives were formulated, i.e.:

- i. To investigate the effects of a speed reading course on reading comprehension of Malaysian undergraduate students.
- ii. To compare the effects of a speed reading course on reading comprehension of impulsive vs. reflective Malaysian undergraduate ESL students.
- iii. To examine the impact of a speed reading course on reading time of Malaysian undergraduate students.
- iv. To explore the perception of the Malaysian undergraduate students regarding a speed reading course.

1.5 Research questions

The research questions below are proposed to pursue the purpose of the study:

Q1: What is the effect of a speed reading course on reading comprehension of Malaysian undergraduate students?

Q2: Can impulsivity vs. reflectivity predict the effect of a speed reading course on reading comprehension of Malaysian undergraduate students?

Q3: What is the effect of a speed reading course on reading time of Malaysian undergraduate students?

Q4: What is the perception of Malaysian undergraduate students with regards to a speed reading course?