

Relationship Between Reading Speed and Comprehension Among EFL Learners

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Abstract

This study was carried out to investigate the relationship between reading speed and comprehension among EFL learners. The study specifically investigated the reading speed of EFL learners, comprehension level of EFL learners, gender influence on EFL learners reading speed, gender influence on EFL learner comprehension level and relationship between reading speed and comprehension level of EFL learners. The study was a correlation type using purposive and random sampling techniques to draw a sample of 50 EFL learners out of which 30 adequately responded. The main research instrument was drafted from the pool of comprehension passages commonly used among the EFL learners in KSA. Two research questions were answered in the study using frequency counts and percentages. Three research hypotheses were formulated and tested. Hypotheses one and two were tested using t-test while hypothesis three was tested using Pearson Product Moment Coefficient (PPMC) all hypotheses were tested at 0.05 significant level, the statistical tool used for analysis is Statistical Package for Social Science (SPSS). The findings of the study indicated that the reading speed of the Saudi EFL learners is average while the comprehension level of the EFL learners is equally on the average. Similarly, the result indicated no significant difference in the male and female EFL learners' reading speed and comprehension level and the relationship between reading speed and comprehension of EFL learners is negative, weak and not significant. It was recommended among others that government and all stakeholders in the Kingdom of Saudi Arabia should put in place policies for an improved reading speed and comprehension level of EFL learners and necessary facilities should be made available for EFL learners to improve their reading speed.

Keywords: Reading Speed, Comprehension, KSA, EFL, Gender

INTRODUCTION

Reading involves a complex interplay between the reader's cognitive processes and tactics and different kinds of information found in the text. It is a process whose aim is to create meaning from text by using information that has been visually encoded. It is such a creative and productive activity that involves being intentional, selective, anticipatory (Smith, 2004). According to Mora, Quito, and Macías (2021), reading accounts for a large percentage of the knowledge gained through audio-visual elements that facilitate access to knowledge in formal learning. The essence of reading, however, is comprehension, which is described as the act of creating meaning through the coordination of several intricate processes, such as word reading, fluency, and understanding of both words and the outside world. According to Snow (2002), comprehension is the act of concurrently deriving and creating meaning from written language through engagement and interaction.

There are reports that the citizens of Saudi Arabia are not big readers. Since they do not read for pleasure very often, the learners find it difficult to read in their native dialect (Al-Shumaimeri, 2006). This is despite that reading is a critical ability that children must acquire in the early grades since it serves as the basis for learning in all other academic topics during their schooling (Sloat, Beswick, & Willms, 2007). According to Alotaibi (2022), for instance, when reading English-language materials, Saudi students surely have the same reading difficulties as other Arab EFL students, and it is actually the subject on which Saudi test takers perform the least well globally (Aryadoust, 2012). Nezami (2012) found that limited vocabulary, a lack of self-study exercises, difficulty understanding the text, spelling and pronunciation errors, limited class discussion and group work, and not reading widely enough were the main problems in a study looking at the reading skills and abilities of Saudi EFL students at the university level.

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One important factor usually neglected in students' reading is the reading speed despite being a crucial component of reading proficiency. According to Soysal (2022), reading speed is commonly acknowledged as one of the markers of fluency in reading. This was also the view of Matsui and Noro (2010) who asserted that reading is a sophisticated mental activity requiring a wide range of abilities, the most crucial of which is reading speed. Studies have demonstrated, for example, that children who get instruction to increase their reading speed also have improvements in their reading comprehension (Alessi & Dwyer, 2008; Chang, 2010). In view of this, the focus in this paper is to examine the relationship between reading speed and comprehension among the Saudi EFL students. Specifically, the study sought to

Find out the reading speed of Saudi EFL learners

Investigate the comprehension level of Saudi EFL learners

Examine the influence of gender on the reading speed of Saudi EFL learners

Examine the influence of gender on the comprehension level of Saudi EFL learners

Examine the relationship between the reading speed and comprehension level of the Saudi EFL learners

RESEARCH HYPOTHESES

The following null hypotheses were tested at 0.05 level of significance:

there is no significant difference in the reading speed male and female Saudi undergraduate EFL learners.

there is no significant difference in the male and female undergraduate EFL learners and their level of comprehension

there is no significant relationship between Saudi undergraduate EFL learners' reading speed and their comprehension level.

LITERATURE REVIEW

Concept of Reading Comprehension

Constructing meaning through reading is a multifaceted process that involves a network of cognitive operations (Wijaya, 2018). Shihab (2011) asserts that reading is an intricate process involving sociological, linguistic, and psychological elements; it is an interactive process in which the reader and the text interact to determine the meaning of the text. According to Smith (2004), reading is a creative and productive activity that possesses four unique and essential qualities: it is intentional, selective, anticipatory, and comprehension-based. According to Hedgcock et al. (2009), reading involves a complex interplay between the reader's cognitive processes and tactics and different kinds of information found in the text. Koda (2007) described reading as a process whose aim is to create meaning from text by using information that has been visually encoded.

From their own point of view, Mora, Quito, and Macías (2021) maintained that reading accounts for a large percentage of the knowledge gained through audio-visual elements that facilitate access to knowledge in formal learning (Escurra, 2003; Vallés, 2005). Prior reading education models have tended to emphasize top-down skills (for triggering the reader's prediction strategies and background knowledge) or bottom-up processes (for decoding and understanding the text). Reading instruction entails teaching students how to make reasonable interpretations of written texts (Lems, Meller, & Soro, 2010). There is much to read about. It involves more than just understanding the definitions of specific words inside a given text. It is the process of interpreting a text reasonably in order to understand it. It is seen as an essential life skill and, as such, a cornerstone of academic achievement (Al Abik, 2014; Pugh, Pawan, & Antommarchi, 2000).

Since reading comprehension include both high- and low-level connected linguistic and nonlinguistic components, its definition is rather complicated. "Understanding what you read" is a very clear definition of

comprehension (McShane, 2005). But comprehension is more complicated to define than it first appears. Understanding is a highly complex activity that requires just as many definitions as reading; this is primarily because comprehension is widely recognized as "the essence of reading" (Tankersly, 2005). According to Klinger, Vaughn, and Boardman (2007), reading comprehension is the act of creating meaning through the coordination of several intricate processes, such as word reading, fluency, and understanding of both words and the outside world. Snow (2002) offers a more comprehensive definition that makes an effort to reveal the intricate structure of comprehension. According to this definition, understanding is the act of concurrently deriving and creating meaning from written language through engagement and interaction. This implies that comprehension entails three elements:

The reader: this person is responsible for comprehending; we encompass here all the skills, information, and background that an EFL reader brings to the reading process.

The text is all that needs to be understood; this includes written content.

The activity: which includes understanding; it encompasses the goals, procedures, and outcomes related to reading.

The larger social and cultural context in which the reading takes place has an impact on and an interweaving of these three factors. McShane (2005) asserts that comprehension is an active process in which readers attempt to create meaning. In order to understand the script's message, the EFL readers would interact reciprocally with the printed text by drawing on their general knowledge of the outside world. In this sense, understanding is understood to be the process of connecting the known to the unknown and the new to the established. According to Mikulecky and Jeffries (2004), comprehension involves interpreting what is read and drawing connections between the ideas and the reader's prior knowledge. According to Smith (2004), comprehension is the process of connecting what we already know, our objectives, and our expectations with many facets of the world around us, including what we read. It is obvious that reading and learning to read are meant to help with comprehension.

The capacity to read a text for understanding is also the definition of reading comprehension (Spooner, Gathercole, & Baddeley, 2006). Among other things, it entails using past knowledge, formulating forecasts, and extracting important information. It is the capacity to read and the ability to absorb and retain the information read. Richards and Schmidt (2002) asserted in their own work that comprehension is the process of determining the intended meaning of spoken or written communication. It is a dynamic process that incorporates information from the communication itself (bottom-up processing) as well as contextual information, prior knowledge, and the goals and intents of the speaker and listener (top-down processing).

Through engagement with the text, the reader generates meaning; this interaction is derived from past experiences in which the author's words, phrases, paragraphs, or concepts are decoded. Consequently, a good understanding depends on the reader's prior knowledge as well as their familiarity with the text's vocabulary, concepts, and structural aspects (Snow, 2002). This indicates that vocabulary knowledge is essential for reading comprehension in both first and second languages, as well as foreign languages (Iqbal, Noor, & Kazemian, 2015; Nation, 2001), among other reasons. Thus, problems including improper control over vocabulary, tenses, and grammar structures, ignorance of reading methods, and a lack of reading habits all have a negative impact on reading comprehension in a second language (L2 or foreign language) (Iqbal et al., 2015).

Grabe (2009) made the observation that comprehension is a variety of abilities and behaviors rather than a singular thing. The ability of EFL students to mentally connect several textual events and create a coherent image of the text's content is fundamental to understanding. In this instance, processing takes place when readers understand a text through mental processes that connect the events in the text to the text's overall information. A high level of domain expertise facilitates comprehension. In this instance, readers will comprehend the content better if they are more knowledgeable about it (Wijaya, 2018).

Amir (2018) asserts that the ability to read comprehension is a dynamic process. From a psycholinguistic perspective, reading involves a variety of tasks, from the reader's first perception of written elements to the

creation of textual comprehension. In order to successfully comprehend the text, the reader must take out and combine different informational fragments from the text, then interpret the information by applying it to their prior knowledge (Koda, 2005). Both transactional interaction and process or system can be used to explain the relationship that exists between the reader and the text. It is possible to view reading as an event or as a comprehensive activity that integrates the social, emotional, cognitive, and metacognitive domains. As a result, reading can be seen as a highly dynamic and complex process in which the reader's prior knowledge, personal factors, strategic processes, task demands, speed reading, and the reading context are just a few of the variables that can affect comprehension (Grabe, 2009; Grabe & Stoller, 2002; Koda, 2005).

There are three main reading comprehension models that are important for controlling and promoting the process of understanding. These models also help readers get beyond obstacles to reading comprehension and help them grasp textual passages more fully. These models consist of the interactive model, the top-down model, and the bottom-up model.

Bottom-up model: According to this method, readers should gradually start reading by decoding each letter, vocabulary word, and finally phrase in order to understand written texts. Stated differently, this method sees reading as primarily concerned with words and letters. Therefore, in order to accurately deduce meaning from a book, readers must be able to comprehend and discern every letter and vocabulary word while reading. Since the bottom-up approach emphasizes how critical it is to understand every word for comprehension, quick word understanding is an essential precondition (Ahmadi et al., 2013). This reading comprehension paradigm states that readers who follow the bottom-up method become expert readers very rapidly, and their proficiency increases their ability to decode information (Pressley, 2000).

Top-down model: This comprehension model considers readers' prior knowledge, experiences, and expectations surrounding the subject matter in order to assist them in making sense of written content. According to Eskey (2005), the top-down paradigm therefore sees reading comprehension as a process that begins "from the brain to text" (p. 564). The top-down method states that before starting the reading comprehension process, readers need to set some expectations about the content. These expectations should be constructed based on the reader's past knowledge of the topic at hand.

After setting some expectations, the reader is given another task that requires them to validate or refute their earlier assumptions by using their past knowledge of the world to understand terms used in the text. As a result, according to the top-down comprehension paradigm, the reader infers meaning from the text by integrating it with prior knowledge, rendering the text meaningless in and of itself (Ahmadi, Hairul, & Pourhossein, 2012).

Interactive model: This one commonly combines elements of the top-down and bottom-up reading comprehension models. This model, in the opinion of Ahmadi et al. (2012), is the most comprehensively conclusive model for comprehending the process of reading comprehension since it affirms the importance of the reader-text interaction. The interactive model modifies the assumption that the bottom-up and top-down models cannot be utilized independently to explain the entire reading comprehension process. It therefore requires interaction between these two models (Ahmadi & Gilakjani, 2012; Ahmadi, Ismail, & Abdullah, 2013). Alderson (2000) noted that "the whole reading process involves the interaction between both approaches, rather than being a 'either/or' selection between the bottom-up and top-down models" (p. 38). This is in line with his observation.

There are reports that the citizens of Saudi Arabia are not big readers. Since they do not read for pleasure very often, the learners find it difficult to read in their native dialect (Al-Shumaimeri, 2006). Despite this, reading is a critical ability that children must acquire in the early grades since it serves as the basis for learning in all other academic topics during their schooling (Sloat, Beswick, & Willms, 2007). Alotaibi (2022) asserts that when reading English-language materials, Saudi students surely have the same reading difficulties as other Arab EFL students. Reading is actually the subject on which Saudi test takers perform the least well globally, according to the summaries of TOEFL and IELTS statistics (Aryadoust, 2012). In a study examining the reading skills and abilities of Saudi EFL students at the university level, Nezami (2012) found that the main

issues were limited vocabulary, a lack of self-study exercises, difficulty understanding the text, spelling and pronunciation errors, limited class discussion and group work, and not reading widely enough.

This is despite that one of the most crucial aspects of mastering reading is reading comprehension. According to Woolley (2011), students must go beyond simply decoding words and sentences to have a strong comprehension of the passage as a whole. To understand a text, students must actively engage in a process that takes into account their prior knowledge of the context, the reading material's goal, and the writers' level of vocabulary and language (Hollenbeck, 2011; Pardo, 2004; Snow & Sweet, 2003; Woolley, 2011). Because it calls for pupils to apply a variety of cognitive processes, abilities, and activities, the process is complicated. These abilities include the ability to decode words fluently, comprehend grammar, draw conclusions, draw on prior information, and adjust working memory as necessary (Fletcher- Janzen, Reynolds, & Vannest, 2013; Kendeou, McMaster, & Christ, 2016).

Thus, in order for people to succeed in their personal life, reading comprehension is also a necessary ability (Blair, Rupley, & Nichols, 2007). For example, reading comprehension abilities are necessary for people to be able to work and keep a job as well as to successfully participate in other everyday activities (Hoeh, 2015; Mahdavi, & Tensfeldt, 2013). For pupils to learn from books, magazines, and scientific papers, reading comprehension skills are therefore crucial. The knowledge they acquire will be helpful for both their future academic endeavors and jobs (Ahmadi et al., 2013; Papatga & Ersoy, 2016). According to Jubani et al. (2012), for example, pupils who are proficient readers and comprehend what they read typically outperform their less competent colleagues in the same school. Furthermore, they have mentioned that a lot of research has been done on pupils' comprehension skills in reading. According to Buyuktasapu (2012) and Bolos (2012), who conducted their own studies, individuals who read stories about young people demonstrate superior comprehension skills and reading and writing abilities. Understanding the information in texts is the aim of reading comprehension, according to Spooner et al. (2006).

Linguists believe that both the text's macrostructure and microstructure play a role in reading comprehension. All of a text's premises, or the semantic data spelled out in its sentences, make up its microstructure. However, the text's macrostructure is created by each sentence and the data it contains. The text base, as defined by Alderson, Haapakangas, Huhta, Nieminen, and Ullakanoja (2015), is the meaning of the text as it is actually expressed by the text, composed of both the micro- and macrostructure. Therefore, readers who successfully employ a greater range of techniques do better on reading comprehension tasks (Bongratz et al., 2002).

Measuring Reading Comprehension

Assessing and determining the reading comprehension skills of students is crucial (Dewitz, 2003). This is because it enables educators to ascertain whether or not pupils have grasped the pre-established standards for their grade levels; assess the degree to which students apply specific comprehension techniques; and identify potential areas of difficulty for individual students (Klingner, Vaughn, & Boardman, 2014). But since reading comprehension requires a complex interplay of skills such as language, memory, sensory perception, and motivational beliefs (Guthrie, Hoa, Wigfield, Tonks, Humenick, & Littles, 2007), suitable assessment tools should integrate a multimodal approach that incorporates a detailed examination of every student's individual learning requirements (Woolley, 2011). Academic achievement may suffer if teachers are unable to meet the individual needs of every student and are mistakenly placed in an inappropriate intervention program as a result of not using the necessary evaluation tools (Woolley, 2011). According to Gebhardt (2013), in order to appropriately identify these challenging students and provide the appropriate kind of intervention, teachers must have access to efficient reading comprehension exams.

Reading Speed

Speed is a crucial component of reading proficiency. Reading speed, also known as silent reading speed, is commonly acknowledged as one of the markers of fluency in reading, according to Soysal (2022). The total number of words a person can recognize in a minute is known as the word recognition rate (Yen, 2016). In addition to comprehension and decoding accuracy, reading speed level is thought to be one predictor of kids'

reading fluency. Matsui and Noro (2010) assert that reading is a sophisticated mental activity requiring a wide range of abilities, the most crucial of which is reading speed (Matsui & Noro, 2010). However, it has been advised that speed reading is more than merely reading words more quickly than you always did. It all comes down to reading at a pace that is suitable for the content you are reading. If you read too slowly, you risk losing focus, getting bored, and forgetting everything. Reading too quickly can decrease your chances of remembering what you want to remember since it will make you angry and anxious, which will make you even less likely to recall (Konstant, 2003).

Reading comprehension and speed are closely related to one another. Studies have demonstrated that, in contrast to popular belief, which holds that comprehension increases with reading speed, individuals who demonstrate a high degree of reading comprehension are also likely to read at a fast speed (Bowey, 2005; Perfetti, Landi, & Oakhill, 2005; Stanovich, 2000). Research has demonstrated, for example, that children who get instruction to increase their reading speed also have improvements in their reading comprehension (Alessi & Dwyer, 2008; Chang, 2010). According to the aforementioned facts, when an individual exhibits a high level of reading comprehension and speed in their mother tongue, a similar phenomenon usually takes place in the target language. Reading speed is dependent on the type of reading that is done. Mora, Quito, and Macías (2021) distinguished three reading comprehension levels: A reader's comprehension level for common reading (magazines, books, and simple texts) is between 250 and 500 words per minute (wpm), while for study reading (complex texts requiring deep concentration) it is between 180 and 200 wpm with 90% comprehension. Finally, for superficial reading (text exploration), it is between 800 and 1500 wpm with 50% comprehension.

Generally speaking, reading a text quickly indicates a high degree of automatism in word recognition (López, 2013). According to some studies, proficient readers can read between 250 and 300 words per minute on average in their mother tongue, but when reading in a foreign language or an L2, their speed drops to 200–250 words per minute when the reading material contains words and grammar that they are familiar with (Nation, 2005; Mora, Quito & Macías, 2021). The inclusion of vocabulary and syntax that EFL or ESL readers are unfamiliar with typically causes a decline in average word-per-minute (wpm) in L2 or foreign languages (Cobb, 2008; Fraser, 2007). Put differently, when reading in their first language (L1), readers only utilize one language, but when reading in their second language (L2), learners must deal with at least two languages (Ovando, 2005). This makes it more difficult and requires a more sophisticated procedure to read a material in a second or foreign language with understanding (Hudson, 2007).

Factor Influencing Reading Speed

Konstant (2010) identifies five primary determinants of reading speed. The first is the purpose's clarity. The capacity of EFL students to constantly understand why they are reading a book is known as clarity of purpose. Whether a reader reads a work for enjoyment or to learn something from it is up to them (Konstant, 2010). According to Klinger, Vaughn, and Boardman (2007), reading is an activity with a goal. A reader must be aware of what they hope to get subliminally from the reading material before they begin to read. The mind becomes primarily focused on the knowledge to be obtained as a result of that interest. After that, the eyes search over each line for the term that will lead to that information. Setting goals before beginning the reading process is therefore advantageously essential. He or she will read more quickly if the purpose is obvious.

The motivation and attitude of the readers is another element. Reading motivation and mood are significant factors. EFL students typically cannot read as quickly as those who have a strong reading drive when they are fatigued and lack motivation (Konstant, 2010). Reading speed is also influenced by one's familiarity with the vocabulary and topic matter. As to Konstant (2010), this pertains to the prior information that EFL readers has regarding the subject matter. If they are familiar with the book already, they will have a foundation to begin from and may read really rapidly. This also implies that readers would read texts faster if they are easy to read and slower if they are difficult to read. Put differently, Konstant (2010) found that EFL learners' reading speed is influenced by the text's level of difficulty.

Consequently, reading speeds generally differ. It changes according on the passage that is read. Reading passages that are more challenging and unfamiliar generally takes longer than reading narratives. Additionally, speed changes based on the goals of the readers. The level of reader interest can also influence reading speed. However, as noted by Fraser (2007), reading speed varies even within a single selection, with certain sentences being read more slowly than others. Individuals differ in their reading speeds as well; even pupils in the same instructional level frequently read at quite different rates. Individual cognitive processing speed may be the reason why some readers read simply faster than others. Fraser (2007) clarified that reading various things for various reasons necessitates reading at varying speeds.

Words per minute (WPM) is a unit of measurement for reading speed. The teacher times how long it takes the children to read, whether they do it aloud or silently. The most precise way to measure reading time is using a stopwatch, but a watch with a second hand will do just well. The word count in the text is multiplied by 60, and the resulting WPM is calculated by dividing the result by the total time taken to read the passage. The outcome is a WPM score. This method can be used to measure reading speed both silently and orally. As seen in Table 1, this reading speed level category can be used to gauge kids' reading proficiency. If the content is 500 words or more, it can be utilized in this category (Fry, 2011).

Table 1: Level of Reading Speed

S/N	SECOND	LEVEL
1.	45 seconds or less	Very fast
2.	46-60 seconds	Fast
3.	61-90 seconds	High average
4.	91-119 seconds	Average
5.	120-150 seconds	Slow
6.	151 seconds or more	Very slow

Consequently, the formula for calculating words per minute is as follows: $(cw/s) \times 60 = wpm$. This formula takes the number of words read properly (cw) and divides it by the time it takes to read the text in seconds (s). However, it should be mentioned that EFL and ESL readers need to read at different rates. EFL students typically read slowly because, as noted by Chang (2010), they frequently read slowly, word by word, and double-check new vocabulary as they come across them. They are not able to recognize words automatically. As a result, according to Noer (2012), reading rate or speed is calculated by dividing the total number of words read by the reading time. It can be classified as follows:

Table 2: Reading Speed Classifications

Reader	Speed wpm
Poor	<150
Average	150 – 300
Good	300 – 500
Excellent	500 – 750
Unbelievable	750 – 1000

Source: (Noer, 2012).

As a result, the Jaeger exam is the oldest reading evaluation that is currently known to exist. Clients are required to read several phrase fragments that decrease in size geometrically aloud (Runge, 2000). Jaeger's geometric size progression was lost throughout the translation process because of adjustments made to the font typeface from the original German print. The Jaeger test was also translated into French and English (Runge, 2000). A logarithmic drop in the standard print size of the sentences was implemented in the creation of the Bailey-Lovie cards to remedy this problem. The test's administrator asks participants to read passages that contain two to six unrelated words; however, research has shown that reading passages in their entirety, whether by visually impaired or normally sighted individuals, is a better indicator of reading speed than using random words to gauge reading speed. Because of this, therapists now use the Bailey-Lovie cards to determine the amount of magnification that people with low vision need to read a normal-sized text, rather than using them to gauge reading speed (Rubin, 2013).

The logarithmic progression of the Bailey-Lovie cards was incorporated into both the MNREAD and Radner acuity charts to attempt to offer a reading speed metric under more naturalistic reading situations. But they

used cohesive sentences to gauge reading speed instead of sentence fragments. Nineteen brief, straightforward lines totaling sixty characters make up the MNREAD. Every sentence is provided on three lines of text, written at a third-grade reading level, and its length reduces logarithmically (Brussee et al., 2014). Similar to the MNREAD, the Radner acuity charts were created in Germany initially and have subsequently been translated into eleven other languages, including English (Brussee, et al., 2015; Brussee et al., 2014). The Radner acuity charts are composed of 24 distinct sentences, each with 14 words. The sentences decrease in size logarithmically and are created for readers in the third to fourth grade (Brussee et al., 2015). The critical print size, maximum reading rate, and reading acuity of a client can all be ascertained using the Radner charts.

Although the Radner and MNREAD charts offer many advantages, they also have drawbacks. The MNREAD and Radner have 10–14 words per sentence and 14 words per phrase, respectively, which is short and easy to understand, however these short sentences may actually overestimate the reading speed of prolonged reading (Altpeter, et al 2015). Consequently, employing a reading speed assessment tool that relies on brief, uncomplicated sentences instead of continuous sentences—that is, a paragraph—may not yield reliable reading speed data for researchers and rehabilitation specialists.

In response, to address some of the drawbacks of the previously stated reading speed assessments, continuous sentence paragraphs were used in the creation of the International Reading Speed Texts (IReST) (Trauzettel-Klosinski & Dietz, 2012). Text difficulty, phrase complexity, word count (M=132 words), and grammar have all been standardized throughout the 10 paragraphs that comprise the IReST (Trauzettel-Klosinski & Dietz, 2012). Each book in the series is adapted to read at the sixth-grade reading level from an encyclopedia entry. The ten writings have each been translated into seventeen languages, including German, French, English, and Japanese. Standard deviation and mean words per minute are two examples of normative values that have been supplied for every text in every language. The IReST was created expressly to be a standardized reading speed test that can be used repeatedly in a variety of languages. Initially, the IReST was validated using a sample of 436 people, ages 18 to 35 (25 participants per language, 36 participants for the Japanese texts). Additionally, Trauzettel-Klosinski and Dietz (2012) state that they can be used to gauge a person's reading speed both with and without visual impairments. To measure their reading speed, participants are asked to hold an IReST at a distance of 40 cm and read the entire text aloud as quickly as they can, without turning back to correct mistakes. A more reliable measurement of reading speed is possible since the IReST includes ten texts that are comparable to each other, making it possible to evaluate reading speed without taking practice effects into account.

In practice, the IReST can be used to measure reading speed in low vision patients both before and after receiving low vision rehabilitation to ascertain the effectiveness of the treatment. It can also be utilized to measure the variation in reading speed depending on the kind of assistive reading device being used (Nguyen et al., 2009). The IReST has its own limits even though it does alleviate some of the shortcomings of existing reading speed metrics. The lack of a logarithmic progression in text sizes makes it impossible to assess a client's essential print size or reading acuity, even though the continuous sentence style of the IReST enables doctors to ascertain a client's maximal reading pace. Furthermore, although the various language versions of the IReST have all been validated in their home countries, neither a revalidation nor a validation in other English-speaking nations have been conducted for them. This is especially problematic for the English language IReST because the sentences, grammar, syntax, and other language components may be foreign to English language speakers outside of the UK, like Saudi students, because the English language IReST was first developed and validated in the UK.

It is critical that EFL instructors take slow reading seriously. This is due to the fact that slow readers take significantly longer than their peers to read tasks, which has an impact on both homework and classroom activities (Caldwell, 2008). When a teacher assigns reading for the class, the slow reader rarely completes it and usually knows that other students have finished the assignment while he or she may only be halfway through. Frustration is readily generated by this. It makes sense to stay out of a stressful scenario. Thus, slow readers try to avoid reading as much as they can. Reading promotes fluency, and since the slow reader is unwilling to read, the issue is likely to persist and even get worse. For these reasons, even in cases when comprehension is present, teachers still need to assess reading speed. Determining the reading speed of the

children is crucial because it allows us to identify those who read very slowly for their independent level. Their performance in certain other disciplines, in addition to English, may be impacted by their pace.

EMPIRICAL REVIEW

In order to increase gifted kids' reading comprehension and speed, Soysal (2022) conducted a mixed-method study on the subject. The study's goal was to provide the gifted students with speed reading techniques training. It was determined that the gifted students' reading comprehension and speed increased as a result of their instruction in speed reading techniques, that they also made significant progress toward developing good reading habits and developed a positive attitude toward reading, and that the research conducted would help the students succeed academically.

Mora et al.'s (2021) study looked at the reading comprehension and speed of Ecuadorian university students learning English. 400 students enrolled in English classes from September 2019 to February 2020 participated in the study. After taking reading assessments to gauge their comprehension and reading speed, the students answered a second questionnaire on reading techniques and sociodemographic characteristics. The results indicate that while the student's English reading comprehension is strong, his or her reading speed is below average, partly because of outside influences.

Okasha (2020) investigated how well Saudi students' EFL reading abilities may be improved by using strategic reading techniques. The group undergoing experimentation employed strategic reading approaches, whilst the control group was provided with the regular classroom instruction. The study's conclusions indicate that innovative methods are necessary for Saudi EFL learners who wish to advance their reading abilities. The study concluded that in order to provide EFL learners with reading feedback, teachers should adopt innovative strategies like peer review, reading conferences, and consciousness.

Shehzad et al. (2020) investigated the foundation of Saudi students' reading self-efficacy beliefs and reading methods using 188 Saudi EFL students from five Saudi public universities. The participants were chosen by stratified random selection, and data were gathered using a questionnaire that included three constructs: reading procedures, reading consciousness, and beliefs. The findings showed a substantial correlation between reading beliefs and notions related to self-consciousness. Additionally, there was a significant link found between applying metacognitive reading strategies and reading self-efficacy attitudes. On the other hand, the findings demonstrated a robust and favorable correlation between reading technique and perceptions of the efficacy of reading.

Alhazmi et al. (2019) investigated "vowel blindness" hypothesis in native Arabic speakers reading English words by the use of eye-tracking technology. Among other things, the study showed that Arabic speakers studied the words for longer than native speakers did—roughly twice as long on average. This implies that before the Arabic speakers could recognize a word and read it aloud, they need additional fixations on each word. The Arabic speakers read for almost twice as long, which might be explained by the fact that they took, on average, twice as many fixations as the native speakers.

The perspectives of pre-university instructors regarding reading proficiency in English as a foreign language (EFL) were assessed in Alenzi's (2019) study. It also acknowledged the difficulties college students had in their reading comprehension classes in order to get a thorough grasp of the educational process. The results showed that when teachers are not knowledgeable about effective teaching strategies, students suffer. The findings also demonstrated the significant influence that students' cultural background and prior knowledge had in their development as readers.

Alhazmi (2018) looked at the low-level reading difficulties of Arabic EFL learners to determine whether the issues were related to processing or knowledge. Among other things, it was discovered that Arabic EFL learners as a group, even those with bigger vocabulary, are unable to recognize sight words fluently and must obsessively focus on nearly every letter in words in order to read them, indicating phonological decoding while reading.

Using a correlational research methodology, Wijaya (2018) also looked into reading comprehension and speed in second language reading. The research sample consisted of 74 students who enrolled in the General Purpose Reading course for writers. Tests including reading comprehension and reading speed were used to get the data. The hypothesis was tested by analyzing the data using Spearman's Rank Order Correlation. The alternative hypothesis was rejected due to the Spearman's rho value result of $\text{Sig.} = .608 > \alpha = .05$. This indicated that there was no relationship between the reading comprehension and speed of the students.

Reading comprehension skills in higher education were examined by Amir (2018) in relation to reading techniques and speed reading. This study set out to find out how students' reading comprehension skills were affected by their speed reading and reading technique. 4996 pupils were among the population. The method of proportionate stratified random sampling was also used to choose 370 students. A Likert scale questionnaire and reading comprehension tests served as the study's instruments. Regressions, both simple and numerous, were used to examine the collected data. The study's findings indicate that speed reading makes up 30.7% of the improvement in reading comprehension.

Ja'afar et al. (2016) looked at the relationship between understanding and reading speed. Using the curriculum-based measuring (CBM) method, the study was conducted to find out how well Malaysian lower secondary school students' reading accuracy was affected by the repeated reading (RR) approach. The effects of the RR approach on the percentage of words decoded (%WCPM) reading speed of five lower secondary struggling readers were examined using the single subject experimental design (SSED). Data was collected over a 12-week period, and a line graph was used to plot the initial and end readings of %WCPM. The individual progress of each student both within and between cases was compared using the visual data from the line graphs. Repeated one-way measures Accuracy scores at Time 1 (pre-intervention baseline), Time 2 (fourth week after intervention), Time 3 (eighth week after intervention), and Time 4 (twelfth week after intervention) were compared using the ANOVA technique. Based on the participants' reading rates expressed in percentage of words per minute, the results demonstrated that the RR method was a useful tool for improving reading rates.

Alhazmi and Milton (2015) used thirty Arabic-speaking learners in their own study to look at the association between phonological vocabulary size, orthographic vocabulary size, and EFL reading competence among native Arabic speakers. It was observed that phonological vocabulary size and IELTS' reading performance are related. This indicates a slow, word-by-word reading. These EFL learners could not recognize most of the words by sight, and relied heavily on their phonological vocabulary lexicon to decode the words. This study is different from the current one because reading comprehension and speed were not the basis for it.

Another interpretive research on reading comprehension difficulties among EFL students at Saudi Arabian University was conducted by Alsubaie (2014). These difficulties were discovered by analyzing the reading aloud procedures of the students, and the reasons given by the students for these difficulties were examined from the viewpoints of the lecturers and the readers themselves. Sixteen student volunteers from three Saudi Arabian colleges participated in the Think Aloud Protocol, providing information about the reading aloud procedures of their peers. In the follow-up Retrospective Verbal Report, nine students agreed to discuss how they thought about their reading aloud experiences. Following that, all sixteen students participated in a semi-structured interview during which they were asked about the elements influencing their difficulties with reading. Regarding their students' English reading comprehension, six of their instructors likewise offered to conduct a comparable set of interviews. The results demonstrated that a variety of reading processes that hampered comprehension were displayed by Saudi EFL learners. Their poor punctuation was matched by their poor reading comprehension, which included guessing and repetition—both of which were typically wrong. Words were frequently mispronounced due to improper decoding, especially vowels that were pronounced by their alphabetic designations instead of phonologically. Additionally, words that were identical visually or phonologically were replaced for one another, suggesting a breakdown in comprehension monitoring. Additionally, it was discovered that the pupils' weak reading speed hampered their ability to acquire coherence, fluency, and comprehension.

Students majoring in English at Qassim University in Saudi Arabia had their reading comprehension tested by Al Abik (2014). In the study, a quantitative method was employed, and one hundred three students took part. Ten multiple-choice questions were assigned to each of the two reading passages, each with a different length and subject matter, for the students to answer. Principal results of the research demonstrate that study participants' general reading comprehension was low ($\bar{X} = 9.8$).

Finally on this note, the relationship between 86 Don Bosco College senior high school students' academic ability in English and their reading competency was examined in Roxas's (2011) study. The Posttest of CEM-English Diagnostic Tests (SY 2009–2010) and a questionnaire were used to collect data in order to gauge the respondents' interest in reading as well as their overall grade point average in English for the academic year 2009–2010, which represented their academic achievement in the language. The students' enthusiasm in reading has no significant relationship to either their reading proficiency or their academic accomplishment, according to the results, but their reading comprehension has a substantial association to their academic achievement in English.

METHODOLOGY

In order to gather data on the relationship between reading comprehension and speed among EFL learners, the researcher used survey-style correlation research in this study. Inferences regarding the overall response of the whole population under investigation were made using the questionnaire. The study's population consisted of all Saudi Arabian university undergraduates, but the target demographic was limited to a subset of the country's EFL students. The purposive and random sampling approaches were employed in the sample selection process for this investigation. The university's EFL students were all chosen using the purposive sample technique. Because purposeful sampling is a type of non-probability sampling strategy that involves using judgment and a conscious effort to create representative samples by incorporating presumed typical areas of groups in the sample, it was deemed appropriate for the study. Only 30 undergraduate students adequately responded to the questionnaire items; their responses were analyzed in the study. Additionally, 50 respondents were randomly sampled for the study to account for attrition and experimental mortality using proportional sampling technique to allocate number of respondents to the university sampled on the numbers of EFL learners in the university.

Drafted from the pool of comprehension passages frequently employed by EFL learners during their course of study, the passage was utilized to collect the pertinent data for this investigation. Additionally, five experts attested to the instrument's validity. The reviewers assisted in ensuring that the text was pertinent to the study and that the wording was clear. Through the use of the test-rest process, the instrument's dependability was assessed with a second group of chosen students.

The reliability of the questionnaire was confirmed by the correlation coefficient of $r = 0.81$, which showed that there was a strong association between the two sets of data. The Pearson Product Moment Correlation coefficient was used to test the correlation between the two sets of data obtained. Ultimately, the correlation between reading comprehension and speed was ascertained by analyzing the data collected from the responses of the university students that were sampled together with their scores. The research questions were analyzed using the mean and standard deviation, t-test, and Pearson Product Moment Correlation Coefficient; the hypotheses were tested using the same Pearson Product Moment Correlation Coefficient.

FINDINGS AND DISCUSSION

This section presents the results of the data collected with a view to addressing and testing the stated research objectives and hypothesis.

Research Objective 1: The reading speed of Saudi EFL learners?

Table 3: Reading speed of EFL Learners

S/N	Reading Speed	Frequency	Percentage
1	3	1	3.3
2	4	5	16.7

3	5	6	20.0
4	6	11	36.7
5	7	7	23.3
6	Total	30	100.0

Table 3 reveals that the reading speed of the EFL learners can be categorized in to five ranging from 3 to 7. The highest is 7 while the lowest is 3, the reading speed with the highest number of respondents is 6 with 11(36.7%) respondents while the one with the lowest number of respondents is 3 with 1 (3.3%).

Research Objective 2: The comprehension level of Saudi EFL learners?

Table 4: Respondents' comprehension level

S/N	Comprehension	Frequency	Percentage
1	20	5	16.7
2	30	7	23.3
3	40	10	33.3
4	50	5	16.7
5	60	3	10.0
6	Total	30	100.0

Table 4 shows that comprehension of the respondents can be categorized into five ranging from 20 to 60. With the highest number of respondents scoring 40 and above and the remaining 12 scoring below 40.

Hypothesis 1: there is no significant difference in the male and female EFL learners reading speed

Table 5: t-test Analysis of Gender Influence on EFL Learners Reading Speed

Gender	N	Mean	Std. Dev	t	Df	Sig
Male	14	5.64	1.216	0.191	28	0.850
Female	16	5.56	1.094			

Table 5 reveals that there is no significant difference between male and female EFL learners reading speed, this is because the p-value is greater than 0.05, hence the null hypothesis is therefore not rejected. It means gender did not influence the reading speed of the EFL learners.

Hypothesis 2: there is no significant difference in the male and female EFL learners reading speed

Table 6: t-test Analysis of Influence of Gender on EFL learners Comprehension

Gender	N	Mean	Std. Dev	t	Df	Sig
Male	14	37.86	11.883	0.059	28	0.953
Female	16	38.13	12.764			

Table 6 reveals that there is no significant difference between male and female EFL learners' comprehension, this is because the p-value is greater than 0.05 hence the null hypothesis is therefore not rejected. It means gender did not influence the comprehension of the EFL learners.

Hypothesis 3: there is no significant relationship between reading speed and comprehension of EFL learners

Table 7: PPMC of Relationship between Reading Speed and Comprehension of EFL Learners.

Variable	N	Mean	Std. Dev	r	Sig	Decision
Time	30	5.60	1.133	-0.236	0.210	Not significant
Score	30	38.00	12.149			

Table 7 shows the relationship between reading speed and comprehension of EFL learners using Pearson Product Moment Correlation PPMC. It is observed from the table that the relationship is negative, weak and not significant because the p-value is greater than 0.05, it is weak since $r = 0.236$. The relationship is negative meaning that as reading speed is increasing the comprehension is decreasing of vice versa. Hence, the null hypothesis formulated is therefore not rejected.

Therefore, from the above, it can be seen that research question 1 was used to examine the reading speed of Saudi EFL learners. The result of the finding indicated average reading speed for the EFL learners. The result is not in tandem with the study conducted by Soysal (2022) to increase gifted kids' reading comprehension

and speed, the result indicated significant progress towards developing good reading habits and positive attitude towards reading. But, the result corroborates study of Mora et al.'s (2021) that looked at the reading comprehension and speed of Ecuadorian university students learning English and the results indicate that while the student's English reading comprehension is strong, his or her reading speed is below average.

In addition, comprehension level of Saudi EFL learners was confirmed using research question 2. The result of this finding negates the findings of research conducted by Alenzi's (2019) who evaluated pre-university instructors' opinions regarding English as a foreign language (EFL) reading proficiency. In order to obtain a comprehensive understanding of the educational process, it also recognized the challenges university students encountered in their reading skills courses. The findings demonstrated that students suffer when teachers lack knowledge of efficient teaching methods. The results also showed that background knowledge and culture played a big role in helping students become better readers.

Finally, hypothesis 3 was used to test the relationship between reading speed and comprehension of EFL learners. This result is in line with the study of Wijaya (2018) who used correlational research methodology looked into reading comprehension and speed in second language reading where 74 students were sampled and enrolled in the General Purpose Reading course for writers. Tests including reading comprehension and reading speed were used to get the data. The hypothesis was tested by analyzing the data using Spearman's Rank Order Correlation. The alternative hypothesis was rejected due to the Spearman's rho value result of $\text{Sig.} = .608 > \alpha = .05$. This indicated that there was no relationship between the reading comprehension and speed of the students.

CONCLUSION

The result of the study indicated that gender has no influence on the EFL learners' reading speed and comprehension level and the relationship between EFL learners' reading speed and comprehension level is weak. Reading is an important element which accounts for a large percentage of the knowledge gained through audio-visual elements and this is very important to the comprehension level of students at all levels. The study however concluded that, effort should be made to assist learners to improve their reading speed and comprehension level through exposure to rigorous comprehension enhancement strategies.

RECOMMENDATIONS

The study recommended that:

Government and all stakeholders in the Kingdom of Saudi Arabia should put in place policies for an improved reading speed and comprehension level of EFL learners;

Necessary facilities should be made available for EFL learners to improve their reading speed; and

The universities in KSA should include in their curriculum courses to improve EFL learners' comprehension level.

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