

Cognitive Processing in Multilingual Contexts: Evidence from Reading Speed and Comprehension of Urdu (L1) and English (L2)

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Abstract: Around eighty percent of the world population is multilingual. In many multilingual countries the medium of instructions in educational institutes is L2; however, the level of proficiency in L2 can affect the overall academic performance of the students. Reading is an important part of education and therefore it is important to see if the reading speed and comprehension of individuals is affected because of their multilingualism or not. The present study aimed to achieve this purpose. Four reading and comprehension tests (two in L1 and two in L2) were conducted with the adult students participants followed by retrospective interviews. The data was analysed in the light of Single-Route model of reading (Seidenberg & McClelland, 1989). The findings of the study showed that reading speeds vary in L1 and L2 in such individuals; however, the patterns could be different favouring the L2 more. This could be attributed to the language dominance and exposure to one particular language in case of L1 and L2.

Keywords: Multilingualism, Reading Speed, Comprehension, Single-Route Model

Introduction

Language is cognitive process as brain perceives, interprets and produces the linguistic symbols. It is inseparable from other cognitive abilities such as memory, learning or reasoning because in order to understand and produce language, it is crucial to perceive the input and relate it to the conceptual knowledge and structures. Effective communication is impossible without cognition as it is difficult for individuals to consistently guess the meanings. It involves visual processing, lexical access and retrieving information from the long term memory to comprehend the message (Shahnazari & Dabaghi, 2014). As one of the receptive language skills, reading relies on the coordination of various skills involving word recognition and inference making, and executive functions such memory, attention and metacognition as they are essential for comprehension (Wylie et.al., 2018). Hence, it is not just a simple activity of decoding but a high level cognitive task. Speed reading is the ability to read large number of words in a short amount of time while being able to comprehend it as well. It is claimed that a person can read up to 400 or even 1000 words a minute by various speed reading enhancing programs available online; however, 200 to 250 words per minute is very close to the limit that can be handled by the motor and cognitive systems that are involved in reading (Traxler, 2012, pp. 370). Speed reading is not skimming or scanning but it involves reading every word and comprehending it as well. Multilingualism seems to affect the reading speed of readers. Researchers believe that bilinguals usually have higher academic achievements as compared to monolinguals (Schwieter & Yu, 2018). However, using multiple languages particularly in academic environment with preference given to a foreign language can lead to language anxiety and this type of anxiety can make the language experiences difficult for the users (Young, 1991). This anxiety can result in difficulty in reading and eventually lower grades in students (Garza et.al., 1999). So, it is important to see if multilingualism truly affects the reading processing and if its effect is positive or negative.

According to Festman and Schwieter (2019) monolingual children performed slightly better than bilinguals on standardized tests of spellings and reading; however, these differences were not very significant to make any claim. Kim (2020) after conducting an experimental study found that multilingualism does not have a significance effect on reading. Liu (2022) presented the MECO L2 corpus

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that provides eye-tracking data on L2 reading of 543 university students coming from 12 different L1 backgrounds. It provides analysis of factors that influence L2 reading fluency and comprehension, and highlights contrasts between the determinant's fluency and comprehension. Grabe and Yamashita (2022) studied the reading relationship between L1 and L2. They argued that L2 reading development is influenced by L1 transfer, L2 language skills, and dual-language processing. Differences in reading between L1 and L2 arise from linguistic, cognitive, educational, and socio-cultural factors. They presented their arguments in the light of several theoretical perspectives. They found twelve differences in L1 and L2 reading. Tywoniw (2023) showed that reading in a second language (L2) involves complex interactions between linguistic knowledge, literacy abilities, and strategic competence. Using eye-tracking methods, her study highlights how individual differences, such as motivation and reasoning, can compensate for L2 proficiency in reading comprehension tasks and suggests teaching goal setting strategies for different reading tasks and activities.

Vogelzang, et. al. (2024) studied the effect of multilingualism on reading skills. Their study revealed that multilingualism positively influences reading skills in English for children from multilingual backgrounds, meanwhile mother tongue education enhances literacy in the regional language. At the same time minority language speakers without mother tongue education struggle in the majority language. Meier (2022) explored the influence of multilingualism and mutual intelligibility on Wikipedia reading behaviour, particularly in Nordic countries. He highlights that while users frequently access native language editions, there is a significant reliance on English Wikipedia, indicating potential access barriers and knowledge gaps. Scientists have found that brains of monolinguals and multi-linguals show different pattern of activations (Kim, 2020). Some argue that multilingualism has positive effect on reading skills of individuals (Vogelzang, et. al., 2024) while some point towards potential barriers caused by it and advocates for mutual intelligibility (Meier, 2021).

However, all these studies focused on reading in the foreign language only and found that there did not exist any significant difference in the reading speed and comprehension of monolingual speakers of the language and multilingual speakers who learned the target language as a second or third language. There is a need for study to observe the reading speed and comprehension of the multi-linguals in different languages they speak and see if there is any difference in their reading abilities across different languages.

In order to understand language acquisition, development and use more comprehensively in different contexts, it is essential to study linguistic processing in the backdrop of cognitive processing. Language is not merely a communicative tool but fundamentally a cognitive system that encodes and reflects human perception, thought and action. It engages complex mental operations across morphosyntactic processing, figurative abstraction, verbal speech, speech production, sign language, and discourse comprehension. For instance, Batool and Shehzad (2018) and Batool et al. (2022) show that cognitive processing has foundation in sensory variation, highlighting how linguistic meaning is rooted in perceptual and cognitive experience. Similarly, Batool et al. (2024) reveal through slips of tongue that errors in speech production reflect cognitive breakdowns in conceptual, formulation, and articulation stages of speech planning. Figurative processing also underscores cognition at work (Batool et al., 2022) while the cognitive dimensions of language further extend to diverse modalities, like sign language (Jahangir et al., 2025). At the discourse level, the studies on cognitive frames (Batool et al., 2025) and spatial cognition demonstrate (Noreen et al., 2024) confirm that language not only externalizes mental representations, but also restructure cognitive patterns (Batool et al., 2022; Batool et al., 2025). Collectively, these studies assert that linguistic processing is inseparable from cognitive mechanisms, and examining this interdependence offers critical insights into how language is acquired, developed, and used across contexts.

Building on these insights, it becomes evident that multilingual language users provide a particularly rich site for exploring cognitive processing, since they continuously negotiate between distinct linguistic systems, structures, and scripts. Unlike monolinguals, multilinguals must allocate cognitive resources flexibly across morphosyntactic, semantic, and discourse levels, which can directly affect their reading practices. In contexts such as Urdu-English bilingualism, where readers switch between scripts and linguistic conventions, reading involves not only decoding symbols but also activating cognitive schemas for comprehension and meaning-making. Thus, there is dire need to systematically examine how reading

speed and comprehension are shaped by the cognitive demands of multilingual processing. By foregrounding this dimension, the present study extends the broader understanding of language as cognition to specific case of bilingual reading, highlighting the ways in which cognitive mechanisms of processing underpin reading fluency and comprehension in multilingual contexts.

Around eighty percent of the world population is multilingual. In the era of globalization, it has become important for individuals to navigate through multiple languages in their everyday lives to accomplish different tasks. People use different languages to perform different functions and often the use of different languages is task dependent. For example, Pakistan is a multilingual country (Rehman, 2006) and majority of people use their mother tongues at home and use Urdu outside their homes to interact with people coming from different linguistics backgrounds. Pakistan does not have any one language as medium of instruction (Jabeen, 2020). However, majority of the educational institutes claim to use English as medium of instructions. Particularly, in higher educational institutes such as universities, the medium of instructions as well as the language of academia in general is English. In fact, it is the official language of Pakistan (Heruela, 2024) and almost all the significant documentation takes place in English. Therefore, for Pakistani students it becomes crucial to develop different skills in English including reading and writing. However, most of these students are multi-linguals and multilingualism seems to have number of effects on the academic performance of individuals including their reading speed (Kim, 2020).

Therefore, it is very important to investigate if multilingualism affects their reading and if their reading speed and comprehension is better in their first languages as compared to English. It is also important to see if the effect of multilingualism is positive or negative and if it effects their overall academic performance in any way. Hence, the present study aims to study the effect of multilingualism on reading speed and comprehension of multilingual participants. It aims to compare the reading speed and comprehension of participants' L1 and L2. The present study delimits itself to English (L2) and Urdu (L1) only and addresses following objectives and questions:

Research Objectives

The present study aims to achieve the following objectives:

1. To examine the extent to which the reading speed and comprehension of participants vary in their L1 and L2 and examine any difference in these two.
2. To investigate the effect of L1 on L2 reading and comprehension
3. To examine the possible reasons/factors for the difference in reading speed and comprehension in L1 and L2.

Research Questions

1. To what extent the reading speed of participant in L1 varies as compared to their reading speed in L2?
2. How does the reading comprehension in L2 differ from reading comprehension in L1?
3. What are the possible factors affecting the reading speed and comprehension of participants in their L1 and L2?

The study is significant for teachers particularly language teachers and policy makers.

Research Methodology

The study is experimental in nature. The objective of the study is to determine if the reading speed in multilinguals varies across different languages and if multilingualism has an effect on the comprehension of language users in both L1 and L2. For this purpose a reading comprehension activity was performed with students to observe their reading. Students were provided with a reading text and a comprehension test. Same text was used for both the languages, so, that the content remains the same in both the languages. The results of the study were used for analysis. The activity was also followed by short follow up interview as a retrospection technique. It helped us in refining and validating our findings. The data was analysed from the theoretical perspective of Single-Route model of reading (Seidenberg & McClelland, 1989).

Sample

The participants were the students of BSAI (Artificial Intelligence) first semester. The sample was selected using purposive and convenient sampling. The linguistic profiles of all the participants were collected and it showed that all of them were multilinguals with Urdu as their L1 along with Punjabi and Pashto. Almost all the participants learned these languages simultaneously before going to school. Majority of them learned English later on in their schools. All the participants considered Urdu as their L1 and English as their L2. All the participants were taking Functional English as a subject in their first semester. Total 11 participants were selected for the study after the informed consent. Only willing participants were selected for conducting the activities.

All the participants were males. While conducting the activity, the participants were asked to mention their schools and the medium of instructions of their educational institutes. This allowed us to understand the level of exposure they have towards their L1 and L2.

Data Collection Technique

The data was collected in two phases.

First Phase

In the first phase of the activity participants were provided with four short texts. Two of the texts were in English Language (L2) and two of the texts were in Urdu language (L1). Both English and Urdu texts were similar and had similar content. The texts were selected keeping in mind the level of language competency of the participants (Appendix 1 and 2). Since the participants were students of BS first semester, the texts selected for the activity were hard and appropriate for college students. The readability level was tested using 'Readability Scoring System Plus'. All the texts were not handed together to the students, rather each text was given after the activity was completed for the previous text. They were provided one text at a time.

First of all, the participants were asked to read the text. Their reading time was recorded. If students had regression (regressive saccade refer to going back few words while reading) it was recorded. After reading the participants were provided with a set of questions from the passage and were asked to answer them. This helped us in finding if participants were able to comprehend the text or not. Same was repeated for all the texts.

Second Phase

The reading activity was followed by a retrospective interview. The purpose of this activity was to understand the processing of the participants while reading in their L1 and L2. It also helped in reflecting on the findings of the results. Participants were asked few reflecting questions such as

- Can you please reflect on the experience of the activity?
- Which passage was easy to read Urdu or English?
- Which passage was easy to comprehend?
- Did you feel the need to read again, or did you go back while reading?
- Was there any difference in reading experience in Urdu and English?

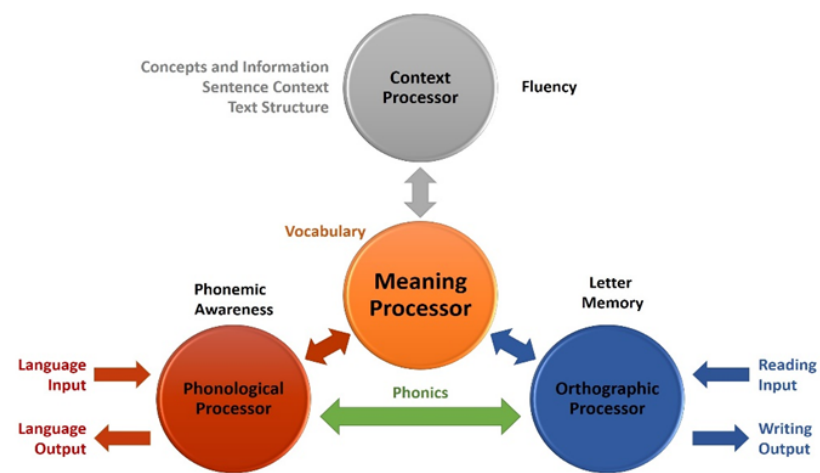
The activity was performed with the informed consent of the participants and only willing participants were selected for the study.

Theoretical Framework

Present study used Single-Route model of reading (Seidenberg & McClelland, 1989) as theoretical framework. This model is based on the parallel distributed processing pattern just like TRACE or SRN models. The mechanism of this model is based on the neural network model that contains three groups of processing units- orthographic units, phonological units and semantic units. Layers of hidden processing units are present in between each processing unit. Each word leads to the activation of patterns across the entire network as each unit in the network is connected to another unit and activation in a unit can influence activation of other units. A visual input promotes activation in the orthographic units which leads to activations in the hidden units connected to them. These patterns of activation in turn prompt activation

in the phonological units which direct the naming response. Figure 1 shows the visual representation of the Single-Route model of reading.

Figure 1
Seidenberg and McClelland’s model of reading 1989



Every word is represented across the entire network as a distributed pattern of activation. Each unit in the network is connected to the other, so when one unit is activated, it leads to the activation of the other unit. Learning and experience modify the weights in the units. This model is selected as it explains how all the processing units are activated simultaneously. It can help us in making inferences about the processing of Urdu and English reading in multilinguals.

Analysis and Discussion

One of the objectives of the present study was to see the difference in the reading speed of multilinguals in their L1 and L2 for the similar text. The L1 of all the participants of the study was Urdu and their L2 was English. All the participants were given 4 texts (2 English and 2 Urdu) to read and their reading time was recorded. As participants were asked to read 4 texts in total, the length of the texts was kept comparatively short. The length of all the texts was around 150 to 200 words.

Reading Speed

First of all, the reading times of the participants for four different texts in their L1 and L2 was recorded. The table given below shows the time taken by the participants while reading different texts.

Table 1
Reading Time of the Participant for Texts in English and Urdu

Participants	Reading time text 1 English L2	Reading time text 1 Urdu L1	Reading time text 2 English L2	Reading time text 2 Urdu L1
P1 (English Medium)	40 sec	55 sec	35 sec	1 min
P2 (English Medium)	1 min	1 min	30 sec	1 min
P3 (Mixed)	51 sec	37 sec	49 sec	52 sec
P4 (English Medium)	1 min	3 min	50 sec	2 min 48 sec
P5 (Mixed)	55 sec	50 sec	30 sec	50 sec
P6 (Mixed)	45 sec	25 sec	45 sec	35 sec
P7 (Mixed, English)	1 min 10 sec	1 min 8 sec	1 min 20 sec	1 min 50 sec
P8 (Mixed)	42 sec	39 sec	30 sec	38 sec
P9 (Mixed)	45 sec	40 sec	35 sec	35 sec
P10 (English Medium)	35 sec	1 min 4 sec	43 sec	1 min 35 sec
P11 (English Medium)	31 sec	42 sec	32 sec	36 sec

The reading times of the participants for the respective passages in L1 and L2 were approximately same for the majority of the participants with slight variations. However, the interesting finding in the reading time of almost all the participants is that they spent less time on reading in English that is L2 for them as compared to Urdu that is L1 for them. In other words, their reading speed was more in their L2 as compared to their L1. It is important to notice that out of the 11 participants, 6 were from English medium schools and their medium of instructions was English. They studied most of their subjects in English language throughout their school years. Five of the participants were from the schools where medium of instructions was both English and Urdu; however, they also studied most of their subjects in English. Despite majority of the subjects being taught in English, the predominant language of the classrooms was Urdu in their schools. This can be attributed to the mixed and non-uniformed reading times recorded for the participants coming from mixed language schools. It can be seen in Table 1 that those participants exhibited fluctuating reading times as they were able to read the English passages quickly than the respective Urdu passage, but at the same time they exhibited an opposite response for the other set of the readings. Such kind of findings make it difficult to form inferences. Similar kind of findings were found in the data of some of the participants coming from English medium schooling backgrounds. However, the majority of the English medium background students were able to read the English passages quickly as compared to Urdu.

Another important observation was made regarding the regression strategy found in their reading. In the readings of the participants who took above 40 seconds were seen to be going back while reading in order to comprehend the text. While few of the Participants from the mixed school background were seen regressing in English texts, majority of the English medium Schooling participants were seen regressing in Urdu texts. This regression indicates towards the comprehension and understanding of the texts. Participants tended to go back when they could not grasp the meaning of the text as revealed in their retrospective interviews. Overall, the phenomenon of regression was more recurrent for the Urdu texts as compared to English texts.

Over all findings indicated that the participants' reading speed was more in English as compared to Urdu. As indicated by Vogelzang, et. al. (2024) in his study, our study also found that reading speed of multilinguals was more in English as compared to their L1. It can be related to the fact that majority of the students have studied their courses predominantly in English language as compared to Urdu and that's why they are more accustomed to reading in English as compared to Urdu. Even though their L1 is Urdu, while reading their processing in English is faster.

Reading Comprehension

Since reading is not merely going through the sentences but also involves comprehending the words and sentences as well, the comprehension of the participants for the provided passages was tested. They were asked five questions from each passage in order to see their understanding of the texts. The scores of their comprehension tests out five are given in table 2 for each passage.

Table 2

The Comprehension Scores of the Participants for the Four Texts

Participants	Score text 1 English L2	Score text 1 Urdu L1	Score text 2 English L2	Score text 2 Urdu L1
P1 (English Medium)	5	5	5	5
P2 (English Medium)	4	4	5	5
P3 (Mixed)	5	5	5	5
P4 (English Medium)	5	5	5	5
P5 (Mixed)	5	5	5	5
P6 (Mixed)	4	4	5	5
P7 (Mixed, English)	4	3	4	2
P8 (Mixed)	5	5	5	5
P9 (Mixed)	5	5	5	5
P10 (English Medium)	5	3	5	4
P11 (English Medium)	5	5	5	5

The scores of the comprehension tests show that the participants were able to comprehend the texts in both the languages as most of the participants scored well on these tests. There was no comparable difference in the scores of the two languages. Only two of the students scored lower in Urdu comprehension and one of those students had his schooling abroad and had very little exposure to written Urdu. This could be the reason for his comparatively poor performance in Urdu comprehension. However the fact that participants frequently used regression (going back a few words while reading for understanding) cannot be ignored. Keeping that in mind, it is safe to say that on the whole students were able to comprehend the English texts quickly while reading as compared to Urdu.

Again, the findings of the comprehension tests can be related to the argument build in the previous section. Even though it is considered that the L1 might be the dominant language, however, in case of the participants of the present study, it seems like the dominant language during reading is L2. Since the participants were exposed to their L2 more during their school years, it becomes the dominant language for them in the academic settings. The participants had more exposure to English reading, since all of their text books except for Urdu and in some cases Islamiyat, were in English language. Thus, their reading skills in Urdu are not that developed.

Single-Route model of reading (Seidenberg & McClelland, 1989) proposes that all the three processing units (orthographic, phonological and semantic) along with the hidden units are interconnected and are activated at the same time when visual input is taken (Figure 1). The reading speed depends on the level of activity in different units. The faster the units process the information, the faster the system retrieve the word from the semantic units and move to another word. Thus, in case of English and Urdu all the processing units will be working simultaneously while reading. The difference in the reading speed in both the languages can be attributed to the different levels of activation in the processing units. Since the participants were more exposed to the text of their L1 the level of activation in different processing units will be lower while reading in that language and hence faster processing speed and quick reading. According to Traxler (2012) the more familiar words take lesser time to process. Seidenberg & McClelland (1989) suggested that experience strengthens the weights in different processing units. Thus, the more reading experience of the participants in their L2 (English) shows that the weights for their L2 in orthographic, phonological and semantic units are stronger as compared to L1 (Urdu). This could be the contributing factor for faster reading speed and comprehension in English.

Moreover, English orthography is simple as compared to Urdu. Thus, it can be assumed that the English words will be easy to process in orthographic processing units leading to quick activations in phonological units and eventually in semantic units. Urdu on the other hand has a difficult orthographic structure and it may take longer time and more activations in the orthographic units leading to delayed activations in other processing units, and eventually slower reading speed.

Regression while reading the texts shows that even when the orthographic and phonological units were active, the semantic units delayed in their activation or in selection of appropriate meaning. Since this model indicates towards simultaneous activation, there are chances that multiple meanings are activated at the same time and to choose the most relevant meaning took time for the participants. Similarly, the model works on feedback mechanism as well, there is a constant feed forward and feedback happening between the units and which helps in selecting the appropriate meaning terms of the context. The model suggests that the activation of semantic units and retrieval of appropriate meaning is context dependant. Sometimes, the previously selected meaning may not be appropriate with the followed context. This can cause the regression for the participants to read again and access the most appropriate and relevant meaning from the semantic units. As the demographic data of the participants show that they were more exposed to L2 in context of academics and reading, L2 tends to be their dominant language in that case. Most regressions were noted in L1 reading; therefore, the activation of semantic units and selection of relevant meaning took time. Moreover, the students were not exposed to Urdu texts that much and that could also be a reason for longer reading time as the words are less familiar. These findings somehow support the claims of Grabe and Yamashita (2022) that reading differences in L1 and L2 is affected by the educational and cultural differences.

Possible Factors affecting Reading Speed and Comprehension

The activity was also followed by retrospective interview questions. The participants were asked few questions that reflected on their experience of the reading activity. The interview questions helped in validating the findings of our study. It also helped in listing some of the possible factors that affect the reading speed and comprehension of the multilinguals. Most of the respondents' answers were aligned with our findings. Reflecting back on their experience, the participants mentioned that English passages were easy for them to read and comprehend. Urdu texts were comparatively difficult to read and were taking more time to read and comprehend and they had to go back to understand the message. The reason presented was their less exposure to Urdu reading as compared to English. They revealed that they feel comfortable in speaking Urdu but when it comes to reading they find Urdu difficult. They revealed that they haven't done that much reading and writing in Urdu and that is the reason they were having difficulty in reading Urdu. However, they mentioned when it comes to speaking and listening, they are more confident in Urdu as compared to English. The most possible reason for this contrast in both L1 and L2 when it comes to these skills is the kind of exposure and experience they had in both the languages. The participants acquired their L1 early in their lives but that exposure was mostly limited to speaking and listening. On the other hand, L2 (English) was learned later on mostly in academic setting with preference mainly given to reading writing.

Thus, the present study suggested that some of the leading factors that affect the reading speed of multilinguals in their L1 and L2 is the time of exposure and the nature of exposure they have with L1 and L2. Not just the time of exposure with a certain language but the skill they are more exposed to also has a significant effect. In our case, even though the participants were exposed to their L1 for their whole lives, their reading performance was better in L2. It is because they were exposed to reading more in L2 as compared their L1. The academic language for them was their L2 and it was reflected in their slightly better performance in L2 reading activity as compared to L1. This finding is rightfully in line with findings of Grabe and Yamashita (2022) that educational background has an effect on reading speed.

Thus, in the light of the findings of the present study, it can be assumed that it is not necessary that individuals perform better in their L1 as compared to L2 particularly in reading tasks. This study to some extent supports the findings of Kim (2020) that multilingualism does not affect the reading performance significantly as there was no major difference the reading speed and comprehension of the participants in their L1 and L2. Findings of this study are somehow aligned with the claims made by Vogelzang, et. al. (2024) that multilingualism has a positive effect on reading skills of the students. Since reading is not a natural activity, number of different factors will influence the performance in reading related tasks. In present study the educational background and their exposure to L1 and L2 particularly their written texts are assumed to be the determining factors for the unexpected results.

Conclusion and Recommendations

This study intended to investigate the reading speed of multilingual individuals in both their first language (L1) and second language (L2), primarily focusing on identifying patterns and the potential factors that affect their reading speed and comprehension across different languages. The study revealed that contrary to the expectations, there was no considerable difference between the reading speed of participants in their L1 (Urdu) and L2 (English). However, there was a slight advantage observed in the participants' reading speed and comprehension in L2 (English). This advantage suggests that the greater exposure of the participants to their L2, particularly in terms of reading and writing, may have been a contributing factor for their better reading performance in L2. These finding highlight the potential impact and influence an academic linguistic environment have on the reading performance of multilingual individuals. This study was limited by its small sample size and relatively short reading passages due to time constraints. Subsequently, it is important that the findings need to be interpreted with caution.

Recommendations

1. Future studies can include a larger sample with more diversity to capture broader variability in reading performance.

2. Longer and more complex passages can be included to assess reading and processing over extended texts.
 3. Future studies can incorporate neurocognitive measures such brain imaging or eye-tracking to get deeper insights of the cognitive and neural processes underlying reading in multiple languages.
 4. Comparative studies across different age groups, proficiency levels, and language pairs can provide an understanding the effects of exposure, proficiency and orthographic differences on reading speed.
 5. A longitudinal study can be conducted to explore how shifts in language use and exposure over time affect the reading fluency and comprehension of multi-linguals.
- Future research can enhance our understanding of the cognitive, linguistic, and environmental factors that shape multilingual reading performance.

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Appendices

Appendix 1: Sample Text English

Nestled at the foothills of the majestic Himalayas, the village of Serenity is a haven of tranquility. Surrounded by lush greenery and meandering streams, this idyllic hamlet is a testament to the simplicity of rural life. The villagers, deeply connected to nature, follow age-old traditions passed down through generations. Agriculture is the heartbeat of Serenity, with terraced fields painting the landscape in hues of green and gold. The village temple, standing proudly in the center, is a hub for communal gatherings and spiritual celebrations. However, as modernization edges closer, questions arise about the delicate balance between progress and preserving the village's cultural heritage.

Appendix 2: Sample text Urdu

درختوں کے پہاڑوں کے سرحدوں پر بسا ہوا، گاؤں سیرینٹی، عظیم ہمالیہ کے قدرتی چوٹیوں کے قدموں میں ایک سکون کا مقام ہے۔ پرسرار سبزیوں اور چکرانے والے چھوٹے ندیوں سے گھیرا، یہ دلکش گاؤں دیسی زندگی کی سادگی کا اظہار ہے۔ گاؤں والے، قدرت سے گہرا تعلق رکھتے ہیں، جو نسلوں سے نسلوں تک چلی آئی ہوئی سنگی حکمتوں کا پیرو کار ہیں۔ زرعیت سیرینٹی کا دھڑکن ہے، چڑھائی گئی زمینیں برے اور سنہرے رنگوں میں منظر نامہ بناتی ہیں۔ گاؤں کا منہدم مینار، وسط میں فخر سے کھڑا ہے، جو جماعتی اجتماعات اور روحانی تقریبات کا مرکز ہے۔ مگر جب کہ حد تک ریاستی ترقی بڑھتی ہے، سیرینٹی کو معاشرتی وراثت کو ترقی اور حفاظت کرنے کے درمیان نازک توازن کے بارے میں سوالات ہوتے ہیں۔