



## Reading Comprehension in L1 And L2 Among Grade 6 Pupils: A Comparative Study

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### ABSTRACT

The ongoing debate about the interdependency of reading comprehension between the first language (L1) and the second language (L2) has been a significant topic since reading is believed to be a fundamental skill crucial for learning and academic success. The difference between the reading comprehension in L1 and L2 among Grade 6 pupils was examined in this study to assess the relationship between their abilities in both languages using the PHIL-IRI reading materials. It has been discovered that no significant difference was found between their L1 and L2 reading comprehension based on their post-test scores: L1 (M=65.167, SD=10.787, n=120) and L2 (M=66.208, SD=12.178, n=120) at the .05 level of significance ( $t=0.841$ ,  $df=124$ ,  $p=0.402$ ), further signifying that the pupils' reading comprehension in L1 and L2 is comparable but does not significantly differ. L1 can positively influence L2 reading skills, thus highlighting the importance of strengthening L1 reading comprehension to enhance L2 reading skills, as identified in the significant correlation between L1 and L2 reading comprehension. Addressing the disparities in learning outcomes by promoting inclusive and equitable quality education aligns with Sustainable Goals 4 (Quality Education) and 10 (Reduced Inequality) and increasing exposure to L1 is essential for developing better L2 reading skills. Addressing these challenges in bilingual education reflects the broader educational strategy, especially in ASEAN countries, including the Philippines, which helps to improve reading comprehension to ensure learning and academic success.

**Keywords:** *reading comprehension, L1, L2, Grade 6, Bilingual education*

### 1 INTRODUCTION

Reading is essential for learning and communication, analyzing and decoding written symbols into meaningful language. It also plays a fundamental role in cognitive and linguistic development. Compelling reading goes beyond just recognizing words; it involves comprehension and the ability to interact with the text to derive meaning. The deficiency in language knowledge impairs reading proficiency, underscoring the importance of language skills in achieving comprehension (Davis, 2006). Mastery of reading by the end of grade four is crucial, as students who do not

achieve this level will likely face academic challenges later. Despite various instructional strategies, most students in the Philippines continue to struggle with reading comprehension (Bilbao et al., 2016). PISA 2018 results showed that Filipino students scored lower in reading than their international peers, with 80% failing to meet proficiency standards (Nalzar, 2008; Tomas et al., 2021). The situation is further exacerbated by regional disparities, such as those in the Autonomous Region of Muslim Mindanao, which reports alarmingly low literacy rates (Miñoza & Montero, 2019).

These challenges underscore the need for effective reading programs to improve educational outcomes and promote social and economic development.

Reading is a foundational academic skill and a key to personal growth and societal contribution. From early childhood, the ability to read and understand text plays a critical role in intellectual development and lifelong learning (Li & Clarianna, 2018; Vida & Acal, 2019). Defined by the Oxford Dictionary as the process of looking at and understanding written or printed words, reading is integral to acquiring, communicating, and sharing information and ideas (Salazar, 2018). It is essential for academic success and overall well-being; as such, reading empowers individuals to enhance and enrich their lives (Salazar, 2018). Reading comprehension plays a role in reading effectively, as emphasized in developing literacy. It involves building mental representations and connecting prior knowledge with new information (McLaughlin, 2012). Studies have shown that while oral reading benefits first-language (L1) learners by improving pronunciation and word recognition, silent reading is more beneficial for reading comprehension in second language (L2) contexts (Abiad, 2019). L2 learners often face more significant challenges due to differences in language structure and background knowledge (Jiang, 2016; Fälth et al., 2022).

For Grade 6 pupils, proficient reading comprehension is vital for academic achievement and personal development. Effective interventions, such as remedial programs and vocabulary development, can significantly improve reading skills and comprehension (Vida & Acal, 2019; Cadiong, 2020). Despite advancements, prior knowledge and instructional support remain critical to reading success (Negosa, 2021). In the context of ASEAN integration, the SEA-PLM 2019 highlights that many students in Southeast Asia, including the Philippines, struggle with reading proficiency, affecting their overall educational outcomes (Balinbin, 2020; Spink & Cheng, 2021). Addressing these challenges requires targeted interventions and policy recommendations to improve literacy rates and ensure equitable educational opportunities across the region.

The reading comprehension in a student's first language (L1) and its ability to predict their reading proficiency in their second language (L2) has been investigated in this study, and its findings hold significance for various stakeholders: school administrations can use insights to enhance learning environments; teachers can tailor instruction more effectively; parents can support their children's fluency development; learners can recognize the value of reading proficiency in both languages; and future researchers can utilize

this study as a foundational resource for further exploration of L1 and L2 comprehension dynamics among language minority students. Furthermore, this study aligns with Sustainable Development Goal 4 (Quality Education), which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Improving reading proficiency in both L1 and L2 supports enhancing educational outcomes and reducing disparities in literacy. The study also contributes to Sustainable Development Goal 10 (Reduced Inequalities) by addressing educational inequalities among language minority students and advocating for equitable access to quality education for all learners, regardless of their linguistic background. Exploring the relationship between L1 and L2 reading comprehension in this study provides insights into effective bilingual education practices. It highlights the need for targeted interventions that support both language skills, as this addressed the gap in understanding how proficiency in L1 impacts L2 reading outcomes, particularly within the context of language minority students.

### 1.1 Statement of the Problem

This study examined the correlation between reading comprehension in L1 and L2 among Grade 6 pupils. It focused on answering the following questions:

1. What were the pupils' reading comprehension scores during the pre-test and post-test in L1? In L2?
2. Was there a significant difference between the pupils' pre-test and post-test scores in L1? In L2?
3. Was there a significant difference between the pupils' post-test scores in L1 and L2?
4. Was there a significant correlation between the pupils' post-test scores in L1 and L2?

### 1.2 Hypothesis

H<sub>01</sub>: There is no significant relationship between the L1 and L2 reading comprehension among the Grade 6 pupils.

### 1.3 Significance of the Study

The reading comprehension in a student's first language (L1) and its ability to predict their reading proficiency in their second language (L2) has been investigated in this study, and its findings hold significance for various stakeholders: school administrations can use insights to enhance learning environments; teachers can tailor instruction more effectively; parents can support their children's

fluency development; learners can recognize the value of reading proficiency in both languages; and future researchers can utilize this study as a foundational resource for further exploration of L1 and L2 comprehension dynamics among language minority students. Furthermore, this study aligns with Sustainable Development Goal 4 (Quality Education), which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Improving reading proficiency in both L1 and L2 supports enhancing educational outcomes and reducing disparities in literacy. The study also contributes to Sustainable Development Goal 10 (Reduced Inequalities) by addressing educational inequalities among language minority students and advocating for equitable access to quality education for all learners, regardless of their linguistic background. Exploring the relationship between L1 and L2 reading comprehension in this study provides insights into effective bilingual education practices. It highlights the need for targeted interventions that support both language skills, as this addressed the gap in understanding how proficiency in L1 impacts L2 reading outcomes, particularly within the context of language minority students.

#### 1.4 Theoretical Background

Theories that underpinned this study include Schema Theory, which posits that readers use prior knowledge to interpret new information (Shen, 2008; Murray, 2019). Constructivist Theory emphasizes the active construction of knowledge through experiences and social interactions (Spivey, 1989), and Linguistic Interdependence Theory suggests that proficiency in L1 supports the development of L2 skills (Cummins, 1981). These frameworks collectively provided a comprehensive understanding of how reading comprehension develops and how proficiency in one language can influence another in this study.

#### 1.5 Literature Review

Reading comprehension is a multifaceted skill beyond mere word recognition, including the ability to interpret and integrate text information. According to Salazar (2018) and Abiad (2019), reading comprehension involves a dynamic interaction between the reader's existing knowledge and the new information presented in the text. Learning to read is a vital achievement for children, evolving from fundamental interactions with books to fluent comprehension and meaningful engagement with texts. Reading is a fundamental skill crucial for practical living, as it helps expand vocabulary and adjust to life situations (Li & Clarianna, 2018; Vida & Acal, 2019). Differences

between reading comprehension in a first language (L1) and a second language (L2) have been discussed by previous studies, emphasizing that L1 readers typically utilize more effective reading strategies and have better background knowledge, while L2 readers may face challenges due to less developed strategies and difficulties with vocabulary and cognitive processing (Turnbull & Evans, 2017; Jiang, 2016; Fälth et al., 2022). Effective reading comprehension involves recognizing words and integrating and interpreting information from texts (Lynch, 2020; McLaughlin, 2012).

Comparing reading comprehension in a first language (L1) and a second language (L2) reveals significant differences. Studies indicate that L1 readers typically demonstrate more effective reading strategies and better background knowledge, facilitating comprehension. In contrast, L2 readers often face challenges, such as less developed reading strategies, limited vocabulary, and more significant cognitive load (Turnbull & Evans, 2017; Jiang, 2016). The complexity of L2 reading comprehension is exacerbated by orthographic differences and less familiarity with the language, making it more difficult for L2 learners to achieve proficiency comparable to L1 readers (Fälth et al., 2022).

The broader context of reading proficiency extends to regional and global educational goals. The study aligns with Sustainable Development Goals (SDGs), particularly Goal 4 (Quality Education) and Goal 10 (Reduced Inequalities), emphasizing the need for equitable access to quality education and addressing educational disparities (Balinbin, 2020). Studies from Southeast Asia and the Philippines highlight significant challenges in reading proficiency, with many students performing below expected levels and struggling to meet global standards (Tomas et al., 2021; Spink & Cheng, 2021; Lucas et al., 2021). Their studies show the need for effective educational policies, improved teacher support, and targeted interventions to close the literacy gap and support student achievement. Reading comprehension is a complex, multifaceted skill influenced by various cognitive and educational factors. While L1 readers generally exhibit stronger comprehension abilities, L2 readers face additional challenges that require targeted support and interventions. Reading comprehension's importance extends beyond individual achievement, impacting broader educational outcomes and aligning with global educational goals (Yilmez, 2016). Addressing these challenges through effective programs and policies is essential for improving literacy and educational equity on a regional and global scale.

## 2 METHODOLOGY

### 2.1 Research Design

This quantitative study utilized the descriptive comparative research design. It assessed the reading comprehension level



to compare the L1 and L2 reading comprehension.

## 2.2 Respondents

The study focused on Grade 6 pupils for the school year 2023-2024 at an elementary school in Zamboanga Sibugay, Philippines. The sample comprises 120 pupils selected through random sampling. This approach ensures that the respondents represent a broad cross-section of the student population, providing a comprehensive view of reading comprehension levels and potential differences between L1 and L2 proficiency within this group.

## 2.3 Data Gathering Procedure

The researcher first sought permission from the principal to conduct the study, after which consent was obtained. Grade 6 advisers were notified, and a permission letter was sent to parents/guardians for their children's participation. Upon receiving parental consent, the researcher asked the pupils for their assent.

The assessment occurred during the pupils' free time to avoid disrupting regular class hours. Participants were assured that their results would not affect their class standing. Each pupil underwent individual oral reading sessions with two reading passages in different languages (5 passages in Bisaya and English). Reading comprehension was evaluated using passages and an eight-item comprehension test, with materials adopted from the Philippine Informal Reading Inventory (Phil-IRI).

## 2.4 Data Analysis

The data analysis began by calculating the weighted mean for reading comprehension scores in L1 (Bisaya) and L2 (English). The weighted mean provided an average comprehension score for each language. An independent samples t-test was performed to compare reading comprehension between L1 and L2. The t-test determined whether the differences between comprehension scores in L1 and L2 were statistically significant. In assessing the relationship between L1 and L2 reading comprehension, the Pearson Product Moment Correlation was used to examine whether the reading comprehension in L1 was significant compared to the reading comprehension in L2, giving insights into the correlation between the two languages' reading comprehension levels.

## 3 RESULTS AND DISCUSSION

### Pupils' Reading Comprehension in L1 (Pretest)

Table 1.1 presents the pretest scores of Grade VI pupils in their first language (L1). Most pupils, specifically 110 out of 120 (91.7%), scored in the frustration level of comprehension, indicating performance below 58%. A smaller group of ten pupils scored between 59% and 79%, placing them in the instructional level of comprehension. This result highlighted an essential issue in reading comprehension among Grade VI students. The high percentage of pupils at a frustration level underscores the need for effective intervention strategies for the broader research on reading literacy problems in the Philippines. Nalzar (2008) and Tomas et al. (2021) report widespread reading proficiency difficulties among Filipino students. Furthermore, Librea et al. (2023) conducted a meta-synthesis of factors influencing low reading literacy skills in Philippine elementary schools. Their analysis identified several contributing factors, including a lack of reading elements, insufficient teacher training, and a shortage of reading materials. These factors collectively impact students' reading proficiency and echo the frustrations observed in this study's pretest scores. The predominance of students in the frustration level of comprehension indicates a pressing need for enhanced reading programs and interventions. As Librea et al. (2023) suggest, restructuring reading programs with continuous progress monitoring and targeted reading diagnosis could be essential in addressing these deficiencies. The results emphasize the need for a comprehensive approach to improving reading literacy, including better re-source allocation, teacher training, and parental involvement, to foster advancements in students' reading comprehension.

Table 1.1 Pupils' Reading Comprehension Pretest Scores in L1

Reading Comprehension Pretest Percentage Scores	Descriptive Interpretation	Frequency	% from the Total
Below 58%	Frustration	110	91.7
59-79%	Instructional	10	8.3
80% and above	Independent	0	0
<b>Total</b>		<b>120</b>	<b>100</b>
<b>Weighted Mean Interpretation</b>			<b>37.604% Frustration</b>

### Pupils' Reading Comprehension in L1 (Post-test)

Table 1.2 presents the post-test scores of Grade VI pupils in their first language (L1). Following the intervention, 73 pupils (60.8%) scored within the instructional level of comprehension, with scores ranging from 59-79%. This indicates an improvement from the pretest, moving out of the frustration level. However, 35 pupils still scored between 58% and below, maintaining their position in the frustration level of comprehension. A notable 12 pupils (10%) achieved scores of 80% and above, indicating they reached the independent level of comprehension.

The shift observed from the pretest to the post-test demonstrates a positive trend in reading proficiency among the students. This improvement is consistent with findings from

D'Angelo et al. (2020), which emphasize the importance of targeted interventions in addressing reading comprehension difficulties. Their study, which examined poor reading comprehension in early French immersion students, highlighted the overlap in reading difficulties across languages and the significant role of vocabulary development. Their findings suggest that weaknesses in vocabulary can hinder comprehension in both English and French, which is relevant for understanding the progress observed in this study. As students advance from frustration to instructional and independent levels, it underscores the potential impact of targeted reading strategies on comprehension improvement. Moreover, the improvements observed align with the recommendations of Librea et al. (2023), who identified the need for continuous progress monitoring and targeted interventions to address low reading literacy. Their meta-synthesis of factors affecting reading literacy in the Philippines highlights similar challenges and underscores the importance of a restructured reading program. The presence of students still at the frustrated level indicates ongoing challenges that require sustained and comprehensive support, including enhanced teacher training, increased availability of reading materials, and active parental involvement. While the post-test results encourage progress, they also reveal areas needing attention. The study's findings reflect broader research on reading comprehension, including the need for targeted interventions and ongoing support to ensure that all students achieve a high level of reading proficiency.

Table 1.2 Pupils' Reading Comprehension Post-test Scores in L1

Reading Comprehension Post-test Percentage Scores	Descriptive Interpretation	Frequency	% from the Total
Below 58%	Frustration	35	29.2
59-79%	Instructional	73	60.8
80% and above	Independent	12	10
<b>Total</b>		<b>120</b>	<b>100</b>
<b>Weighted Mean Interpretation</b>		<b>65.167%</b>	<b>Instructional</b>

### Pupils' Reading Comprehension Scores in L2 (Pretest)

Table 2.1 presents the pretest scores of Grade VI pupils in their second language (L2). Most pupils, 98 (81.7%), scored within the frustration level of comprehension, with scores below 58%. Meanwhile, 22 pupils (18.3%) scored 59-79%, placing them at the instructional level. These results indicate that the overall reading comprehension level of the pupils in L2 during the pretest is predominantly at the frustration level.

The results highlighted the challenges students' pupils face when learning to read in a second language. Yilmaz (2016) emphasizes that reading comprehension in an L2 is a

complex cognitive skill influenced by text-related and reader-oriented factors. The study highlighted how vocabulary knowledge, topic familiarity, and perceived interest can affect reading comprehension in an L2. However, Yilmaz's study did not find significant correlations between these factors, suggesting that limited lexical coverage may dominate comprehension difficulties. This aligns with the frustration level observed in the pupils' L2 performance, as their limited vocabulary in the second language may have hindered their ability to comprehend the texts. Furthermore, D'Angelo et al. (2020) explored reading comprehension difficulties across multiple languages and emphasized the role of vocabulary in predicting reading comprehension outcomes. In their study, poor English and French comprehends demonstrated vocabulary weaknesses contributing to comprehension difficulties. Similarly, the Grade VI pupils' struggles in L2 may stem from insufficient vocabulary and unfamiliar syntactic structures in the second language, echoing the challenges learners face in Yilmaz's and D'Angelo et al.'s studies.

Librea et al. (2023) highlighted vital factors contributing to low reading literacy skills in elementary schools, including the lack of reading materials, teacher competence, and student motivation. These factors may have compounded the difficulties experienced by the pupils in this study. Addressing these literacy challenges requires a restructured reading program and continuous monitoring to ensure progress.

The pretest scores underscore the complex nature of L2 reading comprehension and the critical need for comprehensive support in improving second language literacy. Limited vocabulary, unfamiliar textual structures, and other learner-oriented factors all contribute to the pupils' low comprehension levels, as supported by the findings from Yilmaz (2016), D'Angelo et al. (2020), and Librea et al. (2023).

Table 2.1 Pupils' Reading Comprehension Pretest Scores in L2

Reading Comprehension Pretest Percentage Scores	Descriptive Interpretation	Frequency	% from the Total
Below 58%	Frustration	98	81.7
59-79%	Instructional	22	18.3
80% and above	Independent	0	0
<b>Total</b>		<b>120</b>	<b>100</b>
<b>Weighted Mean Interpretation</b>		<b>47.500%</b>	<b>Frustration</b>

### Pupils' Reading Comprehension Scores in L2 (Post-test)

Table 2.2 presents the post-test scores of Grade VI pupils in L2. Most pupils, 65 (54.2%), achieved scores, placing them at the instructional level of comprehension (58% and below). This was followed by 34 pupils (28.3%) who

scored between 59-79%, indicating frustration-level comprehension. Only 21 pupils (17.5%) attained independent-level comprehension with scores above 80%. These results indicate significant variability in the pupils' reading comprehension performance in L2, with the majority remaining at the instructional level and a notable portion still struggling at the frustration level.

Research in second language (L2) reading comprehension suggests several cognitive and linguistic factors impact individual differences in L2 comprehension. Li & Clarianna (2016) emphasize that L2 reading comprehension involves complex interactions between cognitive abilities, language proficiency, and the order in which L1 and L2 are processed. Their integrative analysis highlights how learner abilities like working memory and proficiency levels are critical in reading comprehension outcomes. This complexity is reflected in the diverse scores observed in the post-test results, where a substantial portion of pupils struggled to achieve independent comprehension despite instruction. Similarly, Zhang et al. (2023) underscore the importance of orthographic and vocabulary knowledge in L2 reading comprehension, which was found to account for a significant portion of the variance in reading performance. In the context of Grade VI pupils, their vocabulary knowledge, especially in L2, may have been a critical factor in influencing their post-test performance. The mediation effect of vocabulary knowledge on orthographic knowledge and reading comprehension further supports the notion that pupils with stronger vocabulary foundations are more likely to progress to higher levels of comprehension, as reflected in the 17.5% who attained independent-level comprehension.

Moreover, Yamashita et al. (2023) provide a longitudinal perspective on developing L2 reading comprehension, identifying factors such as vocabulary breadth, grammar knowledge, and listening comprehension as critical contributors to initial reading comprehension levels. Although grammar knowledge negatively predicted narrative growth in their study, listening comprehension emerged as a significant positive predictor, highlighting the importance of oral language skills in enhancing reading comprehension even in foreign language contexts. This may explain why some pupils achieved higher levels of comprehension post-test, as their listening comprehension abilities may have supported their progress.

The post-test results in Table 2.2 reveal that while there has been improvement, many pupils remain at the instructional level in L2 comprehension. The findings emphasize the critical role of vocabulary, grammar, and cognitive

abilities in shaping L2 reading outcomes. To further enhance reading comprehension in L2, targeted interventions focusing on vocabulary acquisition, grammar instruction, and listening comprehension may be necessary, as supported by the works of Li & Clarianna (2016), Zhang et al. (2023), and Yamashita et al. (2023).

Table 2.2 Pupils' Reading Comprehension Post-test Scores in L2

Reading Comprehension Post-test Percentage Scores	Descriptive Interpretation	Frequency	% of Total
Below 75%	Frustration	34	28.3
75-89%	Instructional	65	54.2
90% and above	Independent	21	17.5
<b>Total</b>		<b>120</b>	<b>100</b>
<b>Weighted Mean Interpretation</b>		<b>66.208% Instructional</b>	

### Difference between the Pretest and Post-test Comprehension Scores in L1

Table 3 illustrates a significant difference between the pupils' pre-test and post-test comprehension scores in L1, as the paired samples t-test revealed. The pre-test scores ( $M=37.604$ ,  $SD=12.925$ ,  $n=120$ ) were considerably lower than the post-test scores ( $M=65.167$ ,  $SD=0.984$ ,  $n=120$ ), with a t-value of -30.959 and a p-value of 0.000, indicating statistical significance at the 0.05 level. This suggests a notable improvement in reading comprehension after the intervention, highlighting that comprehension occurred, as evidenced by the increased post-test scores.

Existing literature emphasized the need for reading interventions and comprehension improvement. Librea et al. (2023) suggested that teacher competency, reading enthusiasm, and available reading materials can significantly affect pupils' reading literacy skills. The increase in post-test scores could be linked to the intervention's role in addressing these factors, leading to improved comprehension in L1. Moreover, the study underscores the importance of structured reading programs with continuous monitoring, which may have contributed to the student's progress. D' Angelo et al. (2020) support that comprehension difficulties can stem from vocabulary weaknesses, particularly in a bilingual or multilingual learning environment. Since the pupils in this study were tested in L1, it is possible that their more substantial vocabulary knowledge in L1, compared to L2, contributed to their improved comprehension scores. This aligns with the notion that enhanced vocabulary can significantly impact reading comprehension, as Zhang et al. (2023) noted that vocabulary knowledge mediates the relationship



between orthographic knowledge and reading comprehension. Ylmez (2016) also highlights that vocabulary knowledge, perceived interest, and strategic reading behaviors can influence L2 reading comprehension. While this current study focused on L1, the improvement in comprehension scores could suggest that similar learner-oriented factors, such as topic familiarity and reading strategies, enhanced pupils' understanding of the texts.

The significant improvement in post-test comprehension scores in L1 demonstrates that the intervention effectively increased reading comprehension among the Grade VI pupils. The results are consistent with findings from Librea et al. (2023), D' Angelo et al. (2020), and Zhang et al. (2023), emphasizing the importance of structured reading programs, vocabulary enhancement, and comprehension strategies in fostering improved reading outcomes. This improvement further reinforces the critical role of addressing both learner-oriented and text-related factors to promote

**Table 4: Testing for Differences Between Pupils' Pretest and Post-test Comprehension Scores in L1**

Dependent Variable	Comprehension Scores in L1						t	df	p	Interpretation
	Pretest			Post-test						
	M	SD	n	M	SD	n				
Pretest and Post-test Comprehension Scores in L1	37.6	12.9	120	65.1	9.84	120	-30.9	119	.000	Highly Significant

Legends: M=Mean; SD=Standard Deviation; n=Number of Sample; t=calculated t; df=Degrees of Freedom; p=Probability Value

**Difference between the Pupils' Pretest and Post-test Comprehension Scores in L2**

Table 4 shows the results of the paired samples t-test, which demonstrated a significant improvement in pupils' post-test comprehension scores in L2 (M=66.208, SD=12.179) compared to their pretest scores (M=47.500, SD=11.726). This statistically significant difference (p=.000) suggests that pupils' reading comprehension in L2 significantly improved after the intervention, implying the effectiveness of whatever reading strategies or instructional methods were used to enhance comprehension. The findings are consistent with Mikulec and Vuić (2019), who emphasized reading comprehension's essential role in everyday and academic settings. While their study focused on pre-service teachers, the core idea remains relevant—effective reading comprehension is crucial for accessing

information. Their research revealed lower-than-expected comprehension scores in both L1 (Croatian) and L2 (English) among university students. Although the current study involves younger pupils, the increase in post-test scores supports the notion that targeted interventions can improve reading comprehension.

Dependent Variable	Comprehension Scores in L2						t	df	p	Interpretation
	Pretest			Post-test						
	M	SD	n	M	SD	n				
Pretest and Post-test Comprehension Scores in L2	47.5	11.7	120	66.2	12.1	120	-25.9	119	.000	Highly Significant

Legends: M=Mean; SD=Standard Deviation; n=Number of Sample; t=calculated t; df=Degrees of Freedom; p=Probability Value

Grabe & Jiang (2018) highlighted critical differences between L1 and L2 reading, particularly in linguistic proficiency and exposure. They observed that improving L2 comprehension could suggest that while L2 reading may present additional challenges due to limited proficiency and exposure, these can be mitigated through structured interventions. The study aligns with Grabe & Jiang's assertion that differences between L1 and L2 decrease as proficiency in L2 improves, as seen in the significant post-test score increase. Moreover, Maluch and Sachshe (2020) investigated L2 reading speed and comprehension, noting that students with higher proficiency in L1 tend to perform better in L2. This relates to the current study's findings, as improved L2 comprehension in the post-test could reflect the gradual transfer of skills from L1 to L2, supporting the hypothesis that metalinguistic awareness and skill transfer can enhance L2 reading comprehension. However, Babayiğit (2015) noted that L2 learners often face challenges in oral language skills, significantly impacting their reading comprehension. The current study's improvement in post-test scores may be partly due to addressing such challenges through direct instruction in vocabulary or grammar or increased practice with L2 texts. This suggests that much like Babayiğit's findings, oral language skills could be crucial in boosting comprehension, especially for L2 learners. Lastly, Edele and Stanat's (2016) findings reinforce the importance of L1 listening comprehension as a predictor of L2 reading comprehension. However, this study focused on younger learners. It did not precisely measure listening skills; the significant improvement in comprehension after intervention may reflect a broader

transfer of linguistic skills from L1 to L2. This supports the argument that fostering L1 proficiency, especially in foundational skills like listening comprehension, can indirectly enhance L2 reading skills.

This study's significant improvement in L2 reading comprehension highlights the value of targeted instructional interventions in enhancing reading skills. It also aligns with existing literature, underscoring the complex interplay between L1 and L2 literacy, proficiency, and reading comprehension.

**Table 5: Testing of Differences Between Pupils' Post-test Scores in L1 and L2**

Dependent Variable	Post-test Comprehension Scores						t	df	p	Interpretation
	L1			L2						
	M	SD	n	M	SD	n				
Post-test Comprehension Scores in L1 and L2	65.1	10.7	120	66.2	12.1	120	-0.841	119	0.402	Not Significant

Legends: M=Mean; SD=Standard Deviation; n=Number of Sample; t=calculated t; df=Degrees of Freedom; p=Probability Value

**Difference between the Pupils' Post-test Scores in L1 and L2**

Table 5 reflects the results of the paired samples t-test comparing pupils' post-test comprehension scores in L1 (M=65.167, SD=10.787) and L2 (M=66.208, SD=12.178), indicating no significant difference (p=0.402) between the two sets of scores. This suggests that pupils' reading comprehension in both languages is relatively similar, contradicting the findings of Mikulec and Vuić (2019), whose study showed a noticeable difference between L1 and L2 comprehension scores. In their research, Croatian university students scored higher on L1 comprehension (M=13.6, SD=2.05) than L2 (M=11.29, SD=2.24), pointing to a gap in reading proficiency between the two languages.

Furthermore, this challenges conventional assumptions that L1 comprehension is typically stronger than L2. One of the assumptions is that the lack of significant difference in this study could be that the pupils received effective instruction in both languages, resulting in a balanced development of comprehension skills. Talebi (2015) supports this possibility, suggesting that reading strategies transfer from L1 to L2, mainly when strategic reading competence is built in L1. This cross-linguistic transfer may have contributed to

the similar comprehension scores in both languages observed in the current study. Moreover, Zheng et al. (2023) highlighted the strong correlation between grammatical knowledge and reading comprehension, emphasizing how cohesive ties—connections within text through grammar—play a crucial role in understanding across languages. Pupils may have acquired similar grammatical knowledge in both languages, enabling them to perform equally well in reading comprehension tests. The significant correlation effect size between grammatical knowledge and reading comprehension noted in Zheng's meta-analysis suggests that mastery of grammar could account for the balanced comprehension performance between L1 and L2 in the current study. This contributes to the ongoing discourse on reading comprehension and language proficiency, especially in multilingual contexts. The absence of a significant difference between L1 and L2 comprehension scores may indicate that targeted educational strategies can bridge the gap between first and second language comprehension. This result also supports the idea that proficiency in L1 can positively influence L2 reading through strategic skill transfer, as suggested by Talebi (2015). However, the difference in outcomes compared to Mikulec & Vuić's (2019) study suggests that factors such as the educational context, the age of the learners, and the languages involved may significantly affect comprehension levels across languages.

This further illustrates that L1 and L2 reading comprehension can be at similar levels under certain conditions, possibly due to cross-linguistic transfer and balanced grammatical knowledge acquisition. This challenges the typical expectation of stronger L1 comprehension and highlights the importance of comprehensive instruction in both languages to promote equal proficiency.



**Table 6. Testing the Relationship Between the Pupils' Post-test Scores in L1 and L2**

Variables	Pearson Correlation (r)	Remark	p-value	Interpretation
Post-test scores in L1 and L2 n =125	0.306	Negligible	<.001	Highly Significant

*Correlation Size: ±.00 - ±.30= Negligible; ±.31 - ±.50= Low; ±.51 - ±.70= Moderate; ±.71 - ±.90= High; ±.91 - ±1.0= Very High*

### Significant Correlation between the Pupils' Post-test Scores in L1 and L2

Table 6 shows the test relationship between the pupil's post-test scores in L1 and L2. As reflected in the table, the test yielded a Pearson Correlation (r) coefficient of 0.306 with a p-value of less than .001. This signified the rejection of the null hypothesis and established a highly significant relationship between the variables at 0.05.

Furthermore, the r-value of 0.700 also signified a moderate positive correlation between the variables. This means that the increase in the pupils' post-test scores in L1 was related to the increase in their post-test scores in L2, and the decrease in the pupils' post-test scores in L1 was related to the decrease in their post-test scores in L2. Hence, it can be presumed from the results that there is a significant relationship between the pupils' post-test scores in L1 and L2.

This result implied that L1 comprehension impacts L2 comprehension, thus affirming the L1 and L2 interdependence hypothesis.

The results relate to the study conducted by Mikulec and Vuić (2019), which found a positive correlation between L1 and L2 reading comprehension. The correlation analysis of the examined variables was also applied in their study, and the obtained results were similar. The analysis of the RC test results in the L1 and L2 showed a statistically significant positive correlation ( $r = 0.424, p = 0.000$ ) (Mikulec & Vuić, 2019), thus confirming their hypothesis and indicating a possible transfer of skills between the two languages.

The pupils' reading comprehension results portray the constructivist approach to language acquisition. The pupils' proficiency in L1 and L2 reading comprehension implied that they are immersed in the language, as it emphasized their active role in knowledge building from L1 to L2. Bloom's taxonomy also implies that the pupils critically

analyze the new information as they read the text. Bloom's taxonomy starts with knowledge and memory. It gradually encourages the pupils to seek more information based on a progression of questions and keywords that prompt them to build new knowledge as they read.

The schema theory states that schema impacts understanding and plays a substantial role in reading comprehension. The results showcased how the pupils' schemata gave them the background knowledge to comprehend the texts. Their building of generating the word meaning provided them knowledge from L1 to comprehend in L2. Although English as a second language learners tend to equal native English speakers, as shown in the pupils' reading comprehension level, the interdependency of L1 and L2 showed a positive transfer towards comprehending the texts.

### 4. CONCLUSION

Based on the findings, this study concluded that there is no significant difference between the reading comprehension of Grade 6 pupils in L1 and L2 and that these abilities are correlated, bringing essential insights into the discussion of language learning and comprehension. Contrary to Yamashita's (2007) findings, which suggested that students tend to experience more positive feelings and ease when reading in their native language (L1) due to the perceived difficulty of the second language (L2), the current study indicates that with the proper educational support, pupils can achieve similar comprehension levels in both languages. This outcome suggests that the perceived difficulty of L2 reading might be mitigated through effective teaching strategies and exposure to both languages.

The results correlate with findings from Talebi (2015), who says that the transfer of reading strategies from L1 to L2 implies that once pupils acquire strategic reading skills in their native language, they can apply these skills in their second language, potentially explaining the similarity in their comprehension performance across both languages. The L2 comprehension foundation results from the cost-effectiveness of improving L1 reading skills, further aligning with this study's finding that the pupils' reading comprehension abilities are closely linked across both languages. Since grammatical knowledge transfers across languages, it is plausible that the Grade 6 pupils in this study had acquired sufficient grammatical understanding in both L1 and L2, helping them perform equally well in comprehension tasks across both languages. The lack of a significant

difference between L1 and L2 comprehension may indicate that the pupils in this study could develop their skills equally in both languages, thereby reducing the perceived difficulty of L2 reading.

This result suggests that given appropriate instruction and practice, students' anxiety around L2 reading can be minimized, and they can develop comparable skills in both languages. The correlation between L1 and L2 reading comprehension shown in this study challenges some traditional assumptions about language learning.

## 5.RECOMMENDATION

The researcher suggests that future studies consider enlarging the sample to include higher-grader students. This would provide a more comprehensive understanding of how specific skills such as working memory, prior knowledge, and inferential capacity contribute to reading comprehension in both L1 and L2. These factors could reveal more profound insights into how reading abilities develop across different educational levels and influence overall literacy.

Emphasizing the importance of enhancing students' reading skills is essential, especially with the ASEAN's goal to a more improved quality education, which also aligns with SDG 4, ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all, underscores the need for education systems to strengthen both L1 and L2 literacy. Quality education must allow students to read and comprehend texts in multiple languages, equipping them for academic success and future opportunities. As Grabe and Jiang (2018) highlighted, proficiency in reading comprehension in both L1 and L2 is crucial for academic achievement. This aligns with the study's findings that show no significant difference between L1 and L2 reading comprehension, suggesting that skills in one language can be transferred to the other, as Talebi (2015) proposed. This study also resonates with SDG 10, which focuses on reducing inequalities within and among countries and ties into the recommendation. Strengthening L1 and L2 reading comprehension helps address educational disparities, especially for students from marginalized linguistic or socio-economic backgrounds. Yamashita (2007) observed that students often feel more positive when reading in L1. However, practical instruction in both L1 and L2 can mitigate these feelings of difficulty in L2, fostering greater confidence and reducing inequalities in learning outcomes. Babayiğit (2015) demonstrated that improving oral language skills in both L1 and L2

can close performance gaps, providing all students, including those in under-resourced areas, equal opportunities to succeed. Education stakeholders, such as the Department of Education, should focus on helping students improve their reading comprehension in both languages. They must also reinforce their preparedness to meet the demands of improving literacy in both L1 and L2, particularly in the context of ASEAN member countries, where literacy rates are a crucial indicator of educational success. Enhancing students' reading comprehension in these languages contributes to academic performance and addresses broader socio-economic challenges. Literacy in L1 and L2 prepares learners to engage with various educational subjects, ultimately reducing social and educational inequalities.

By emphasizing the transferability of reading skills between L1 and L2, fostering inclusive literacy programs, and addressing linguistic challenges, educators can contribute to creating a more equitable and effective education system. Through these efforts, future studies and educational policies can ensure that no student is left behind in their pursuit of literacy, thus fulfilling the goals of SDG 4 and 10 while improving overall literacy rates across ASEAN countries and beyond.

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